## Medical Library Association MLA '22 Hybrid Conference & Exhibits

## Immersion Session, Paper, and Lightning Talk Abstracts



Abstracts for the contributed content sessions are reviewed by members of the Medical Library Association National Program Committee (NPC), and designated NPC members make the final selection of content to be presented at the annual conference. Information is as provided by abstract submitters.

#### **IMMERSION SESSIONS**

Content in this section is sorted by title in alphabetical order.

### Addressing Challenges in Information Literacy Instruction: A Case-Based Approach

Practice Area: Education

**Laura Menard, MLS** - Assistant Director for Medical Education & Access Services, Indiana University, Indianapolis, Indiana

**Nena Schvaneveldt, AHIP** - Education Librarian, Spencer S. Eccles Health Sciences Library, University of Utah, Salt Lake City, Utah

**Kathleen (Kat) Elizabeth Phillips -** Nursing & Allied Health Librarian, Penn State University Libraries / Life Sciences Library, University Park, Pennsylvania

**Joey Nicholson** - Chair and Director, NYU Health Sciences Library, NYU Langone Health, New York, New York

**Session Format:** This session will lead with a panel discussion to introduce the topics, then participants will split into small groups for case-based active learning.

**Session Objective/Overview:** A panel will discuss their experience with three education-related issues: advocating for curriculum integration, asynchronous education, and assessment. After the panel, attendees will divide into small groups to tackle a predesigned case related to one of the topics discussed. Each small group will come up with a plan to address their case, then share each case and discussion points with the larger group.

**Methods:** Participants will learn from peers who have experience in each of the topic areas during a panel presentation and Q&A session. After the panel, participants will break out into small groups, where they will be provided with a case study for discussion and application of the concepts discussed.

**Participant Engagement:** Participants will be able to choose from several cases related to education to address in small group discussion. All small group discussions on specific topics will also contain discussion of how issues could be addressed with diversity, equity, and inclusion in mind.

**Sponsor(s):** Interprofessional Education and Practice, Libraries in Health Sciences Curriculums, Technology in Education, Dental, and Medical Library Education Caucuses and Information Services and Education Domain Hubs

## AVSL Vetted Journal Workshop: Combat Predatory Publishing by Learning How to Develop Your Own Vetted Journal Program, Step-By-Step

Practice Area: Information Services

Caroline Allen - Librarian, C.S. O'Brien Eye Library, Iowa City, Iowa

Karen Alcorn - Reference and Instruction Librarian, Library and Learning Resources, MCPHS University

**Leslie Holland, MLIS** - Manager of Library Services, Southern College of Optometry Library, Memphis, Tennessee

**Session Format:** This presentation and workshop will provide step-by-step instructions on how to develop a program to review discipline-specific publications, determine whether they are legitimate or predatory, and decide whether or not they are worthy of faculty manuscript submission.

**Session Objective/Overview:** This session will address the crucial role that librarians play in advising faculty in the publication process and will inform attendees about the development and maintenance of the award-winning AVSL Vetted Journals List. We will share the successes and challenges experienced during the development of this program. Finally, we will conclude by passing along the tools we've created and give participants an opportunity to practice vetting journals on their own.

**Methods:** The session will begin with a panel presentation on the history of combatting predatory journals, discussing how and why the AVSL Vetted Journals List was started. We will then demonstrate the evaluation and review process, giving participants time to practice evaluating, reviewing, and discussing their results in small groups. Participants will brainstorm how to collaborate with others to initiate their own vetted journal committee. There will be opportunities throughout the session for participants to ask questions of the AVSL Vetted Journals List Committee.

**Participant Engagement:** Participants will have the opportunity to practice hands on activities, ask questions, and discuss with their peers.

**Sponsor(s):** The sponsors of this presentation will be the Association of Vision Science Librarians and the MLA Vision Science Caucus.

### **Cultivating Member Engagement the Armadillo Way: A Practical Guide for Chapters and Caucuses**

Practice Area: Professionalism & Leadership

**Laura N. Haygood, AHIP** - Research and Education Librarian, Gibson D. Lewis Health Science Library, The University of North Texas Health Science Center at Fort Worth, Fort Worth, Texas

**Laura Wright** - Research Support Librarian- Systematic Reviews, Rudolph Matas Library of the Health Sciences, Tulane University, New Orleans, Louisiana

Montie' T. Dobbins, MLIS - Assistant Director for Technical Services, LSUHS Library, Shreveport, Louisiana

**Daniel Burgard, MSLIS** - University Library & Vice Provost for Scholarly Information Management, Gibson D. Lewis Library, University of North Texas Health Science Center

**Susan C. Steelman, AHIP** - Head of Education & Research Services, Univ. of Arkansas for Medical Sciences Library, Little Rock, Arkansas

Jennifer K. Lloyd, AHIP - Associate Director, LSUHSC Libraries, New Orleans, Louisiana

Katie A. Prentice, AHIP - Executive Director, TMC Library, Houston, Texas

David C. Duggar, MLIS - Head, Liaison Librarian, LSUHS Library, Shreveport, Louisiana

**Session Objective/Overview:** This session will discuss the efforts taken by the South Central Chapter to foster member engagement. Topics include the chapter's Membership Committee, the Early Career Librarians Initiative, chapter social events, SCAMeL (the region's academic medical library consortium), and the Armadillo Ball held during MLA's annual meeting. Participants will leave this session with tips and insights into creating engagement within their own chapter or caucus. Participants will be able to learn from our experiences and mistakes, duplicate our successes, and brainstorm ways to use this information in their

own chapter or caucus. This interactive session will also offer opportunities for other groups to share their successes.

**Methods:** Short presentations will be given by panel members. In keeping with Universal Design for Learning, information will be relayed via multiple methods.

**Participant Engagement:** Participants will engage in roundtable discussions, where they will have the opportunity to brainstorm methods to apply to their chapter. During this time, participants will also be encouraged to share the successes of their chapter or caucus. Each roundtable will be focused on topics related to member engagement: social event planning, paths to leadership, engaging early career librarians, and collaborative leadership within the region. This format can be easily shifted online via breakout rooms should the meeting shift online unexpectedly.

**Sponsor(s):** South Central Chapter of the Medical Library Association

#### Curation, Coding, and Communication: Leveraging Librarian Skill Sets for Research and Clinical Data–Focused Roles

Practice Area: Information Management

**Hannah Calkins** - Senior Data Manager, Sage Bionetworks, Philadelphia, Pennsylvania **Liz Amos, MLIS** - Technical Information Specialist, National Library of Medicine, Bethesda, Maryland

Session Objective/Overview: Our session will host a panel of librarians (or those with traditional library educational backgrounds) who currently work in bio/medical data science or data support roles. As panelists, the participants will describe what their job entails, how they ended up in such positions, and how their library science skills and education have helped make them successful. They will also present a brief overview of a current project or focus area they are working on to demonstrate the different types of work available. During the question and answer section, panelists will address what steps those interested in data-focused careers can take to move in that direction. Since networking can be crucial, we will also have a brief networking time where we will encourage the audience to connect with each other (and the panelists) to help build professional connections in the librarian and data support realm.

**Methods:** Panelists will describe their experiences as data support professionals and how their library skills/training helped them be successful. projects they are working on to provide examples of real-life work within data science and data support, and their transition from "traditional" library roles or traditional basis of education into data services positions - including: how did they gain confidence in these roles? How did they "sell" their skill set to get the role? etc. Panelists will then engage in a question and answer session with a moderator and the audience to explore the idea of librarians in data-focused positions and what role we can play in furthering bio/medical clinical and research work.

**Participant Engagement:** Participants will take part in a question and answer session as well as a mini networking session to help build connections to other data support and data focused library professionals.

#### **Developing Pathways to Health Sciences Librarianship**

Practice Area: Professionalism & Leadership

**Gregory Laynor, MLS, PhD** - Senior Librarian, Information Services, Scott Memorial Library, Philadelphia, Pennsylvania

Natalie Tagge, MPH, MS - Head, Podiatry Library, Temple Libraries

**Emily Vardell, AHIP** - Assistant Professor, Emporia State University School of Library and Information Management, Olathe, Kansas

Renee A. Rau, MA, MLIS - Information Services Librarian, Norris Medical Library, Los Angeles, California Juliana Magro - Education and Research Librarian, NYU Health Sciences Library, New York, New York Megan DeArmond, MFA, MSLIS - Systematic Review Services Librarian, Touro University Nevada, Jay Sexter Library, Henderson, Nevada

Because most health sciences librarians enter the profession with little or no health sciences experience and new health sciences librarians often have to cobble together self-education programs, there is a need for more introductory training and mentoring opportunities. Creating new pathways to becoming a health sciences librarian can be valuable for increasing awareness of career possibilities in health sciences libraries and removing barriers to becoming part of the professional community of health sciences librarians. Participants in this session will generate ideas for developing and promoting introductory training and mentoring opportunities in health sciences librarianship, with a focus on making the profession more equitable, diverse, and inclusive.

The session will begin with short presentations to establish guiding questions for group discussion. Natalie Tagge and Greg Laynor will describe their backgrounds as health sciences librarians who came to the field with no prior health sciences experience, will share their research on the training and mentoring of health sciences librarians, and will discuss the introductory health sciences librarianship education and mentoring program they have developed. Emily Vardell will share her perspective as a library science faculty member who teaches courses in health sciences librarianship. Renée Rau, Juliana Magro, and Megan DeArmond will share their paths to health sciences librarianship. These short presentations will establish guiding questions for all session participants to discuss. Participants in the session will discuss the guiding questions in small groups moderated by discussion facilitators. The small groups will share the highlights of their discussions with the whole group.

Questions discussed in the session will include: 1) What methods have you used to develop the skills needed to work as a health sciences librarian? 2) What existing opportunities for introductory health sciences librarianship training and mentoring are you aware of? 3) How might these existing opportunities be better promoted so as to increase equity, diversity, and inclusion in health sciences librarianship? 4) What new introductory health sciences librarianship education or mentoring programs are needed in order to make health sciences librarianship more equitable, diverse, and inclusive? 5) Can you envision how you may want to become involved in existing and/or new health sciences librarianship education and/or mentoring programs?

Facilitators will compile the ideas generated in the session into a document shared with all participants after the session.

## Hardback Life: Reading a Short Story to Develop Your Cultural Humility Skills

Practice Area: Professionalism & Leadership

**Lynn Kysh, MLIS, MPP** - Clinical & Research Librarian, Children's Hospital Los Angeles, Los Angeles, California

**Kyle Horne** - Program Manager, Literally Healing/Children's Hospital Los Angeles, Los Angeles, California **Kelleen Lopez** - Clinical Research Manager, Children's Hospital Los Angeles, Los Angeles, California

**Session Format:** A short story book club where participants will be given time to read independently and then be guided through activities to facilitate discussion and connect the story's themes to cultural humility.

**Session Objective/Overview:** Health humanities offer different ways of thinking about human history, culture, behavior, and experience, which can be used by practitioners to dissect, critique, and influence practices and priorities. Cultural humility is the ability to maintain an interpersonal stance that is other-oriented in relation to aspects of cultural identity that are most important to the person. We will be hosting a book club session focused on a middle grade short story to facilitate discussion and deepen participants' understanding of cultural humility. Participants will receive a copy of the short story to read as part of the immersion session, be led through interactive activities, and leave with a toolkit to facilitate a similar session at their own institutions.

**Methods:** Our session will begin with time for participants to individually read the same short story "Sol Painting, Inc." by Meg Medina. We will provide space for anonymous feedback regarding the short story and passive participation through an anonymous online poll to rank the story and create crowd sourced word clouds. Presenters will provide a brief (15 minute) lecture on cultural humility theory and the dimensions of diversity framework and address any questions. Our last activity will be small group discussions where each group with be provided with the same prompts followed by a large group debrief.

**Participant Engagement:** We will provide opportunities for both passive and active participation including individual reading time, an anonymous online poll, small group discussions, and large group debriefing.

Sponsor(s): Health Humanities Caucus

## Let's Get Critical: Understanding and Applying Critical Theory in Library Practice

Practice Area: Education

**catherine lockmiller** - health science librarian, Northern Arizona University / Cline Library **Meredith I. Solomon, AHIP** - Senior Outreach Officer, Countway Library of Medicine/Outreach Office,

Quincy, Massachusetts

**Emily Vardell, AHIP** - Assistant Professor, Emporia State University School of Library and Information Management, Olathe, Kansas

**David G. Keddle** - Medical Library Services Director, Health Sciences Library, Woodland Hills, California **Nina Exner** - Research data librarian, Virginia Commonwealth University Libraries, Richmond, Virginia

**Laura A. Murray, MSIS, MBA, AHIP** - Graduate Medical Education Librarian, University of South Florida, HCA Healthcare/USF Morsani College of Medicine GME Programs, Tampa, Florida

Soph Myers-Kelley, MLIS - Medical Librarian, Laupus Library, St. Paul, Minnesota

**Brenda M. Linares, MLIS, MBA, AHIP** - Health Sciences Librarian, A.R. Dykes Library, University of Kansas Medical Center, Kansas City, Kansas

**Session Objective/Overview:** This immersion session focuses on the role that critical theory plays in health sciences and medical library practice. In the past several years, critical theory frameworks have been the focus of increased attention, particularly critical race theory and, in library discourse, critical librarianship. Along with this attention has come an overwhelming amount of misdirection and misinformation about critical

theory scholarship and practical application. In this session, we will lay a foundation for understanding the history of critical theory and draw a through line to present-day critical theory modalities. We will then proceed to break out into small groups and discuss how critical theory is applied across library disciplines while outlining different critical discourses, including (but not limited to) critical race theory, feminism, queer theory, critical disability studies, post-structuralism, psychoanalysis, and Marxist theory.

**Methods:** Facilitators will introduce the session norms of participation and communication at the beginning of the session. Secondly, facilitators will present a brief history of critical theory and outline major branches and frameworks. After the presentation, participants will break out into small groups focusing on theoretical frameworks that spark their interest. Facilitators will guide the small groups through a series of learning activities designed to achieve each learning outcome. The large group will reconvene for share back, questions, and considerations for wider library application.

**Participant Engagement:** Learning activities include individual reflection, sharing, and group documentation to be done in small and large groups. Facilitators will lead participants through large and small group activities.

**Sponsor(s):** LGBTQIA+ Caucus, African American Medical Librarians Alliance Caucus, Medical Library Education Caucus, and Social Justice & Health Disparities Caucus

### Mentor-Mentee Relationships: Building Collaborative Partnerships for Career Success

Practice Area: Professionalism & Leadership

**Tamara M. Nelson, MLIS, EdS, AHIP** - User Services Coordinator / Senior Research & Learning Services Librarian, The University of Tennessee Health Science Center Health Sciences Library, Memphis, Tennessee

Sandra G. Franklin, AHIP, FMLA - Director, Woodruff Health Sciences Center Library, Atlanta, Georgia Andrea M. Hayes - Outreach Librarian, University of Arkansas for Medical Sciences, Little Rock, Arkansas Jamia J. Williams - Health Sciences Librarian, SUNY Brockport, Rochester, New York

**Kelsa Bartley, MSI, AHIP** - Education & Outreach Librarian / Learning, Research, and Clinical Information Services, Louis Calder Memorial Library / University of Miami Miller School of Medicine, Miami, Florida

**Shannon D. Jones, MLS, M.Ed, AHIP, FMLA** - Director of Libraries & Professor, Medical University of South Carolina, Charleston, South Carolina

**Session Objective/Overview:** The purpose of this session is to discuss the mentor-mentee relationship from different perspectives. The immersion will cover strategies for identifying a mentor, peer-to-peer mentorship, and successful models of mentor-mentee relationships. Panelists will share their own experiences and insight, as well as provide the opportunity to answer questions from the audience. At the completion of the session, attendees should be able to answer the questions: "Am I ready to be mentored?"

**Methods:** Participants will listen to a moderated panel discussion and be provided the opportunity to engage in an interactive Q&A which will allow them to be a part of the conversation.

**Participant Engagement:** Participants will participate in live polling and Q&A via the conference app feature.

Sponsor(s): African American Medical Librarians Alliance (AAMLA) Caucus

#### Mind the Gap: From RDM 101 to Data Deep Dives

Practice Area: Information Management

**Peace Ossom-Williamson, MLS, MS** - Associate Director, NNLM National Center for Data Services, Fort Worth. Texas

Shanda Hunt - Public health librarian, Health Sciences Library, Minneapolis, Minnesota

Dorris Scott, PhD - GIS Librarian/Social Science Data Curator, University Libraries / Data Services

Sara Gonzales - Data Librarian, Galter Health Sciences Library & Learning Center, Chicago, Illinois

Nicole Contaxis - Data Librarian and Lead of Data Discovery, NYU Health Sciences Library, New York, New York

Session Objective/Overview: The growth of data librarianship has seen considerable development in library support for data discovery and sharing, and this comes with a need for a vast array of knowledge, skills, and abilities. To address this need, partnerships are reflected in the cross-institutional collaborations that have formed to facilitate sharing of knowledge and resources across institutions, including the Data Discovery Collaboration (DDC) and the Data Curation Network (DCN). With the upcoming NIH Data Management and Sharing requirements, these are areas of support that are likely to come to the fore in many health sciences libraries. The newly formed National Center for Data Services (NCDS) of the Network of the National Library of Medicine (NNLM), which seeks to partner with these and other organizations to further this aim, will moderate a panel discussion to address what the center, the DDC, the DCN, and other organizations can do to build capacity and community among health sciences librarians in data sharing and data discovery to support these new requirements, as well as how to forge connections between these more advanced practitioners and those newer to data librarianship.

**Methods:** The session will begin with 15 minute presentations from panelists about their roles (one senior and one newer member of both DDC and DCN). This will be followed by a Q&A of 15 minutes or so, where people can ask/vote up questions, followed by a 30 minute breakout.

**Participant Engagement:** During the breakout session, participants will be asked to identify new opportunities for cross-institutional collaboration and methods they may employ for working together to build these.

Sponsor(s): Data Caucus

#### Potential Pitfalls in Conducting a Research Study

Practice Area: Innovation & Research Practice

**Jonathan D. Eldredge, AHIP, FMLA** - Professor, UNM Health Sciences Library and Informatics Center, Albuquerque, New Mexico

**Merle N. Rosenzweig, MALS** - Informationist, Taubman Health Sciences Library, University of Michigan, Ann Arbor, Michigan

**Session Objective/Overview:** The Immersion session focuses on potential pitfalls encountered when embarking on a research study and how to avoid them. The presentations will cover some of the common mistakes for each phase of the research process. Some of the topics covered by this session might include formulating a question, selecting a study design, design & methodology, analyzing results, interpreting your findings, and conducting a literature review. Sponsors: Research Caucus, New Members Caucus, Medical Library Education Caucus

**Learning Objectives:** By the end of the session participants will be able to: Identify at least two (2) common mistakes in the research process; Recognize how to detect these mistakes; List at least two (2) strategies for avoiding mistakes.

Topics and Speakers: Introduction and Facilitator—Merle Rosenzweig, Informationist, Taubman Health Sciences Library, University of Michigan. Question Formulation: An Iterative Process and the Power of Numbers—Martha Earl, Director, Preston Medical Library, University of Tennessee. How to Select a Study Design—Jon Eldredge, Professor, University of New Mexico. The Literature Review, IRB & Contract—Lindsay Blake, Clinical Services Coordinator, University of Arkansas for Medical Sciences. Understanding the Basics of Statistics—Caitlin Bakker, Research Services Librarian & Director of Open Research & Publishing, University of Minnesota Libraries.

**Methods:** Each panel member will discuss the mistakes made in preparing a research study and how to avoid them. There will be a brief Q & A session for attendees to ask panelists questions.

**Participant Engagement:** Attendees are encouraged to present a project that they are working on or considering on undertaking to get feedback from the panelists.

## Reflect on Accessible Content and Universal Design: An Introductory Immersion Session

Practice Area: Education

**Jason Francis** - Health Sciences Librarian, Stewart Library /Teaching and Information Services, Ogden, Utah

**Diana Meiser** - Engineering, Applied Science and Technology Librarian, Teaching and Information Services/Stewart Library, Ogden, Utah

**Shaun R. Adamson -** Professor/Education Librarian, Stewart Library/Teaching & Information Services, Ogden, Utah

Nathan R. Boettcher - LMS Support Supervisor, Weber State University, Ogden, Utah Oliver Snow - Executive Director of WSU Online, Weber State University, Ogden, Utah Angela McLean

**Session Objective/Overview:** Have you ever wondered how to ensure that content you share with your users is accessible? Join the presenters in learning how to make Word and PDF documents fully accessible through the use of Adobe and Microsoft accessibility checks. This immersion session will provide newcomers to accessibility with practical experience using tools to make content accessible for their user groups.

**Methods:** Participants will be shown the accessibility checks available in Adobe and Microsoft Word in order to understand the types of checks to perform and how to determine if provided source files or final documents are accessible. Participants will work in teams to utilize the accessibility tools outlined to make sample PDFs accessible by performing outlined checks and making corrections under the direction of the presenters. Participants will be provided with introductory information on Universal Design concepts related to document creation. Participants will create their own source files and submit them for presenter review to assess application of UD concepts in document creation.

**Participant Engagement:** Participants will engage with the presenters in a team setting to create accessible documents from provided source materials and create their own documents for presenter assessment. Participants will utilize accessibility functionality in various programs, such as Microsoft Word,

Adobe Acrobat and associated programs. Participants will need access to Microsoft Word and Adobe Acrobat or to sign up for a free 7 day trial for Adobe Acrobat to participate in some portions of the training.

## Reflect, Renew, Reconnect to Envision a New Service Model for You, Your Customers, and Your Library

Practice Area: Clinical Support

Helen Ann B. Epstein, MS, MLS - Informationist, Virtua Health System, Mt Laurel, New Jersey

Stacy F. Posillico - Senior Librarian, Northwell Health Eastern Region Hospitals, Hempstead, New York

Elaine Wells, MA, MLS, AHIP - Library Director, Harold Kohn Vision Science Library, New York, New York

**Shannon S. Glover, AHIP** - Health Sciences Library Coordinator, Northeast Georgia Health System, Gainesville, Georgia

Michelle Lieggi, MLS, AHIP - Medical Librarian, Dignity Health Library

**Stephanie C. Roth, MLIS, AHIP** - Biomedical & Research Services Librarian, Ginsburg Health Sciences Library, Temple University, Philadelphia, Pennsylvania

Jerry Carlson, AHIP - Medical Librarian, Medical Librarian Service, Fort Collins, Colorado

**Elizabeth G. Hinton, AHIP** - Associate Professor/Head of Research Impact & Engagement, Rowland Medical Library/University of Mississippi Medical Center, Jackson, Mississippi

**Laura A. Murray, MSIS, MBA, AHIP** - Graduate Medical Education Librarian, University of South Florida, HCA Healthcare/USF Morsani College of Medicine GME Programs, Tampa, Florida

**Matthew C. Bridgeman, MLIS** - Information and Education Librarian, Robert Wood Johnson Library of the Health Sceinces, New Brunswick, New Jersey

Holly Kimborowicz, MLS, AHIP - Librarian, UH Lake Health Library, Willoughby, Ohio

Cathy Murch, MLIS, AHIP - Librarian, UH Lake Health Library, Willoughby, Ohio

Tanisha N. Mills, AHIP - Medical Librarian, Northeast Georgia Medical Center, Gainesville, Georgia

**Session Objective/Overview:** This is an opportunity for all of us to reflect, renew, reconnect to envision a new normal for us, our customers and our libraries. Presenters will introduce each subtopic with personal stories to start the discussions. Participants will select a subtopic breakout group to join a facilitated discussion to share their stories. The large group will come together to solidify takeaways.

**Methods:** Facilitated breakout sessions in a welcoming environment are planned on the 3 major topics of this session-reflecting, renewing and reconnecting. There will be a report-back session of the entire group and takeaways will be decided.

**Participant Engagement:** During facilitated breakout sessions, participants will be encouraged to share personal stories and comment on colleague stories.

**Sponsor(s):** Hospital Library Caucus, LGBTQIA+ Caucus, Clinical Support Hub, Information Services Hub, Leadership and Professionalism Hub

#### Reflect to Renew: Improving the Accessibility of Your Library's Public Spaces

Practice Area: Professionalism & Leadership

**Shalu Gillum, AHIP** - Head of Public Services, Harriet F. Ginsburg Health Sciences Library University of Central Florida College of Medicine, Orlando, Florida

**Laura N. Haygood, AHIP** - Research and Education Librarian, Gibson D. Lewis Health Science Library, The University of North Texas Health Science Center at Fort Worth, Fort Worth, Texas

Soph Myers-Kelley, MLIS - Medical Librarian, Laupus Library, St. Paul, Minnesota

**Ariel F. Pomputius, MLIS, AHIP** - Health Sciences Liaison Librarian, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Natasha Williams, MLIS, AHIP** - User Services Librarian, Harriet F. Ginsburg Health Sciences Library University of Central Florida College of Medicine, Orlando, Florida

**Objective:** In this session, participants will discuss accessibility in health sciences library physical spaces and will learn how to improve the accessibility of their own library physical spaces.

**Methods:** A panel of librarians will share expertise on accessibility in library public services and will share advice on how to advocate for more accessible spaces. Attendees will play a game designed to help identify areas of accessibility improvement in a variety of library settings. Participants will also have an opportunity discuss within small groups their own experiences and/or success stories with improving accessibility in their library spaces.

**Participant Engagement:** Participants will be actively engaged throughout this session through large and small group interactions and through an interactive game. The small group discussions will include prompts meant to provide an opportunity for participant reflection and brainstorming on their own library spaces. The game will involve pictures of library spaces that participants will be asked to identify as many potential accessibility "issues" that they can find within a set time period. Game facilitators will offer feedback and their own "answers" after each round of the game.

#### **Learning Objectives:**

By the end of the session, participants will be able to:

- define and identify what accessibility is in comparison to ADA compliance
- identify common areas where accessibility can be improved in library spaces
- share challenges and solutions to making library public spaces more accessible

Sponsors: Accessibility and Disability Caucus and Public Services Caucus

#### Reimagining the Practicum Experience: Post-pandemic Round-up

Practice Area: Professionalism & Leadership

**Christina Pryor** - Interim Associate University Librarian & Interim Director of the Health Sciences Library, University of Missouri, Columbia, Missouri

Jenny S. Bossaller - Associate Professor, University of Missouri, Columbia, Missouri

**Denice Adkins** - Professor, School of Information Science & Learning Technologies, University of Missouri, Columbia, Missouri

**E. Bailey Sterling** - Technology & LIS Coordinator, Network of the National Library of Medicine Region 3, Plano. Texas

**Ellen Thieme** - Data Manager; Library Information Specialist, Institute of Public Policy; University of Missouri Journalism Library, Columbia, Missouri

Jess Saunders - Research Support Librarian, Tulane University, New Orleans, Louisiana

Brandon Jason - Nixa Community Branch Manager, Christian County Library, Nixa, Missouri

**Brandon R. Kennedy** - Communication Assistant, Network of the National Library of Medicine Region 3, Colorado

**Session Objective/Overview:** Real-life, practical experiences are a crucial component of professional educational programs, including librarianship. Many LIS programs require students to complete a practicum, under the supervision of a practicing librarian, in a library setting. Online education, which is becoming the norm within LIS education, presents roadblocks to the practicum: students are often employed during "regular" library hours and are often juggling a cadre of personal responsibilities. COVID exacerbated the problem as it closed library doors; however, it also opened new opportunities to engage students in real-life service, a trend that we predict will endure long after COVID has passed. Students and educators will describe selected projects developed during COVID while challenging audience participants to create engaging opportunities outside of the box for emerging professionals.

**Methods:** The panelists will describe their own experiences working in an online practicum experience or working with students both online and face-to-face practical experiences. In addition to sharing our own experiences we have been involved with, we will seek counsel and advice from attendees about the kinds of experiences that engage students and serve the public. We aim to give audience members ideas for working with online graduate students in their work, in order to create new opportunities in health librarianship for new members of the profession.

**Participant Engagement:** We will use a product like Padlet to engage the audience, or cell phones for survey-type questions. There is an ever-expanding array of options for participant engagement, and we will decide which one to use if our proposal is accepted.

**Sponsor(s):** Medical Library Association New Members Caucus and Midcontinental Chapter of the Medical Library Association (MCMLA)

## Transformative Agreements: Challenges, Opportunities, and Potential Impacts in Health Science Libraries

Practice Area: Information Services

**Keith Pickett** - Coordinator, Research Services and User Resources, Rudolph Matas Library of the Health Sciences, New Orleans, Louisiana

**Michael A. Wood** - Head of Resource Management & Qatar Liaison Librarian, Weill Cornell Medicine / S. J. Wood Library, New York, New York

Terrie R. Wheeler - Director and Chair, Samuel J Wood Library, New York, New York

**Kristina DeShazo** - Director of Collection Management, Oregon Health & Science University Library, Portland, Oregon

**Session Objective/Overview:** Panel will introduce transformative agreements (TAs) to a wide audience and educate folks on what they are, license and negotiation needs, and the potential challenges and opportunities for institutions. Special considerations will be taken to represent different kinds of libraries on the panel because use cases and values of TAs differ between institution types. We will empower participants with deeper knowledge and a shared understanding of the impacts of TAs that they can bring back to their institutional setting.

Methods: Q&A

**Participant Engagement:** The panel will be moderated by one person. The moderator will ask the panelist questions curated by him/her and/or taken directly from the attendees before and during a Q&A session towards the end. Through these questions, the panelist will be able to share their experiences and insights on transformative agreements providing the attendees/audience with real values and takeaways that they can apply in their own institutions when considering TAs

**Sponsor(s):** Collection Development Caucus; Scholarly Communications Caucus and Leadership & Management Caucus

#### Using the One Health Approach to Link Global to Local Health

Practice Area: Health Equity & Global Health

**Margaret Henderson, AHIP** - Health Sciences Librarian, San Diego State University Library, Ramona, California

**Kathryn M. Houk, AHIP** - Undergraduate Medical Education Librarian, UNLV School of Medicine Library, Las Vegas, Nevada

**Session Format:** Short presentation followed by group discussions of timely One Health topics, finishing with reflection and sharing of resources.

**Session Objective/Overview:** Many health inequalities and social justice issues can be related to the interactions of humans, animals, and environmental problems. The COVID-19 pandemic is an example of how repeatedly ignoring these issues can have a global impact. This immersion session will help you understand the components of One Health (https://www.cdc.gov/onehealth/index.html) and how people, animals, and plants interconnect with the environment in your local community and the global community.

**Methods:** Lecture to introduce topic and example (with expert guest). Active, team based exploration of specific One Health topics using provided discussion guide to help gather resources to share. Follow-up/reflection to share work of groups.

**Participant Engagement:** The large group will break into tables led by moderators to research preselected topics, e.g. access to clean water, deforestation, climate and oceans, climate change, pollution, internet as essential public utility & health, LGBTQ+ health, racial equity & social justice as global health issues. All participants will be encouraged to reflect on what they have learned and contribute to the list of shared resources.

**Sponsor(s):** Health Equity and Global Health Hub, Animal and Veterinary Information Specialist and Public Health/Health Administration Caucuses

#### PAPERS: RESEARCH ABSTRACTS

Papers in this section are sorted by title in alphabetical order.

#### Academic Health Sciences Libraries' Outreach and Engagement with Native American Communities: A Scoping Review

Practice Area: Health Equity & Global Health

**Allison Cruise** - Visiting NLM Associate Fellow, Health Sciences Library & Informatics Center, Albuquerque, New Mexico

**Melissa L. Rethlefsen, AHIP** - Executive Director & Professor, Health Sciences Library & Informatics Center, Gainesville, Florida

**Jonathan D. Eldredge, AHIP, FMLA** - Professor, UNM Health Sciences Library and Informatics Center, Albuquerque, New Mexico

#### Nydia Villezcas

**Objectives**: A lack of equity in access to health information and low health literacy contribute to overall poor health outcomes for underserved populations. Among those underserved populations, Native Americans face significant health disparities. In order to bridge those gaps, there is an increased need for academic health sciences libraries to reach underserved communities to help provide health information and to improve health literacy. In this project, we seek to identify trends and themes in how academic health sciences libraries have supported community engagement and outreach with Native American communities. We seek to learn about and share culturally relevant effective practices.

**Methods**: We will conduct a scoping review using Arksey and O'Malley's methodological framework and guidance from Joanna Briggs' Manual for Scoping Reviews. Our search strategy will include exploration of 8 databases (ERIC, Education Research Complete, Academic Search Complete, LISA, LISTA, E-LIS, MEDLINE, Native Health Database); searching of unpublished literature, select journals, and conference abstracts; and information gathering from conversations with librarians and community partners. Librarians and partners will be sought through messages to the AAHSL listserv, the New Mexico Library Association listserv, the Border Regional Library Association listserv, the SCC MLA listserv, and MEDLIB-L. Organizational output, especially from Native American-focused organizations and programs, will be included. The searching will be conducted iteratively. Initial searches will be conducted with planned keywords and hedges. Search hedges from University of Alberta will be adapted to include appropriate terminology for indigenous Native American populations included in this review. Citations will be managed with Zotero. Data will be screened in duplicate using Covidence. Key themes will be qualitatively identified, geographic location will be mapped, and data on efficacy, evaluation criteria and sustainability will be extracted when present.

**Results**: The research is not yet completed; full results will be presented at MLA.

Conclusions: The research is not yet completed; full results will be presented at MLA.

# Adapting the National Institute for Health and Care Excellence (NICE) Organization for Economic Co-operation and Development (OECD) Countries' Geographic Search Filters (MEDLINE and Embase, Ovid): Developing Low-and Middle-income Countries' (LMIC) Filters

Practice Area: Information Services

**Lynda Ayiku** - Information Specialist, National Institute for Health and Care Excellence (NICE), United Kingdom, Manchester, England, United Kingdom

**Objectives**: The National Institute for Health and Care Excellence (NICE) Organisation for Economic Cooperation and Development (OECD) countries' filters retrieve evidence for OECD country-focused research topics from MEDLINE and Embase (Ovid). The innovative filters work by excluding database records with only non-OECD country subject headings using the NOT Boolean operator. The filters are also applied to literature search strategies with the NOT operator. This presentation will discuss how the NICE OECD countries' filters can be adapted for other country groups, using the creation of novel filters for low-and middle-income countries (LMICs) as an example. They were developed to improve searching effectiveness for LMIC-focused research topics. Validated LMIC filters were not previously available.

**Methods**: The LMIC filters were developed by rearranging and amending the OECD countries filters' subject headings to find evidence about LMICs by excluding database records with only headings for World Bank high-income countries. LMIC references from 25 reviews generated Gold Standard (GS) sets for MEDLINE (n = 421) and Embase (n = 415). The filters were validated by calculating their recall against these sets.

**Results**: The MEDLINE LMIC filter achieved 99.8% recall against the MEDLINE GS set and the Embase LMIC filter achieved 98.5% recall against the Embase GS set.

**Conclusions**: The novel LMIC geographic search filters find evidence about the countries effectively. The filters also demonstrate that the NICE OECD countries' filters can be adapted to find evidence about other country groups successfully. Validated geographic search filters for the following regions have been previously developed and published: Africa, Spain, the United Kingdom, and OECD countries. A validated filter for the United States is currently in development. Examples of how to adapt and validate the NICE OECD countries' filters for additional country groups (such as continents, or multiple nations with a geographic, political, or economic relationship) will be provided in the presentation. It is hoped that this presentation will lead to the development of more validated geographic filters for context-sensitive research topics.

#### **AHEC Libraries: Resources of the Past?**

Practice Area: Innovation & Research Practice

Andrea M. Hayes - Outreach Librarian, University of Arkansas for Medical Sciences, Little Rock, Arkansas

**Objectives**: Academic and medical libraries play a significant role to students, residents, physicians, and the communities they serve and their existence is fundamental to the development of knowledgeable practitioners. Academic health education centers (AHECs) libraries also play a pivotal part in the maturation of successful physicians and health care professionals when it comes to the development of knowledge and gathering of information. The problem, at hand, however, is that AHEC libraries seem to be disappearing without a trace. A recent analysis of several Southern AHECs has revealed this.

**Methods**: In order to determine how many AHECs still (or ever) had libraries, a survey was created and will be distributed electronically to the over 300 area health education centers in the United States. Respondents will be invited to share knowledge of their institutions' history in relation to area health education center libraries. Responses will be analyzed for similarities and differences in an effort to find a distinguishable pattern.

**Results**: The survey is awaiting IRB approval as of abstract submission. Once research is completed, results will be documented and stored in a way that future historians and researchers can utilize the data.

**Conclusions**: All conclusions found will be presented at the meeting.

#### Analysis of Public Preprint Server Comments on NIH Preprint Pilot Articles

Practice Area: Innovation & Research Practice

Amanda Sawyer, MLIS - PubMed Online Content Specialist (Contractor), National Library of Medicine

**Allison Cruise** - Visiting NLM Associate Fellow, Health Sciences Library & Informatics Center, Albuquerque, New Mexico

Levi Dolan - Data Services Librarian, Ruth Lilly Medical Library, Indianapolis, Indiana

Brianna Chatmon, MLIS - Informationist Trainee, William H. Welch Medical Library

**Objectives**: Given the increased prevalence of preprints during the COVID-19 pandemic, this project sought to analyze public comments left on a sample of preprint articles from the NIH Preprint Pilot to determine if they were substantive in nature. Analysis of article titles and qualitative coding of the comments was conducted. This analysis was designed to obtain both quantitative and qualitative measures of comments on a selected group of articles so that the relationship between public commenting and scientific rigor could be explored.

**Methods**: The first 1,000 preprint articles to be indexed in PubMed Central and hosted on two preprint platforms (bioRxiv and medRxiv) were selected. Using the preprint servers' associated commenting platforms, full text comment threads and Twitter information was obtained, and summary statistics of commenting platforms were produced. From the article sample a total of 494 comments were collected from public commenters using the Disqus platform to provide feedback on the articles. Using the article titles, the authors explored indications of the relationship between article topic and frequency of commenter engagement. Preliminary coding was conducted using a 'thumbs up/thumbs down' method and potential categorizations were suggested. Utilizing these suggestions, the authors created and refined a draft codebook. Finally, thirteen categorizations, ten for substantive comments and three for not substantive comments, were created and used to qualitatively code the comment sample.

**Results**: Two rounds of coding were completed to reach sufficient interrater reliability. The authors found that most of the public comments were substantive, with over 28% meeting the criteria for critique, 21.5% as questions for authors, and over 11% having aspects of a formal peer review process. The analysis revealed engagement between commenters and preprint authors, demonstrated through author responses to questions, updates, and feedback. Commenters also provided suggestions for future research (3.6%) and indicated their intent to utilize the preprint findings in future research projects of their own (2.6%).

Conclusions: This project provides evidence of the impact of public commenting on scientific rigor. Public

commenting was frequently substantive and provided critique which sometimes led to direct revisions of the preprint article. Commenters also provided responses similar in nature to the formal peer review process, providing authors with feedback faster than the traditional process. Through preprints authors can disseminate their research to a wide audience earlier, and comments indicated that some readers intended to use the preprint findings in their own research, accelerating the potential for scientific discovery. As the prevalence of preprints continues to grow and public engagement with preprints increases, this paper's methodology can be replicated and refined to further analyze the value of public commenting on preprints.

#### Analyzing Changes in Work-from-home Policies for Academic Medical and Health Science Librarians

Practice Area: Professionalism & Leadership

**David Petersen, AHIP** - Assistant Professor, Research and Learning Services Librarian, Preston Medical Library, University of Tennessee Graduate School of Medicine, Knoxville, Tennessee

**Matthew Covey, PhD** - University Librarian, The Rita & Frits Markus Library, The Rockefeller University, New Yoek, New York

Janet Crum, AHIP - Director, Health Sciences Library, University of Arizona, Tucson, Arizona

**Objective:** This study investigates work from home (WFH) employment policies at Association of Academic Health Science Libraries (AAHSL) institutions in the United States through a survey of library directors or other senior administrators. The purpose of the study was to gather information about WFH policies prior to and during the COVID-19, including the current state of such policies, to provide context for libraries leaders making decisions about remote and hybrid work as we shift to a new phase of the pandemic.

**Methods**: Researchers sent a 15-question Qualtrics survey to the AAHSL email list. Questions probed the prevalence of WFH policies before and during the COVID-19 pandemic and the current state of such policies; how those policies are created; and what the future of such policies might be. Researchers also examined the impact of WFH policies on morale, productivity, and recruitment and retention of staff. The survey also allowed respondents to upload or link to institutional WFH policies. The survey was open for three weeks with a reminder sent prior to the final week. After closing the survey, the data were analyzed in Qualtrics.

**Results**: Of 73 responses, 71 met inclusion criteria (director/senior administrator in a US academic health sciences library) for a response rate of 40.8% (based on 173 US members of AAHSL). Responses came from every region of the country and from both public (36) and private (31) institutions. 70% of respondents indicated that pre-COVID, fully remote or hybrid work arrangements were either not allowed or limited to temporary/special cases. In contrast, over 70% of respondents indicated their institutions currently allow remote or hybrid work and most indicated these arrangements were likely to continue. Libraries reporting to a College of Medicine administration reported the highest likelihood of continuing flexible arrangements; those reporting to a university library system reported the lowest. Results also indicated that WFH policies had a positive impact on employee morale and retaining librarians.

**Conclusion**: The COVID-19 pandemic had a profound impact on remote work in academic medical and health science libraries. Fully remote and hybrid work options will likely continue for some health science library employees. These arrangements appear to increase employee morale and encourage retention of librarians. Remote or hybrid work may be an important incentive in attracting and retaining talented librarians.

### Analyzing Point of Care Tools Through Faculty, Resident, and Stakeholder Buy-In: A Cautionary Tale

Practice Area: Professionalism & Leadership

**J. Michael Lindsay, MSIS, MBA, AHIP-D** - Head of Collections & Access Services, Preston Medical Library, University of Tennessee, Knoxville, Tennessee

**David Petersen, AHIP** - Assistant Professor, Research and Learning Services Librarian, Preston Medical Library, University of Tennessee Graduate School of Medicine, Knoxville, Tennessee

Abagail Pujol - Administrative Assistant, Preston Medical Library

Hannah Nelsen - Practicum Student, Preston Medical Library and Health Information Center

**Martha Earl, MSLS, AHIP** - Director/Associate Professor, University of Tennessee, Preston Medical Library, Knoxville, Tennessee

**Objectives**: Costs for Preston Medical Library's primary point of care clinical tool have increased to half of the acquisitions budget, while user affiliation data has not been provided to facilitate cost-sharing. In response, user preferences for point-of-care clinical tools were analyzed to determine a viable, less expensive alternative to the current subscription.

**Methods**: At the Dean's direction, a working group of library staff, resident physicians, and medical faculty members was appointed, and data was gathered through individual user surveys of clinical support tools. Three point of care tool options were considered. Additionally, feedback was sought from other AAHSL institutions regarding subscriptions to the tool in question and funding schemes. The Dean and the clinicians evaluated the tools using a series of questions individually chosen as typical to their disciplines. The Dean communicated to GSM and UTMC that cost increases for the product had become prohibitive, requiring that alternatives be considered.

**Results**: Survey responses revealed a strong preference for the incumbent tool, rating PubMed as the second preferred source, but not substitutable. Working group members preferred the current product at point of care, judging one tool adequate but less user friendly and more time consuming. Responses from hospital clinical staff to the hospital leadership resulted in a cost sharing agreement where the hospital will pay half of the cost of the contract renewal.

**Conclusions**: Access to the preferred point of care tool will continue with plans to enhance data gathering to ascertain use patterns by academic and hospital users, as desired by their leadership. The library and the other stakeholders will monitor development of the second choice product and costs for future decision making.

## **Assessing the Information Needs of Health Care Providers Related to Vaccine Hesitancy**

Practice Area: Clinical Support

**Margaret Ansell, AHIP** - Nursing & Consumer Health Liaison Librarian, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Lauren E. Adkins, MLIS/AHIP** - College of Pharmacy Liaison Librarian, Health Science Center Libraries/University of Florida, Gainesville, Florida

Mary E. Edwards, MLIS, EdD - Associate University Librarian, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Jane Morgan-Daniel, AHIP** - Community Engagement and Health Literacy Librarian, University of Florida Health Science Center Libraries, Gainesville, Florida

**Hannah F. Norton, AHIP** - Chair, Health Science Center Library - Gainesville, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Nina Stoyan-Rosenzweig** - Archivist and Historian, Health Science Center Libraries/University of Florida, Gainesville, Florida

**Objectives**: A team of librarians at the University of Florida received internal grant funding to conduct an information and resource needs assessment of local care providers in various settings and roles, related to the conversations they have with patients and the public about vaccination, focusing on COVID-19 vaccination. After the project is completed, the team will use the needs assessment results to create vaccine information resources and/or training sessions tailored to the specific needs of local care providers.

**Methods**: Data collection will take place in the form of interviews and focus groups with local care providers. Questions will address challenges and successes participants face when discussing vaccines with patients, as well as the information resources that would assist them during these conversations. Team members will analyze session transcripts and notes for common themes and salient takeaways and write a report detailing findings and next steps for resource creation. To supplement the librarians' effort on the project, two undergraduate students were hired to assist with data collection and analysis; a secondary goal of the project is to develop these students' social science research skills. The students are assisting with developing the Institutional Review Board (IRB) protocol for the project, finalizing interview/focus group questions, conducting interviews/focus groups, correcting the automated Zoom transcripts of the interviews/focus groups, and coding the collected data.

**Results**: The undergraduate students have recently been hired, and, with the rest of the team, they are in the process of finalizing the IRB protocol and overall interview/focus group processes. With a goal of holding up to 20 interviews and/or focus group sessions, the team has developed a recruitment list of health care providers from a variety of local inpatient, outpatient, and community settings, including 18 individual care providers and 3 organizations or groups of care providers. Recruitment and data collection will be completed by January 2022.

**Conclusions**: The team expects that interviews and focus groups sessions with physicians, nurses, pharmacists, hospital chaplains, and community health workers will yield valuable insights into how to better approach conversations with patients about vaccines and address vaccine hesitancy. Likewise, this assessment will provide evidence of current gaps in available health information and local training resources that could potentially be filled by librarians.

### Assessing a Long-Standing Health Sciences Liaison Librarian Program

Practice Area: Information Services

**Hannah F. Norton, AHIP** - Chair, Health Science Center Library - Gainesville, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Michele R. Tennant, AHIP, FMLA** - Interim Senior Director, University of Florida, Academic Research Consulting & Services, Gainesville, Florida

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**Ariel F. Pomputius, MLIS, AHIP** - Health Sciences Liaison Librarian, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Objectives**: The health sciences library at the University of Florida has operated a liaison program since 1998, with each health-related college or department assigned a liaison librarian as their primary point of contact for library and information services. An extensive assessment of this service model took place in 2003; the current study provides an update to this previous work, using similar data collection tools. This is part of ongoing efforts to periodically request input from faculty, students, and staff about their information needs and whether library personnel and services are meeting them. Such input is used to improve library services and the user experience.

**Methods**: A team of librarians updated the two surveys from the 2003 assessment: one for the health science faculty, students, and staff that our library serves (patron survey) and one for our liaison librarians (librarian survey). The surveys were tested by members of a cross-disciplinary committee in the health sciences and by librarians at the campus science library, respectively. The patron survey consists of 13 questions about participants' experiences and preferences related to liaison services and 6 demographic questions. The librarian survey consists of 20 questions about experiences offering liaison services and needed supports from library administration. The patron survey will be distributed via email by librarians posting to departmental and college email lists and links on the library website and Facebook page. The librarian survey will be distributed via e-mail list to all liaison librarians in the health sciences library.

**Results**: The modified survey instruments were submitted to and approved as exempt by the IRB02 (Behavioral/NonMedical Institutional Review Board). Health sciences faculty and science librarians pilot tested the surveys and provided feedback; minor revisions were made and resubmitted to the IRB for review. The surveys are currently being distributed and will be open for responses throughout the remainder of the fall semester.

**Conclusions**: The team expects that survey responses will yield valuable insights into how effectively our liaison librarian services meet the needs of patrons, from the perspectives of those patrons and the liaison librarians themselves. Results will guide any future changes to liaison librarian services at our institution.

## **Assessment of Library Services at Top-performing Pediatric Hospitals in the Southeast United States**

Practice Area: Information Services

Christine Willis, AHIP - Clinical Information Librarian, Children's Healthcare of Atlanta, Atlanta, Georgia

Kate Daniels, AHIP - Clinical Librarian, Children's Healthcare of Atlanta, Atlanta, Georgia

**Objectives:** Compare and contrast the structure and function of librarians and library services using a convenience sample of pediatric hospitals in the southeast based on the rankings from the Regional US News Best Children's Hospitals and Magnet status. This approach is intended to determine how librarians and library services at hospitals that are recognized by the above programs differ from those that are not recognized.

**Methods**: A convenience sample of participants chosen from the Children's Hospital Association directory. Hospital librarians or representatives on the list were e-mailed a REDCap survey for basic demographic information. The surveys were followed by telephone interviews to collect more detailed information on library services and how they function within the institution. Resulting information was benchmarked with the Canadian Hospital Library Association Levels of Health Library Service and the Medical Library Association Standards for Hospital Libraries.

Results were compared and contrasted based on Regional US News Best Children's Hospitals ranking and Magnet status. Results: Nineteen librarians were contacted in the southeast between November 2021 and February 2022. Ten librarians completed the survey and nine participated in follow-up interviews for a 52% response rate. Those librarians work in urban hospitals in Florida, Georgia, Kentucky, Mississippi, and Tennessee. All but four hospitals are ranked on the U.S. News and World Report list or have Magnet status. Academic affiliation and teaching hospital status are mixed. Seventy percent are affiliated with an academic institution, 60% are teaching hospitals, and only 3 have both. Regarding the MLA and Canadian standards, the ones that a librarian can control within their job scope are met. The ones that are driven by administration were not always met fully. Only one library meets all of the standards.

**Conclusions:** The results are mixed. There are libraries in our sample who do not have rankings or designations yet meet the library standards and vice versa so it is difficult for us to confidently say that having these designations influences library and librarian services, or that librarians influence these designations. All librarians felt they were supported by administration and were meeting job requirements. Our findings show that librarians are truly trying to serve their clinicians to the best of their abilities as resources allow. When asked what they would wish for their libraries all respondents wanted more staff and more funding for resources.

## **Beyond the Conference: Health Sciences Librarians' Motivations** for Publishing

Practice Area: Innovation & Research Practice

Rachel J. Hinrichs, AHIP - Health Sciences Librarian, IUPUI University Library, Indianapolis, Indiana

**Objectives:** According to previous studies, only 22 to 28% of abstracts presented at the Medical Library Association (MLA) conferences are later published as journal articles. What motivates health sciences librarians to take the next step in publishing and disseminating their work? Motivations for publication could stem from intrinsic factors (e.g., to contribute to my profession's evidence base) or from extrinsic factors (e.g., for promotion or tenure). This study will answer the following questions: 1) Are librarians presenting at MLA more motivated to publish due to intrinsic factors, extrinsic factors, or a mix of both? 2) Do motivations for publication differ between academic and hospital librarians? 3) Do motivations for publication differ between those who published in peer-reviewed journals and those who published in other venues?

**Methods:** First authors of abstracts presented at the MLA conferences in 2012 and 2014 (n=628) were surveyed to inquire if their abstract was later published in any full-text format such as a journal article or

book chapter. This two-year sample of conferences was selected to give authors at least five years to publish. If they did publish, they were asked where their work was published, and what were their primary and secondary reasons for publication. Authors who published more than one abstract answered separately for each abstract. The reasons for publication included intrinsic and extrinsic factors identified from the library science literature. Chi-square tests were used to assess differences in motivation.

**Results:** 161 authors responded to the survey, and of these, 49 authors reported that they had published their abstract(s). This sample of authors is 45% of the total number of authors (n=108) who published their work after presenting at the 2012 and 2014 MLA conferences. 51% (n=25) of respondents were motivated to publish due to intrinsic factors, 18.4% (n=9) were motivated due to extrinsic factors, and 30.6% (n=15) reported a mix of both. This difference in proportion was found to be statistically significant using a chisquare test (p=.02). No statistically significant differences were found between hospital and academic librarians or between those who published in peer-reviewed journals and those who published in other venues.

**Conclusion:** Findings indicate that librarians who chose to publish their work after presenting at MLA are primarily motivated to publish due to intrinsic factors. Interventions designed to encourage MLA presenters to publish their work should consider ways to cultivate presenters' intrinsic motivation.

### Librarians and Clinical Pastoral Educators Collaborating to Teach Evidence-Based Practice and Research Literacy

Practice Area: Innovation & Research Practice

**Kerry M. Dhakal** - Assistant Professor, Research and Education Librarian, Health Sciences Library, Columbus, Ohio

**Objectives**: Objective: The objective of this research project is to answer the question, how are librarians collaborating to teach evidence-based practice (EBP) and research literacy to students and residents in Clinical Pastoral Education programs nationwide? My hypothesis is that CPE programs are collaborating with libraries to access resources but are not as likely to collaborate with librarians to teach evidence-based practice and research literacy.

**Methods**: Methods: There are over 300 Association of Clinical Pastoral Education (ACPE) accredited Level I/II Clinical Pastoral Education (CPE) Programs (acpe.edu). After submitting the proposal for this project to the institutional IRB, I will develop a survey and send it to CPE program managers or certified CPE educators at each program to ask them if they collaborate with the library in any way and specifically when teaching EBP or research literacy. I will be using Qualtrics to develop the survey and NVivo 12 Pro and Microsoft Excel to analyze the data collected.

**Results**: Results: Preliminary results will be reported at the Medical Library Association Annual Conference 2022 and this section will be updated accordingly prior to the conference. These preliminary results will include identification of the range of ways that collaboration happens between libraries/librarians and CPE programs in different contexts.

**Conclusions**: Conclusion: Preliminary conclusion points will be collected and analyzed prior to the Medical Library Association Annual Conference 2022 and this section will be updated accordingly at that time.

#### Bibliotherapy for Stress Management: A Wellness Intervention for First-Year Medical Students

Practice Area: Education

Rebecca A. Morin - Head of Research & Instruction, Hirsh Health Sciences Library, Boston, Massachusetts

**Amy E. LaVertu, MLS** - Associate Librarian, Hirsh Health Sciences Library/Research & Instruction, Boston, Massachusetts

**Objectives**: Bibliotherapy, or reading for therapeutic effect, is traditionally deployed in a clinician or librarian-led community self-help context, usually taking the form of a book club or reading group. While medical students report high prevalence of emotional exhaustion and a greater likelihood of depression, their schedules, duties, and the COVID-19 pandemic all place significant barriers on regular attendance and participation in meetings or discussion groups. This study examines if replacing conventional bibliotherapy models with librarian-selected short readings and an independent, self-directed structure influences subjects' overall levels of stress and anxiety.

**Methods**: The study is an Interrupted Time Series (ITS) with four small concluding focus groups. 30 subjects were recruited from the MD class of 2024 in November 2020, and data collection began in January 2021. Data points are derived from the 10-item Perceived Stress Scale (PSS-10), a validated instrument widely used to assess subjects' global perceived stress. The PSS-10 was administered three times prior to intervention and three times following the intervention. The intervention was delivered in March 2021, consisting of three short readings that each participant selected from a list of six. The readings were a mix of fiction and non-fiction, focused on themes of plague and pandemic. All subjects received the intervention, and all who successfully completed the surveys and intervention were invited to participate in a small focus group.

**Results**: Data collected from the PSS-10 were analyzed for overall trends throughout the six months of the study and to determine any significant differences in pre-and-post intervention scores. Focus groups were conducted via Zoom and recorded, and the resulting transcripts corrected and coded by the research team. Qualitative data were analyzed using the constant comparison method.

**Conclusions**: This ITS did show lower PSS-10 post-intervention (p = .410, 95% CI [-2.19, .90]), but was constrained by one academic semester and did not achieve statistical significance; however, this study serves as a proof-of-concept for further exploration of bibliotherapy modalities in an academic health sciences library setting. Analysis of focus group transcripts revealed a very positive overall reaction to a wellness intervention offered by librarians rather than medical school administrators, an interest in a variety of "readers' advisory" service for topical non-curricular reading, and a strong sense of engagement in and concern for overall personal wellbeing among study subjects. Shortcomings of the study were also noted, particularly a desire to engage in deeper and more frequent discussion and analysis of the intervention readings with fellow subjects.

## **Characterizing Search Practices and Reporting in Recently Published Systematic Reviews and Meta-Analyses in Dentistry**

Practice Area: Information Services

Gina Genova - Clinical Librarian, Kornhauser Health Sciences Library, Louisville, Kentucky

**Objectives**: Systematic reviews and meta-analyses aim to identify and synthesize all available evidence to answer a research question. Over the past twenty years, these studies have become widespread in dentistry. Because the goal of a systematic review is to incorporate all evidence on a given question, the search methods used for a review are crucial to judge its validity. This project aimed to characterize the reporting of searches and sources searched for systematic reviews recently published in dental journals. Understanding the current landscape will better enable librarians to help dental researchers navigate systematic reviews, both as readers and authors.

**Methods**: PubMed was searched in February 2021 for English-language articles identified as systematic reviews or meta-analyses by their authors. A title search for "systematic review" or "meta-analysis" was conducted. The Dental journals, English language, and date range 2016-2021 filters were applied. This produced 3,172 results. A representative sample size was calculated, and a list of 343 articles was randomly generated. The full texts of these articles were obtained. Search details were taken from the methods sections. Search reporting was characterized as full, terms only, or absent. All languages included and sources searched were recorded. Results were summarized with descriptive statistics.

**Results**: Of the 343 articles, 24 (7%) didn't report searches. 68 (20%) provided a list of terms. 243 (71%) provided a full strategy for at least one database. 8 (2%) had inaccessible search information. 42 (12%) articles didn't report which languages were searched. 118 (35%) reviews placed no restriction on language. MEDLINE was the most-searched database, searched for 341 (99%) articles. Most articles (215, 63%) searched a Cochrane Collaboration resource. No other database was searched for a majority of reviews. Almost half (161, 46.7%) included some grey literature search.

**Conclusions**: This data provides a snapshot of current practices in searching for systematic reviews and meta-analyses in dentistry. In addition to characterizing favored sources, it suggests ways librarians can help to improve dental systematic reviews. Librarians can encourage researchers to search non-English literature and offer guidance on grey literature searching. The latter will be especially important going forward, as OpenGrey, a favored grey literature source, has since shut down. Finally, over a quarter of systematic reviews and meta-analyses did not fully report their searches. While this project did not evaluate the quality of reported searches, librarians can help ensure both that searches are more consistently fully reported, and that those searches are as rigorous as possible.

## Consolidating and Delivering Comprehensive Library Services Following a Health Care System Merger or Acquisition: A Delphi Study

Practice Area: Professionalism & Leadership

Stacy F. Posillico - Senior Librarian, Northwell Health Eastern Region Hospitals, Hempstead, New York

Jaclyn Morales, AHIP - Senior Librarian, North Shore University Hospital, Manhassett, New York

**Saori Wendy Herman, AHIP** - Director of Health Sciences Library, Assistant Professor of Science Education, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, Hempstead, New York

**Objectives**: When healthcare system mergers occur, full financial and cultural integration provides the most benefit. While there are well-researched standards for healthcare executives to follow during a merger, little empirical research is available for librarians to use in these situations. As a result, librarians are often left to develop their own methods of providing access and services in the newly merged system. Our objective is to present an update on the progress an e-Delphi study intended to achieve expert consensus from library professionals in the development of research-based recommendations for delivering library services through

one comprehensive, geographically distributed system following a merger or acquisition.

**Methods**: An e-Delphi research method is being used over a period of three rounds. Expert panelists for the study were solicited through email campaigns to library professionals from each of the 7 NNLM regions. Active involvement in a U.S hospital or healthcare merger in the last 10 years was the primary requirement for selection. The study was approved by the Northwell Health IRB with "Exempt" status. The research team created a validated qualitative questionnaire that was based on existing literature. Once empaneled, the survey was sent to expert panelists, who were asked to identify key tasks to be addressed during a merger. Thematic analysis will be performed and will serve as the foundation for the quantitative Round 2 and 3 questionnaires.

**Results**: This study is currently underway and the results are anticipated to be finalized in 2023. This presentation is intended to update and inform about the research process thus far.

**Conclusions**: Healthcare system mergers are the present and the future of hospital patient care. The expert panel will identify action-oriented priorities for librarian professionals to address before, during, and after a hospital or healthcare system merger. The results of this e-Delphi study will fill an existing gap in the literature on research-based recommendations for providing library services as healthcare systems transformatively expand. Hospital librarians, who are often unrepresented at merger negotiations, will be able to use this guidance to address library assimilation after a merger occurs.

#### The Continued Problem of Uniform Resource Locator Decay: An Updated Analysis of Health Care Management Journal Citations

Practice Area: Information Management

Amber Burtis - Assessment & User Experience Librarian, Southern Illinois University, Carbondale, Illinois

Susan Howell - Cataloging and Metadata Librarian, Southern Illinois University, Carbondale, Illinois

**Objectives**: This study updates a 2009 study which examined uniform resource locator (URL) decay in health care management journals to determine whether continued URL availability relates to publication date, resource type, or top-level domain. Research has primarily addressed URL accessibility at one snapshot in time or URL accessibility at one snapshot in time for a specific discipline or specific journal. A smaller number of studies have looked at content changes in a sample of URLs but no other published studies have followed a similar methodology to this study by comparing data from a specific discipline over two distinct time periods.

**Methods**: The URLs of web-based resources cited in articles published in five health care management source journals from 2016 to 2018 were compiled in a Microsoft Access database. In total, 10,319 web-based resources were collected. Information about the resource (source journal, issue date, type of resource, URL, URL domain extension, availability) was entered into the database. Each web-based resource was checked to determine if the URL was active or inactive. Statistical analyses were performed to determine if there were statistically significant differences by publication date, resource type, or top-level domain or across the two study periods.

**Results**: There were statistically significant differences in URL availability across resource type and top-level domain. Websites were the resource type with the highest rate of decay. Domains with the highest rate of decay were .com and .net and the lowest rate were .edu and .gov. As expected, the older the citation, the higher the rate of decay. The number of URLs cited increased over 500% since the original 2009 study even though both studies examined a sample of three years of the same five journals. The overall rate of URL

decay decreased from 49.3% to 36.1% between studies.

**Conclusions**: An analysis of differences in findings between the two study periods found that URL decay in health care management journals has decreased in the last 15 years. Still, URL decay does continue to be a problem. Interestingly, health services policy research journals had a lower rate of decay than practitioner-oriented journals (34.8% vs. 51.7%). Authors, publishers, and librarians should work collaboratively to promote the use of digital object identifiers and web archiving as a solution to this problem, perhaps by studying and replicating efforts used by health services policy research journals to increase continued URL availability.

#### **Developing Best Practices for Searching During Public Health Emergencies**

Practice Area: Innovation & Research Practice

**Stacy B. Brody** - Reference and Instruction Librarian, Himmelfarb Health Sciences Library, Washington, District of Columbia

Nicole Askin - Liaison Librarian, WRHA Virtual Library, University of Manitoba, Manitoba, Canada

**Jennifer Coffman, MI** - Science and Engineering Research Librarian, Brown Science and Engineering Library at University of Virginia

Sara Loree, AHIP - Medical Library Manager, St. Luke's Library

Mark Mueller - Clinical Librarian, Saskatchewan Health Authority, Regina, Saskatchewan, Canada

**Margaret Sampson, AHIP** - Evidence Synthesis Librarian, Clinical Research Unit, Children's Hospital of Eastern Ontario Research Institute, Ottawa, Ontario, Canada

**Objectives**: Information professionals working in hospitals, universities, government agencies, and other settings have been called upon to support medical and health care professionals, public health experts, decision-makers, and guidelines creators throughout the COVID-19 response. COVID-19 literature searching presented searchers with new challenges, including the volume and heterogeneity of information and the proliferation of new databases and information portals, and exposed existing issues in metadata and publishing. Leaders of a voluntary pandemic response organization convened an expert panel to develop a broad, living document of best practices for searching in public health emergencies.

**Methods**: Project directors and advisors developed core elements from the literature and shared experiences. Experts were identified by affiliation with evidence synthesis groups, COVID-19 response search experience, and nomination. Consensus on core elements was established through an online survey of expert participants. One project director developed guiding questions on the agreed-upon elements, and expert participants provided written responses. Project coordinators synthesized responses to provide the foundation for best practice recommendations and questions for further discussion. Focus group discussions generated consensus on recommendations extracted from written responses and addressed outstanding questions or areas of disagreement. A writing group of expert participants and volunteers drafted the manuscript. Experts then reviewed the statement prior to publication and further dissemination.

**Results**: Twelve information professionals contributed to best practice recommendations on six elements: core resources (3 recommendations), search strategies (5 recommendations), publication types (3 recommendations), transparency and reproducibility (2 recommendations), collaboration (7 recommendations), and conducting research (3 recommendations). Underlying principles for the

recommendations include timeliness, openness, balance, preparedness, and responsiveness.

**Conclusions**: The authors and experts anticipate the recommendations for searching during public health emergencies will help information specialists, librarians, researchers, and decision-makers respond to future public health emergencies; including, but not limited to disease outbreaks. The recommendations complement existing guidance, including MECIR and PRISMA-S, and address concerns and situations specific to emergency response. The statement is intended to be a living document that should be reviewed following the end of the current Public Health Emergency of International Concern and after the next global health emergency. Future revisions should solicit input from a broader community and reflect conclusions drawn from meta-research on COVID-19 and health emergencies. Changes will be required as technologies, opportunities, and norms evolve, but the underlying principles will remain.

### Developing a Stakeholder-Guided, Principles-Based Community Engagement Toolkit

Practice Area: Health Equity & Global Health

**Allison Cruise** - Visiting NLM Associate Fellow, Health Sciences Library & Informatics Center, Albuquerque, New Mexico

**Objectives**: The National Library of Medicine's Office of Engagement and Training (NLM OET) identified a need to expand community engagement and outreach initiatives for NLM and the Network of the National Libraries of Medicine (NNLM). This project was designed to explore how NLM and NNLM stakeholders define successful community engagement. Using these findings, the project ultimately sought to create a resource for NLM and NNLM stakeholders which could facilitate current and future engagement efforts. The author developed a community engagement toolkit for NLM and NNLM stakeholders as a resource to meet these goals.

**Methods**: Working definitions of community and community engagement were developed through collaboration between project partners in a shared document. Using the definitions, thoughts, resources and background data collected in this document, the author developed a set of principles of community engagement. This was an iterative process consisting of three draft documents. Once the third draft was ready, the team agreed on a set of interview questions. They then identified eleven stakeholders within NIH, NLM, and NNLM to interview using the predetermined set of questions. The third draft of the principles document was shared with all eleven of the interviewees, and the author incorporated feedback into this document throughout the interview phase. Following the conclusion of these interviews, the author created a community engagement toolkit that was informed by interview findings and final principles.

**Results**: Through the interview process, the author identified key themes and challenges to share with OET to inform future engagement and outreach decisions. These findings also helped to inform the community engagement toolkit. This toolkit is a nine-page document consisting of five identified principles. These principles are: trust, flexibility, respect, intentionality, and empowerment. Each principle is paired with a definition, and four of the five have at least one strategy. The defined strategies are paired with questions to consider, tools to use, and resources or examples where appropriate. The toolkit concludes with suggestions for what the toolkit user can do next.

**Conclusions**: This project represented an opportunity to explore and think critically about the meaning of community, community engagement, and what successful community engagement looks like. Collaboration was a fundamental part of the toolkit creation, from the definition stage to the final stage of identifying relevant and appropriate principles and strategies to share. The outcome of this project, a community engagement toolkit for NLM and NNLM stakeholders, is designed to be a thought-provoking tool for both

beginning and experienced engagement and outreach leaders. Though its creation was informed by NIH, NLM, and NNLM stakeholders, it is a flexible and living document, with a paired principle and strategy framework which can be adapted to meet different organizational and community needs.

#### Didactic Physician Assistant Students' Perceptions of Evidence-Based Medicine Resources: A Cross-Sectional Examination

Practice Area: Education

Brittany R. Heer - Health Sciences Librarian, Butler University Libraries, Indianapolis, Indiana

Chris Gillette, PhD

Chris Roman, DMS, PA-C - Associate Professor, Butler University

M. Jane McDaniel, MS, MLS(ASCP)SC - Lecturer and Chair of Admissions, Yale School of Medicine Physician Assistant Online Program, New Haven, Connecticut

**Objectives**: Evidence-based medicine (EBM) instruction is required for physician assistant students. This pilot study seeks to understand which attributes of EBM resources PA students find most and least useful, and their self-efficacy in searching and appraising medical literature.

**Methods**: Students at three PA programs completed a cross-sectional questionnaire at the end of their didactic EBM course that included preferences for commonly used databases, (PubMed, PubMed Clinical Queries, Embase, Cochrane, the TRIP database, Micromedex, Dynamed+, and UpToDate), and self-efficacy in searching/appraising the literature. Thematic analysis identified the most important student-reported attributes of a resource.

**Results**: Eighty-seven students completed the questionnaire (39.5% response rate). The most accessed tool was UpToDate while the least accessed tool was Embase. Students rated that the most important attributes were ease of use/search, information presentation, and conclusion/critical appraisal skill. After one EBM course, on average, students rated their self-efficacy searching the literature (M=3.2, SD=0.6) and appraising the literature (M=3.1, SD=0.8) as 'moderately confident'.

**Conclusions**: PA students in this sample preferred UpToDate as their top EBM tool based on attribute ratings and Embase as their least preferred EBM tool. However, each database included in this pilot study received positive feedback, despite a low usage rate across institutions. This suggests that instructors and librarians have an opportunity to expose students to more tools as well as encourage "the right tool for the right job." Survey results indicate that PA students value ease of use above all else, which can inform both educators and designers of EBM tools.

## Do Your General Public Users Understand the Covid-19 Health Information You Have Provided? A Content Analytical Study

Practice Area: Education

Feili Tu-Keefner, Ph.D., M.L.I.S. - Associate Professor, School of Information Science, Columbia, South Carolina

April Hobbs - Adult Services Librarian, Charleston County Public Library

Abby Bricker - Research Associate, University of South Carolina

**Objectives**: Because uncertainty, great fear, conspiracy theories, and distrust are associated with the current COVID-19 pandemic, people need access to accurate and easy-to-understand information to help them act appropriately. Major health organizations in the U.S., such as the NLM and the Mayo Clinic, have created web portals to rapidly release authoritative COVID-19 health information to a large population. These resources published via MedlinePlus and Mayo Clinic have been widely promoted for user access in public libraries. It is essential to examine whether these authoritative COVID-19 health information resources facilitate health information access by adults from the general public.

**Methods:** (This study examines the levels of readability and comprehension of the COVID-19 health information distributed via MedlinePlus and by the Mayo Clinic. The research design for this study is based on Savolainen's everyday life information concepts and Dervin's sense-making methodology. The research purposes are to 1) better understand the connections between readability levels and consumer health information comprehension; 2) investigate whether the authoritative COVID-19 health information provided can support the evidence-based health information access activities of adults from the general public. The sample populations analyzed are identified through accessing the COVID-19 health information shared on the public library systems' websites of the twenty largest cities in the United States. Microsoft Office software is utilized for content analysis and to calculate the averages of the readability scores of the COVID-19 health information provided by the targeted organizations.

**Results:** The study examines the reading level of the resources to see if they are compatible with the guidelines of the American Medical Association (AMA) for patient education materials (i.e., at a sixth-grade level). The results show that the documents reviewed in the study are not compatible with this reading level. Information provided via MedlinePlus and the Mayo Clinic must be made easy to understand and access.

**Conclusions:** This study shows the readability levels of the commonly used authoritative COVID-19 consumer health information distributed via MedlinePlus and by the Mayo Clinic) are higher than the AMA recommendations for patient education materials. Most of the public libraries and public librarians are not aware of the use of MedlinePlus for user services; education programs must be provided to public librarians and the general public to promote the awareness of MedlinePlus and MedlinePlus Español. Publishers, such as the National Library of Medicine, must strive to lower the readability levels of their COVID-19 consumer health information.

## Educator Experiences With and Attitudes Toward Librarian Involvement in Online Interprofessional Education: A Qualitative Study

Practice Area: Education

**Rachel Helbing, AHIP** - Director of Library Services for the Health Sciences, University Libraries, Health Sciences Library, Houston, Texas

Objectives: Interprofessional education (IPE) occurs when students from different health professions learn about, from, and with each other. IPE adoption has not been ubiquitous, and little research on this topic has incorporated health sciences librarians and other non-clinicians. The objective of this study was to assess educator views on the knowledge, skills, and abilities needed by IPE facilitators and to explore their attitudes toward and experiences with non-clinician facilitators of online IPE activities, particularly health sciences

librarians. The following research questions guided this study: 1) What knowledge, skills, and abilities do health sciences educators deem necessary for facilitators of IPE activities? 2) What are health sciences educators' experiences with and attitudes toward non-clinician facilitators of IPE activities? 3) What are health sciences educators' experiences with and attitudes toward health sciences librarians in particular as facilitators of IPE activities? Methods: This qualitative study utilized a novel questionnaire that included both multiple-choice and free-text questions. The latter were grounded in critical incident technique (CIT), a research methodology that uses direct observations of human behavior to solve practical problems. CIT research asks participants to recall and describe a time when a phenomenon of interest occurred. It was utilized in this study to identify what general factors, and what characteristics of facilitators, are associated with successful IPE activities. The questionnaire was distributed electronically to the population of health sciences administrators, faculty, and staff in Texas involved with IPE. There were 48 responses. The multiple-choice data were analyzed via descriptive statistics, while the free-text data were coded and analyzed via inductive thematic analysis principles. Results: Educators recognized a wide range of characteristics needed by IPE facilitators but viewed interpersonal skills as the most important. They had substantial experience with IPE and recognized the importance of engagement for these learning activities. They also had considerable experience with non-clinician facilitators of IPE activities but less with health sciences librarians. Educator attitudes toward non-clinician facilitators of IPE, including librarians, were positive. Conclusions: The findings of this study indicated that non-clinicians can build upon their existing skillsets and increase their involvement with IPE. They can make the case at their institutions that interpersonal skills and the ability to elicit engagement are more important to IPE than a clinical background. Proper facilitator training will help to ensure success. Having a larger pool of facilitators from which to draw can increase the incidence of IPE, resulting in more collaborative care and improved patient outcomes.

## The Effect of Librarian Collaboration on the Quality of Otolaryngology Systematic Reviews and Meta-Analyses

Practice Area: Information Services

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**Rachel Whitney, AHIP** - Research & Education Informationist, Medical University of South Carolina Libraries, Charleston, South Carolina

Tamar Gordis - Research Fellow, Medical University of South Carolina, Charleston, South Carolina

**Michael Shih** - Clinical Research Fellow & Senior Manager of Clinical Research Operations, Medical University of South Carolina, Charleston, South Carolina

**Shaun A. Nguyen, M.D.,FAPCR** - Professor & Director of Clinical Research, Medical University of South Carolina, Charleston, South Carolina

**Objectives:** This study aims to determine if librarian collaboration is associated with better search quality, reproducibility, and reporting in otolaryngology systematic reviews and meta-analyses. Otolaryngology researchers at the Medical University of South Carolina observed an improvement in the quality of systematic reviews and meta-analyses when collaborating with a librarian, which aligns with what has been published in other health sciences disciplines. To better understand if this trend of increased quality through librarian collaboration is consistent in otolaryngology literature, faculty and research fellows approached librarians with an opportunity to lead this research project.

Methods: Clarivate's Journal Citation Reports was utilized to identify 33 otolaryngology journals which were

then searched in PubMed using a systematic review and meta-analysis search hedge. To identify trends over time, studies from selected date ranges beginning in 2010 were included. Librarians and otolaryngology research fellows extracted data from 505 systematic reviews and meta-analyses. Two research fellows used a data extraction form in Covidence to independently extract the following data elements: journal title, publication type, level of librarian involvement, reporting guideline followed, number of databases searched, dates of database searches, database limits/filters, search peer review, flow chart, grey literature searched, citation searching performed, and times cited. Disagreements were resolved through consensus. Two librarians used a Google form, based on a modified PRESS checklist, to independently evaluate search reproducibility and quality.

**Results:** These results are preliminary and final results are forthcoming pending data analysis by an otolaryngology statistician. All four types of librarian involvement (no acknowledgement, mentioned in text, acknowledgement, and co-authorship) have increased over time. In particular, librarian co-authorship increased from 0% in 2010, to 1.48% in 2015, to 10% in 2021. We anticipate this trend to continue in future years. Similar to the increase in librarian involvement over time, an increase in the overall usage of reporting guidelines was observed. 48% of articles without librarian involvement did not include a reproducible search strategy, while 57% of articles with librarian involvement included a reproducible search strategy for more than one database. The average search quality was higher in searches which had librarian involvement versus searches that had no librarian involvement.

**Conclusions:** Many organizations recommend including librarians on systematic reviews and metaanalyses. We hope that this study adds to the body of evidence linking librarian collaboration with improved search quality, reproducibility, and reporting, as well as demonstrates the value of providing authorship to librarians on systematic reviews and meta-analyses.

#### **Establishing Metrics to Evaluate Diversity in PubMed Central**

Practice Area: Information Management

**Luke Kudryashov** - Associate Fellow, National Institutes of Health, National Library of Medicine, Champaign, Illinois

**Simone Stone** - Associate Fellow, National Institutes of Health, National Library of Medicine, Champaign, Illinois

**Frank C. Vitale, IV** - Associate Fellow, National Institutes of Health, National Library of Medicine, Champaign, Illinois

**Samantha Kennefick Wilairat, MAT, MLIS** - Associate Fellow, National Institutes of Health, National Library of Medicine, San Jose, California

**Objectives**: The primary objective of this research project is to measure and evaluate the diversity, equity, inclusion, and accessibility (DEIA) of journal citations within PubMed Central. The process of conducting this research project involved engaging with multiple stakeholder perspectives, completing literature review and technical analysis, and identifying metadata relevant to DEIA. Throughout the project, we hypothesized that DEIA was inadequately represented in existing database metadata schemas.

**Methods**: Diversity metrics were culled from cross-disciplinary literature reviews and consultation with stakeholders. The researchers developed metrics on all possible levels of analysis. The authors compiled a comprehensive list of all DEIA-related metrics uncovered in the literature review. Considering the broad scope of DEIA, a large majority of identified journal diversity metrics are not analyzable via current metadata

within the database. Thus, the preliminary results of this study will focus on the feasibility of DEIA-related bibliometric analysis of PubMed Central.

**Results**: There are many potential DEIA-related metrics at four levels of analysis (author, article, journal, publisher). Given the current metadata availability and ethical considerations the feasibility and number of DEIA-related metrics that PubMed Central can assess is limited. Because DEIA-related information is not standardized within metadata elements, Natural Language Processing can be used to clean data to enable analysis.

**Conclusions**: We have identified DEIA bibliometric analyses that are possible given the current metadata structures in PMC. We also hope to convey the following generalizable takeaways identified during our research process: Project scoping, ethical considerations, technical considerations, and consultations with stakeholders.

#### An Evaluation of the Openness of COVID-19-Related Randomized Control Trials

Practice Area: Innovation & Research Practice

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Chevenne Payne - Graduate Student, Biology

**Christopher Stave, MLS** - Graduate/Clinical Education Librarian, Lane Medical Library, Stanford University, Stanford, California

**Lily Ren, Master of Information -** Research Communications Librarian, Lane Medical Library, Toronto, Ontario, Canada

Connie Wong, DVM, MLIS, MPVM - Medical Education Librarian, Lane Medical Library, Toronto, Ontario, Canada

Amanda Woodward, MLIS - Web Services Librarian, Lane Medical Library, Stanford, California

**Objectives**: Open science practices have received considerable attention during the COVID-19 pandemic. However, the openness of COVID-19-related randomized controlled trials (RCTs) has yet to be comprehensively assessed. RCTs are frequently referred to as the "gold standard" of evidence which underscores the importance of ensuring their results are rigorous and transparent. In this observational study, we are examining the openness of COVID-19 trials along several dimensions, including open access to publications, data sharing, preregistration, and the availability of other research materials (e.g. protocols).

**Methods**: After identifying published reports describing the results of COVID-19-related RCTs through a comprehensive literature search, we have begun to extract information- both from the reports themselves and from additional information sources (e.g. Unpaywall)- to characterize their degree of openness. In this presentation, we will discuss our preliminary findings as well as how we used this effort to gain experience implementing open science practices ourselves.

#### **Experimenting with the Flip as an Endnote Instruction Method**

Practice Area: Education

**Megan Bell, MLIS, AHIP** - Reference Librarian & School of Health Professions Liaison, The University of Alabama at Birmingham / UAB Libraries, Birmingham, Alabama

**Objectives**: To compare 2 instruction methods for teaching graduate students EndNote. Researcher evaluated whether there was a difference in graduate student confidence using EndNote, instruction satisfaction and knowledge retention regarding EndNote software when instructor used flip classroom model with active learning (experimental) compared to in-class lecture and active learning (control). Study addressed gap in the literature regarding flipped classroom instruction, library instruction one shot sessions and citation manager instruction. Based on literature review, researcher hypothesized there would be a difference in graduate student confidence using EndNote and instruction satisfaction, but no difference in graduate student knowledge retention regarding EndNote software.

**Methods**: Cluster sampling was used to recruit participants. Researcher used Campbell and Stanley post-test only design with random assignment. Classes were assigned to either control or experimental arms of study. Experimental group was given EndNote tutorial one week prior to instruction. Control was not given EndNote tutorial prior to session. Both groups received active learning instruction session. After instruction session, both experimental and control were given assessment which evaluated students' confidence using EndNote, instruction satisfaction and knowledge retention. Confidence and satisfaction questions used Likert scale; questions evaluating knowledge retention used multiple choice and true false questions. Multiple choice and true false questions assigned grade based on questions answered correctly. Two-tailed Mann-Whitney U Test used to analyze distribution of grades and Likert scale of satisfaction and confidence.

**Results**: Study included 6 classes; 3 in experimental and 3 in control. Control included 17 students and experimental included 8 students. All experimental participants completed tutorial prior to instruction session. Alpha 0.05 used as significance level for all tests. Grade P-value was 0.344. Satisfaction P-value was 0.215. Confidence P-value was 0.344.

**Conclusions**: Data suggest there was no difference in grades, satisfaction with instruction session and confidence using EndNote between experimental and control groups.

## **Exploring Perceptions on DEI Workplace Training Through a Self-Assessment Survey**

Practice Area: Professionalism & Leadership

Chloe Hough, AHIP - Reference Librarian, Tampa Bay Regional Campus Library, Clearwater, Florida

**Jane Morgan-Daniel, AHIP** - Community Engagement and Health Literacy Librarian, University of Florida Health Science Center Libraries, Gainesville, Florida

**Objectives**: After a Diversity, Equity, and Inclusion (DEI) Team had been in place for three years, two leaders initiated a project to evaluate the perceptions of health science library faculty and staff on DEI topics and training. As one of the primary charges of the DEI Team is to provide training and programming, the overall goal of the assessment was to improve DEI workplace training offerings at the library by enabling the Team to better understand preferred training methods, whether previous DEI training was considered effective, and which DEI topics library workers felt most and least knowledgeable about.

**Methods**: The project team modified an existing survey on perceptions of DEI training which was discovered during a literature search. The survey was revised to better suit an academic library setting before being created in Qualtrics and distributed to all library faculty and staff via email, starting June 2nd, 2021. The anonymous mixed methods survey consisted of 18 questions and was available for a two-week period. The questions asked participants which training methods were preferred, whether they felt any benefit was gained from previous DEI training, which DEI-related topics respondents felt the most and least knowledgeable about, and what topics caused discomfort. Specific feedback and suggestions for training topics could be provided through free-response questions.

**Results**: Twenty survey responses were received, for a response rate of 90%. Most respondents (14) reported that DEI training was helpful and multiple perceived benefits were indicated. The responses for preferred training methods were varied, without any strong majority. Based on the questions about which DEI topics participants were least knowledgeable about and the free response topic suggestions, the following DEI areas were identified as the most of interest to library employees for further training: asexual inclusivity, critical race theory, critical librarianship, information needs of non-fluent English speakers, acculturation theories, social justice, and active allyship.

**Conclusions**: The DEI Team met to discuss the survey results and created an action plan for how to move forward. Future plans include introducing a DEI book club or movie club on some of the topics, searching for outside speakers to cover requested areas, and developing additional training sessions from scratch on a semesterly basis. In order to address the interest in various training methods, the Team also plans to explore facilitator training to better be able to host group discussions. Overall, the survey provided valuable feedback for the DEI Team and the responses will closely inform future training activities.

## Getting Schooled on Instruction: A Needs Assessment on Teaching Competencies for Librarians

Practice Area: Education

**Catherine Pepper, MLIS, MPH** - Associate Professor/Regional Services Coordinator, Texas A&M University, Austin, Texas

**T. Derek Halling, MLIS** - Associate Professor/Director, Texas A&M University Libraries/Subject Librarians, College Station, Texas

**Objectives**: "Instruction" is a competency defined by the Medical Library Association and is a job requirement for many public services librarians. However, little opportunity for training in pedagogy exists in formal training venues, such as library school, resulting in librarians learning how to teach on their own. Therefore, one of the primary competencies for librarians involved in health sciences curricula lacks an academic foundation and is largely consigned to situational, experiential learning. The research questions are: How do librarians learn to teach? What specific pedagogical skills do librarians need?

**Methods**: A 10-item survey on pedagogical training needs for health sciences and academic librarians will be sent to distribution lists of several library associations. Participants are asked to identify current teaching topics, how they learned to teach, and which of 38 areas of pedagogical training are needed. Face and content validity will be tested prior to survey launch. Data collection will conclude in early 2022. Demographic and quantitative content questions will be presented as categorical percentages, and subgroup data will be reported using cross-tabulation analysis. Qualitative responses will be coded to derive themes. Comparisons between experiences of health sciences librarians and general academic librarians will be explored.

**Results**: Preliminary results from a small-sample pilot survey indicate that "Curriculum and instructional development", "Assessment methods", "How to ensure deep learning rather than surface learning, and "Effective active learning" are among areas of highest need. "Observing other instructors" and "On the job training" were among the most frequently selected methods for pedagogical training, while "Courses in library school" received zero selections. Final data analysis will be completed by April 2022 and results from the full study will be reported at the meeting.

**Conclusions**: Respondents from the pilot survey indicated a strong need for more formal and accessible opportunities for gaining skills and knowledge in instruction. As the methods for gaining skills and mastery of this competency are not standardized, they inherently risk having content gaps, becoming experientially stagnant, and leading to potential instruction irrelevance for learners. Recommendations and conclusions derived from the full study will be presented at the meeting.

#### **Education Session 4**

#### **Building Question Formulation Skills Among Dental Hygiene Students**

Practice Area: Education

**Jonathan D. Eldredge, AHIP, FMLA** - Professor, UNM Health Sciences Library and Informatics Center, Albuquerque. New Mexico

Christine Nathe, RDH, MD - Professor and Director, Dental Hygiene, Albuquerque, New Mexico

**Objectives**: Dental hygiene students at our institution learn Evidence Based Practice skills during their second year. We noted over the years that students markedly improved their formulated questions after training and application of their skills with the assistance of a rubric. Research Question: How much training do students require in order to use the question formulation rubric effectively: a brief 5-minute overview or a 25-minute training that includes a student peer assessment application exercise?

**Methods**: Randomized controlled trial. All pre-randomized 24 students took the question formulation pre-test on the first day of the course on January 22nd. The two instructors scored the students' formulated questions with the students' identities concealed. As expected, there were no statistical differences between the intervention or control group pre-test scores. The instructors administered the post-test on February 19th after the Intervention group had received the training and rubric with the Control group only having received the rubric with a brief explanation. The instructors scored the Intervention and Control group post-tests with the students' identities concealed.

**Results**: The investigators employed a paired t-test to analyze the pre- and post-test score differences for each student in the Intervention and Control groups. Surprisingly, the students' average post-test scores were 41.75 for the Control group and 43.67 for the Intervention group on a 70-point scale, which were not markedly different. The initial paired t-test of the post-test scores confirmed no statistical difference either. Further analysis revealed a bifurcation in post-test scores with six (6) students in the Control group scoring considerably higher than their classmates. Interviews discovered that four (4) of these students collaborated with their fellow students in the Intervention Group following the instruction so they actually did benefit from peer instruction. In other words, some contamination occurred. The other two (2) students learned and practiced alone using the rubric.

**Conclusions:** : The initially surprising results became less surprising with some further analysis and by interviewing students who appeared to score higher than expected. The additional analysis suggests that

Dental Hygiene students benefit by experiencing extra instruction, with the cautionary caveats that this study was limited by some contamination and that it took place during the Covid-19 era.

#### **Information Services Session 3**

#### Common Misspellings and Their Impact on Health Sciences Literature Search Results

Practice Area: Information Services

Jill A. Turner, BSN, MLIS - Associate Library Professor, Dental School Library, Detroit, Michigan

Julia L. Eisenstein, MA, MLIS - Library Professor, University of Detroit Mercy, Detroit, Michigan

**Objectives**: As far back as the 1960's, the health sciences literature has documented the problem of misspelled words in scholarly research. More recently, the misspelling of "pruritus" has received particular attention for the frequency with which it is misspelled. While some articles discuss the practical challenges that can arise from misspellings, very little has been written about how misspelled medical terms affect the ability to retrieve articles from bibliographic databases. The study examines the frequency of misspellings among several commonly used terms and explores how misspellings of these terms affect the retrieval of articles in multiple databases.

**Methods**: Investigators consulted two lists of commonly misspelled words (medical and plain English language), selecting words for analysis that might be used in a health sciences literature search. Searches for misspelled words were conducted in multiple databases. In order to remove articles that would be retrieved using a word's correct spelling, the Boolean Operator NOT was utilized. The remaining results were the articles that could only be retrieved if the word was misspelled in the search. Results were limited to publication dates between 1990-2019. Articles with clinical significance were targeted. Instances of misspellings were verified in remaining articles, and those with misspellings occurring solely in the bibliography were excluded.

**Results**: The top five most commonly misspelled words were occurrence, ophthalmology, pruritus, sagittal, and resistance. The least misspelled, at five articles apiece, were cirrhosis and hygiene. Ophthalmology had the most number of articles that contained at least one misspelling, with 57% of those articles "missing" when searched with the correct spelling. The word with the highest percentage (82%) of missed articles was arrhythmia. Misspelled words were random throughout the articles. Six words had at least one instance in the title. Results for pruritus found sixteen articles containing multiple instances of both spellings (pruritis and pruritus) within the same article.

**Conclusions**: The results of this study indicate misspellings in the medical literature are much more common than one would expect. The ability to retrieve articles is adversely affected by misspellings which has the potential to affect patient care. The manner in which databases handle misspelled keywords is not uniform among databases or even within a single database depending on the search term. Many opportunities exist in the editorial process to identify and correct misspellings before publication. Less so once a journal is published. The implications for peer review and manuscript evaluation are discussed.

#### Developing and Validating a PubMed Infant Hedge: An MLA Pediatrics Librarians Caucus Initiative

Practice Area: Information Services

**Emily Brennan, MLIS** - Research and Education Informationist, Medical University of South Carolina Library, Charleston, South Carolina

Christine Willis, AHIP - Clinical Information Librarian, Children's Healthcare of Atlanta, Atlanta, Georgia

**Lynn Kysh, MLIS, MPP** - Clinical & Research Librarian, Children's Hospital Los Angeles, Los Angeles, California

**Roxanne Bogucka, AHIP** - STEM Liaison Librarian for Health Sciences, University of Texas Libraries, Life Science Library, Austin, Texas

Rachel J. Hinrichs, AHIP - Health Sciences Librarian, IUPUI University Library, Indianapolis, Indiana

Objective: MLA Pediatrics Librarians Caucus members expressed a need for updated pediatric hedges because of revisions to PubMed's search algorithm and librarians' growing collaboration on systematic reviews. Therefore, to create modular hedges based on age groups, the caucus started with an initiative to develop and validate five infant search hedges for use in PubMed. Four hedges were developed by the caucus, based on a combination of personal experience and existing published hedges. These hedges are sensitive and intended for systematic reviews and other broad searches. The fifth hedge, for comparison purposes, is PubMed's infant filter.

Methods: We selected five infant hedges to test and validate. Partnering with a statistician, we conducted a pilot test on a subset of 50 articles, then expanded to the full set of 1000 articles. We identified five search topics that retrieved references on adult and infant populations. We gathered 200 references from each of the five topics, giving us 1000 total. Various date ranges ensured inclusion of indexed and non-indexed references. References were exported into Covidence for screening. Five reviewers, with two votes needed per reference, screened each title and abstract, indicating if the reference included the infant population (human infants, birth-23 months). A third reviewer resolved conflicts. Full-text articles were screened using the same process. The final selected references were the true positive reference set which was used to calculate interrater reliability, sensitivity and specificity of each hedge.

Results: Interrater reliability was 53% for title/abstract screening, and 80% for full-text screening. Hedge 1 (no field tags) has the highest sensitivity (88%). Hedge 2 (text word field tags), hedge 3 (title/abstract field tags) and hedge 4 (super simple keywords) have the same sensitivity (87.4%). Hedge 4 (super simple keywords) has high sensitivity (87.4%) and specificity (89.3%). Hedge 5 (PubMed infant filter) has the highest specificity (96.2%).

Conclusion: MLA Pediatrics Librarians Caucus members developed and validated five sensitive search hedges for use in PubMed. This project provides transparent statistics on the sensitivity and specificity of each infant hedge so librarians can select the hedge that best suits their needs. Hedge 1 may be most appropriate for systematic and scoping reviews, while hedge 5 may be most appropriate for bedside searches. We intend to use the same process to develop additional age-specific hedges for use in PubMed, then translate these hedges for use in other databases.

Evaluating the Influence of Information Literacy Instruction on Health Information-Seeking Behavior in African American Communities: Preliminary Results of a Qualitative Evidence Synthesis

Practice Area: Information Services

**Bethany S. McGowan, MLIS, MS, AHIP** - Associate Professor, Libraries and School of Information Studies, West Lafayette, Indiana

Christina Harrington, Ph.D. - Assistant Professor, School of Computer Science

Jahala Simuel - School Librarian, High School Library, North Carolina

**Objectives**: This report aims to share knowledge gained from a qualitative evidence synthesis and is the first deliverable of an IMLS-funded planning project focused on training library workers to develop information literacy interventions for African American individuals and communities. Project objectives are to:
- Identify how health literacy interventions influence information-seeking behaviors amongst African Americans by observing differences and similarities in trends and themes reported across existing studies. - Evaluate health literacy instruction/education as an infodemic intervention that strengthens the resilience of individuals and communities to infodemics

**Methods**: This research study uses a qualitative method of data collection and analysis. The data collection process included scoping searches to determine the type and richness of available qualitative evidence before selecting the methodology and methods. We followed a Cochrane-established methodology for executing qualitative evidence synthesis--specifically, executing a full convergent mixed-methods review where trials and qualitative evidence are synthesized separately, creating opportunities for them to 'speak' to each other during development, and then integrated within a third synthesis.

Results:	
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Conclusions:

#### **Professionalism & Leadership Session 2**

## **Except For My Commute, Everything Is the Same: The Shared Lived Experience of Libraries During the COVID-19 Pandemic**

Practice Area: Professionalism & Leadership

Bart Ragon - Interim Director, University of Virginia, Charlottesville, Virginia

**Melissa L. Rethlefsen, AHIP** - Executive Director & Professor, Health Sciences Library & Informatics Center, Gainesville, Florida

**Elizabeth C. Whipple, AHIP** - Assistant Director of Research and Translational Sciences, Ruth Lilly Medical Library, Indianapolis, Indiana

**Objectives**: This longitudinal study investigated the impact of COVID-19 on academic health sciences libraries over three pivotal time periods during the pandemic. Findings from the study provide context for the challenges libraries faced and the tactics they employed to ensure continuity of services and support of their staff. The study sought to capture the experiences of libraries as they transitioned to remote service environments, evolved over the course of an uncertain academic year, and began to transition or plan to transition back to in person services in some capacity.

**Methods**: This study used a multi-site mixed-method approach to capture the direct experience of libraries as they evolved during the COVID-19 pandemic at three time points: April 2020, August 2020, and February 2021. Respondents to the April 2020 survey were invited to participate in the next two surveys. The data was collected in Qualtrics and coded using DeDoose, an online platform for analyzing qualitative and mixed methods research. Two researchers developed an initial code set and used open coding techniques to uncover themes that emerged from the data. A sample of the coding independently verified by a third researcher to ensure inter-rater reliability. Results from this study aim to strengthen and elucidate what is known about how libraries responded to COVID-19, as well as identify best practices when responding to future events.

**Results**: Thirty-seven AAHSL libraries across all regions participated in the April 2020 survey, followed by 26 and 16 libraries for the August 2020 and February 2021 surveys, respectively. We identified 29 independent themes from the qualitative data, with the categories of Lessons Learned, Internal Communication, Telecommuting and Library Building being used most frequently across all three surveys. Throughout the data, staff remained a central theme.

Conclusions: From April 2020 to February 2021, academic health sciences libraries shared a transformative experience as they responded to new challenges due to the pandemic. The phenomenological approach used provided a rich dataset that assisted in the creation of a shared experience by libraries. At the onset of the pandemic, library leaders were energized as they focused on the transition to remote services and well-being of staff. As the pandemic dragged on, respondents expressed exhaustion, having to maintain focus on internal communication and staff well-being, but also working through the challenges of budget reductions, reopening planning, and a lack of certainty. Final data analysis, presented at the conference, will include an analysis of thematic clusters, breakdowns by region, and descriptive statistics.

## Impact of COVID-19 on Parents/Guardians in the Library Profession

Practice Area: Professionalism & Leadership

**Stephanie C. Roth, MLIS, AHIP** - Biomedical & Research Services Librarian, Ginsburg Health Sciences Library, Temple University, Philadelphia, Pennsylvania

**Elizabeth G. Hinton, AHIP** - Associate Professor/Head of Research Impact & Engagement, Rowland Medical Library/University of Mississippi Medical Center, Jackson, Mississippi

Bridget Jivanelli, MLIS, AHIP - Medical Librarian, Kim Barrett Memorial Library, New York, New York

**Objectives**: While the impact of COVID-19 was felt by many, there is no collective understanding of the impact of the pandemic on those who are parents/guardians working in the library setting in the United States. Therefore, this narrative literature review will try to answer the following main question. Primary Question: What is the current and future impact of COVID-19 for those who are working in the U.S. and are parents/guardians in the library profession? This paper is sponsored by: Systematic Reviews and Hospital Library Caucuses

**Methods**: The research team conducted a narrative literature review and a search in the following bibliographic databases: PubMed (NLM), Business Source Complete (EbscoHost), Social Science Premium Collection (ProQuest) and LISTA (EbscoHost). Google searches were also performed to locate news articles, conference proceedings and other media outlets such as blogs, podcasts and/or webinars. Additionally, due to the lack of literature in the library field, other disciplines were considered, if relevant to

the complex issues parents and/or guardians faced during the COVID-19 pandemic. The research team also collected real-life stories from librarians who were caregivers of children during the pandemic and the real-life stories were coded and woven in to support the literature and illustrate important concepts. The collection of stories from librarians were not considered research involving human subjects and an IRB waiver was therefore granted.

**Results**: The literature review resulted in 79 references, a majority were not related to the library profession. Stories were collected from 51 participants in a variety of library settings. A majority of participants were librarians but some were directors, supervisors/administrators, library staff or library assistants. The average number of children per participant were two. Stories were coded and in total there were 14 codes that ranged from flexibility, mental health/burnout, safety concerns, work/life balance, job performance, childcare issues and more.

**Conclusions**:This study found the reports in the literature accurately reflected what was reported in the set of participants who shared their COVID-19 story. Themes emerged about the many hardships parents and/or guardians faced during the pandemic. More than 50% of participants in this study commented on mental health, stress and/or burnout. 60% of participants in this study reported issues with childcare. Over 60% of participants reported a lack of support or wished for better support. A handful of participants reported recommendations regarding administrative issues or policies related to work from home, flexible arrangements, safety and/or work/life balance. Job security and performance were also important factors for the participants.

### The Impact of COVID-19 on Burnout in Health Information Professionals

Practice Area: Professionalism & Leadership

Angela Spencer, AHIP - Health Sciences Librarian, Saint Louis University, St. Louis, Missouri

Elizabeth Laera, AHIP - Medical Librarian, McMahon-Sibley Medical Library, Birmingham, Alabama

OBJECTIVES: This study builds on data obtained during a 2019 study measuring burnout in health information professionals using the Copenhagen Burnout Inventory (CBI). The investigators seek to understand how burnout rates have changed over the past 3 years and assess how the COVID-19 pandemic has affected burnout rates among health information professionals. METHODS: Potential study participants must be current health information professionals and were contacted via various medical and special librarianship listservs to complete a survey using Qualtrics. Participants were asked to first complete a modified Copenhagen Burnout Inventory (CBI) questionnaire and then assess their own levels of burnout, regardless of how they answered the CBI. Respondents were also asked to rank how COVID-19 has affected their burnout, factors affecting their current burnout levels, and if they have taken any additional measures to cope with burnout during the pandemic. Demographic information was collected to quantify results with others in similar settings and experience levels. RESULTS: 399 survey responses were recorded; of these, 365 contained enough data to be considered usable. Average CBI scores showed that 43.71% were at least moderately burned out or feeling some symptoms of burnout. This is a 36.5% increase in burnout since 2019. 75% of respondents self-reported feeling at least somewhat burned out in comparison to 40% in 2019. 55% said that COVID-19 has impacted their burnout and 29.2% said COVID-19 was somewhat a factor, meaning that 84.3% of survey participants feel that COVID-19 has affected their level of burnout. The main factors contributing to burnout in 2022 include general pandemic concerns, having too much to do, and work environment. Outside of the general pandemic concerns, the factors contributing to burnout are similar to those identified in 2019. CONCLUSIONS: Has the COVID-19 pandemic influenced burnout in health information professionals? A 2019 survey reported about 42% of health

information professionals were facing significant levels of burnout. Our study shows that considerably more health information professionals are burned out than they were pre-pandemic, and 55% of respondents attribute this to COVID-19. This study contributes to the growing scholarship of burnout in librarians and may help health information professionals cope with the ongoing pandemic.

# Exploring Library Use as We Returned to "Normal" in Fall 2021: How Different is "Normal" and Why?

Practice Area: Information Management

**Robin Sewell** - System & Data Analytics Librarian, Texas A&M University Medical Sciences Library, College Station, Texas

**Objectives**: Many universities and their associated libraries returned to normal for the 2021 fall semester. At our university this means face-to-face instruction only, all services fully open, and mask mandates and social distancing requirements are forbidden. Although we are back to normal, the library feels less busy. This analysis uses library data gather from multiple sources pre-pandemic and for the fall 2021 semester to answer four questions on library space use: Is library space use impacted by the ongoing pandemic? Have our patron demographics changed? Why has patron use changed? Are health sciences students reasons for changes in use different?

**Methods**: Our library has several data sources that include pre-pandemic library use data and data for Fall 2021. These include Springshare LibCal reservations, swipe access to the graduate study space, Sensource occupancy data, and manual space use counts from fall 2017 and fall 2021 counting projects. The Springshare and swipe access data includes college affiliation information and will speak to changes to the college level demographics of our patrons. This data will be supplemented by a brief six question survey available to patrons using our spaces and sent via a targeted email to health sciences students requesting their participation. The survey will gather information on current library use, pre-pandemic library space use, changes in space use, and the reasons for these changes or for a lack of library space use.

**Results**: All data sources show a decrease in patron use of MSL spaces (17% - 64%). Demographic data shows minimal changes in the demographics of the patrons using MSL spaces. The predominant reason for decreased students use of MSL space was studying at home (45.5%). There was no difference between health sciences and non-health sciences patrons reasons for not using our spaces in fall 2021.

**Conclusions**: While space use was impacted by the pandemic, the trend actually began earlier. This is a prime opportunity to emphasize the services of the library, focusing less on the library as a physical space

# Hardback Life: A Book Club Focused on Literature for Young People for Pediatric Hospital Staff

Practice Area: Clinical Support

**Lynn Kysh, MLIS, MPP** - Clinical & Research Librarian, Children's Hospital Los Angeles, Los Angeles, California

Kyle Horne - Program Manager, Literally Healing/Children's Hospital Los Angeles, Los Angeles, California

Kelleen Lopez - Clinical Research Manager, Children's Hospital Los Angeles, Los Angeles, California

Julie Werner - Researcher, Children's Hospital Los Angeles, Los Angeles, California

**Objectives**: Incorporating the literary arts through book clubs among health science students and clinicians has demonstrated changes in cultural perspective, improved communication, and impacted daily practice. However, few book clubs have been interdisciplinary or focused on literature for children and young adults. We sought to determine the feasibility of a recurring children's and young adult literature book club for pediatric hospital staff by piloting the book club Hardback Life. With the success of our pilot phase, we now seek to examine the potential impact on participants' comradery and empathy through piloting a book club and then designing and implementing a prospective observational study with mixed methods analysis of group data.

**Methods**: March 2020-Summer 2021 we facilitated four iterations of Hardback Life focused on developing organizational procedures and collecting post survey data from participants. In March 2022, we began recruiting all hospital staff for three groups: non-participants, readers, and reader-attendees (n=100). Non-participants will not read the book nor participate in a book club meeting. Readers will read the book but not participate in a book club meeting. Reader-attendees will read the book and participate in a book club meeting. Book clubs will be offered either online through WebEx software or in-person in accordance with the hospital's evolving COVID-19 protocols. From April 2022 - August 2022 we will run three iterations of the book club where readers and reader-attendees will be given a free copy of a pre-selected book for young people. Reader-attendees will also sign up to attend an hour-long book club facilitated by the co-primary investigators where they will participate in activities designed to promote reflection and discussion with colleagues.

**Results**: Our pilot data indicated an increased interest and participation in Hardback Life. Participants expressed in post-survey data appreciation of the selected titles and the opportunity to connect with other staff members. For our research, we are collecting baseline demographics and use the Assessment Scale of the Work Environment-10 and Interpersonal Reactivity Scale as pre- and post-tests among all groups following each iteration of the book club. Descriptive statistics will be used to summarize participant characteristics and study measures. Repeated measures ANOVA will be performed to study the effect of group (non-participant, reader, reader-attendee) and time (pre/post-book club) on scores.

# Health Sciences Faculty Knowledge and Use of Online Textbooks: A Pilot Survey of Two Universities

Practice Area: Education

Lindsay E. Blake, AHIP - Clinical Services Coordinator, UAMS Library, Little Rock, Arkansas

**Kim Mears** - Health Sciences & Scholarly Communications Librarian, Robertson Library, Charlottetown, Prince Edward Island, Canada

Objective: Students across the globe assert that one financial barrier to higher education is the cost of course materials, specifically textbooks. A review of recent literature reveals that the use and adoption of affordable textbooks is gaining ground among undergraduate programs, but is still low in professional health sciences programs. This research examines faculty knowledge of the cost of required course materials and the use of online textbooks (Library provided eBooks and open textbooks) as required course materials. Methods: Two librarians working with health sciences programs, one in Canada and one in the United States, utilized a brief survey to explore faculty knowledge and use of electronic textbooks (eBooks) and open textbooks in their courses. Faculty were also queried on their reasons for, or barriers to, selecting electronic or open textbooks as course materials. The survey was distributed to the faculty in medicine, nursing, pharmacy, public health, health professions, health sciences, and veterinary medicine in the Fall 2021 semester. Survey results will be reviewed for faculty knowledge of textbook cost to students; electronic

books and availability in their campus libraries; open textbooks and willingness to use or author an open textbook. Results: The survey received 92 responses. The largest number of respondents were affiliated with allied health/health professions (n = 20) and veterinary medicine (n=14). Most respondents (63%) did not select a library owned eBook or an open textbook for their courses taught in Fall 2021. Reasons for not using eBooks or open textbooks centered around lack of knowledge, availability, and access. Respondents indicated that they would use a Library consultation service to select a Library owned eBook (n = 24) or an open textbook (n = 33) if it was offered. Conclusion: Faculty acknowledge that digital course materials provide many benefits, such as cost savings, convenience, and access to a variety of formats. Libraries often provide access to course eBooks, but faculty knowledge and comfort with this format, as well as beliefs in student preferences, may prevent them from choosing online options. Knowledge and trust of open textbooks is also a current barrier to their adoption. Interest in selecting and using online textbooks exists among faculty, but library services are needed to increase their use.

# Health Sciences Library Workshops in the COVID Era: Librarian Perceptions and Decision-Making

Practice Area: Education

Nell Aronoff - Associate Librarian, Health Sciences at Abbott Library, Buffalo, New York

**Molly K. Maloney** - Senior Assistant Librarian, University at Buffalo, Health Sciences at Abbott Library, Buffalo, New York

**Michelle L. Zafron** - Associate Librarian/Coordinator of Reference Services, University at Buffalo, Health Sciences at Abbott Library, Buffalo, New York

**Amy G. Lyons, AHIP, FMLA** - Associate Librarian, University at Buffalo, Health Sciences at Abbott Library, Buffalo, New York

**Pamela M. Rose** - Web Services & Library Promotions Coordinator, University at Buffalo, Health Sciences at Abbott Library, Buffalo, New York

Elizabeth Stellrecht - Head, Health Sciences Library Services, University Libraries, Buffalo, New York

**Objectives**: The objective of our study was to determine how COVID-19 impacted academic health sciences library workshops. Based on our own experience, we hypothesized that health sciences libraries moved their workshops online during the height of the pandemic, and that they continue to offer them virtually. Additionally, we believed that the online availability of these workshops increased attendance.

**Methods**: In March 2022, we invited 161 Association of American Health Sciences Libraries members in the United States and Canada to participate in a Qualtrics survey about live workshop offerings taught by health sciences librarians. Live workshops were defined as: synchronous; voluntary; offered to anyone regardless of school affiliation; and not credit-bearing. Workshops during the following time periods were compared: pre-March 2020; March 2020-June 2021; and July 2021-December 2021.

**Results**: Eighty-one unique responses, a response rate of 50%, were captured for the first question. Of these, 72 offer live workshops. Campuses returned to fully in-person learning at different times, and more than a dozen respondents were still working in hybrid environments when the survey was administered. Before March 2020, 77% of respondents (n=53/69) primarily taught in person. From March 2020-June 2021, 91% of workshops (n=62/68) were conducted online. From July 2021-December 2021, 65% of workshops (n=45/69) were still being held virtually while 29% (n=20/69) were offered in a hybrid format. During the height of the pandemic, 60% of respondents (n=42/70) observed increases in attendance as compared to the attendance before March 2020. From July 2021-December 2021, that number fell to 43% (n=30/70).

Based largely on survey evaluations and participant feedback, 99% of respondents noted that overall workshop satisfaction was unchanged (54%; n=38/70) or improved (44%; n=31/70). The most frequently cited challenge to teaching online was not being able to visually assess learners (n=46/70). Ninety-one percent of respondents (n=64/70) considered the fact that attendees did not have to travel to a physical location to be a benefit. Respondents plan to continue offering workshops online, in person, and in hybrid formats.

**Conclusions**: Respondents' experiences mirrored our own. Before the pandemic, workshops were primarily taught in person. With the advent of the pandemic, librarians adjusted to a new reality and shifted to teaching primarily online. More than half of respondents reported increased attendance from March 2020-June 2021 and found positive or no change in overall satisfaction despite moving most workshops online. The long-term impact that the pandemic has had on workshops may require further study.

# How Are NIH Researchers at San Diego State University Sharing Their Data: Helping to Ensure Compliance

Practice Area: Information Management

**Margaret Henderson, AHIP** - Health Sciences Librarian, San Diego State University Library, Ramona, California

**Objectives**: As more and more funders require data sharing, it is important for institutions to learn how their researchers are complying with mandates and make sure data sharing is done at the appropriate level of security. This study will look at data sharing statements found in PubMed Central articles by [institutional] authors. Depending on the results, recommendations can be made to review data management plans for appropriate data sharing statements, add an institutional repository, subscribe to a general repository service such as Figshare, or develop other support services for researchers.

**Methods**: After downloading the full text articles by SDSU researchers deposited in PubMed Central, this study will review any attached data sharing statements. This method was suggested by John Borghi at csv,conf 2021 (https://csvconf.com/speakers/#john-borghi). After collecting a list of data sharing options, the sites will be reviewed using Trustworthy Repositories Audit & Certification: Criteria and Checklist (TRAC) metrics to ensure the sites are appropriate for the types of data being deposited. The data sharing statements will also be compared to the data sharing requirements of the grants supporting the research. Finally, researchers will be surveyed to learn about their choices, so options for improvement can be considered.

Results:

Conclusions:

## Impact of Clinical Librarians at Patient Care Rounds on Residents Resource Use

Practice Area: Clinical Support

Lindsay E. Blake, AHIP - Clinical Services Coordinator, UAMS Library, Little Rock, Arkansas

Lauren Tong - Clinical Librarian, UAMS, Little Rock, Arkansas

**Objectives**: The aim of this research study is to measure the impact of clinical librarians attending patient rounds with hospital care teams. Clinical librarians join resident lead teams during patient rounding to search for evidence-based literature pertaining to patient care. This information is used to support faculty teaching points, answer point of care questions, and provide research on in-depth medical issues. However, it is not always known if this information has aided in patient care management, confirmed previous care assessments, or supported educational sessions.

**Methods**: This research study utilized a survey which was distributed to all residents and fellows at the end of their inpatient rotations in which a clinical librarian was present. The clinical librarians distributed the survey to trainees at the end of each month-long rotation in Pediatrics, Pediatric Infectious Disease, Trauma, and Family Medicine. Brief demographic data including resident year of training, gender identity, and program were collected. Survey questions asked trainees to respond with their comfort level in using the clinical librarian service and how useful they found the information provided. The remainder of the questions look at how provided information is used in patient care and if it is used to make changes to patient care.

**Results**: Residents in all surveyed programs were frequent users of UpTodate as a primary resource followed by online search engines, PubMed, and LexiComp. Residents most frequently asked questions when clinical librarians were present, but also utilized email. Having a librarian on rounds increased comfort levels in asking questions, the number of questions asked and the number of answers found. Information provided by the clinical librarians affected patient care from diagnosis to treatment, with frequent help in drug and lab choices. Overall, residents appreciated the presence of a clinical librarian on rounds and the information they provided for patient care.

**Conclusions**: The survey had a 12.5% return rate, which severely limited our analysis. Overall demographics were slanted towards female residents from the Family Medicine program, though resident experience was split fairly evenly from Interns to Fellows. It was expected that the presence of a clinical librarian would encourage residents and fellows to ask more questions about patient care and this assumption appears to be true in our sample. Residents became comfortable with clinical librarians on rounds and this prompted them to ask more questions pertaining to patient care. However, the majority of questions are asked in-person, showing the importance of having a librarian present where residents work.

### Incorporating a Practice Drug Information Question into an Evidence-Based Medicine Skills Lab

Practice Area: Information Services

**Jason B. Reed** - Assistant Professor and Health Sciences Information Specialist, Purdue Libraries and School of Information Studies, West Lafayette, Indiana

Amy Sheehan - Professor of Pharmacy Practice, Purdue University College of Pharmacy

Chelsea Baker - Assistant Clinical Professor of Pharmacy Practice, Purdue University, Zionsville, Indiana

Divya Desai - Drug Information Fellow, Purdue University, Zionsville, Indiana

**Objectives:** To assess changes in student pharmacist confidence and proficiency in verbal interprofessional communication, specifically though the incorporation of a feedback-oriented practice exercise prior to a graded simulated drug information request.

**Methods:** An interdisciplinary team of pharmacy faculty, pharmacy fellows, and library faculty collaborated to give students the opportunity for a no-stakes oral drug information question as practice for a graded assignment later in the semester. Students received the rubric used for both the practice and graded activity.

Students received oral feedback for the practice question and written feedback for the graded assignment. Students were assigned a short reflection assignment after the practice question and invited to participate in a survey assessing their experiences and attitudes after the graded assignment. The reflections were collected through the course learning management system and will be qualitatively analyzed and the optional surveys were administered via Qualtrics and includes a mix of likert questions and free response questions. This study was approved by the institutional review board.

**Results:** Of the 140 students that were evaluated, 136 responded to the survey (97%). There was a significant increase from baseline in respondents who agreed that they were confident in their ability to communicate with healthcare professionals after the practice exercise (43% to 91%) with 88% of students agreeing that they received valuable feedback regarding their communication skills. Grade averages from the practice exercise to the graded assessment increased from 83% to 92%, with 12% vs 1% of students failing the assignment respectively. Students additionally reflected on the suitability of the practice exercise to their learning style, with at least 80% of students agreeing or strongly agreeing that the practice exercise helped identify communication strengths and weaknesses, and that the practice exercise enhanced the student's overall learning experience.

**Conclusions:** The addition of a practice drug information activity resulted in increased student performance in the graded assignment, with fewer students failing the assignment. The implementation of a practice exercise that included immediate feedback enhanced overall student perceptions regarding their own communication skills, and provided valuable feedback that was conducive to student learning styles.

### Information Specialists: Guardians of Scientific Output of Their Institute

Practice Area: Information Services

**Wichor M. Bramer** - Information specialist, Erasmus MC - Medical Library, Gouda, Zuid-Holland, Netherlands

**Objectives**: Researchers from many institutes, both academic and non-academix perform and publish systematic reviews. Many of these institutes have a medical library that offers SR services to their researchers. Sometimes researchers seek assistance but cannot find it, or they fail to seek assistance, yet they will still pursue their review. Thus, many systematic reviews are published without assistance of a medical librarian. Our aim is to investigate barriers to using assistance from a medical library, and to develop ideas how we can improve the percentage of SRs that are assisted by medical libraries.

**Methods**: We surveyed corresponding authors of systematic reviews from researchers from university hospitals. We asked them whether or not they had used assistance from a search specialist. If they had not used assistance we asked further for the reasons and barriers for not asking for assistance. We surveyed medical librarians from university hospitals about the percentage of SR projects in their institute that they serve. We will investigate the barriers to serving all requests.

Results: Results are not yet available but will be added when the abstract is accepted.

**Conclusions**: At our institute we assist 90% of the systematic reviews, thus improving the scientific quality of the publications. However, when we are asked to do peer review of systematic reviews we see SRs from university employees based on inferior searches that have been developed without the assistance of a librarian. The aim of our research is to inspire medical librarians to become guardians of their organization's systematic review output either by offering peer review of researchers developed searches, or by offering librarian-mediated searches. That was each SR project should be based on a high quality search from the

start of the project.

# An Observational Study on the Key Research Databases to Which Academic Health Sciences Libraries in North America Subscribe and Provide Access to Their Served Communities

Practice Area: Innovation & Research Practice

**Fei Yu, PhD, MPS** - Health Technology and Informatics Librarian, Health Sciences Library at the University of North Carolina at Chapel Hill, Cary, North Carolina

**Rebecca Carlson, AHIP** - Liaison to the Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**Objectives**: Research databases index scholarly outputs (e.g., peer-reviewed articles, books) and provide search functions to users for information retrieval are essential resources for the services that academic health sciences libraries (AHSLs) provide to support education, practice, and research, including systematic reviews and bibliometric analysis. However, research databases have become increasingly expensive, challenging the shrinking budget of AHSLs. This study aimed to survey the key research databases that AHSLs currently subscribe to and provide insights to both librarians and library administrators in terms of database subscription patterns and strategies for informed decision-making in dealing with database cancellations.

**Methods**: The authors conducted an observational study from September 1st to 20th, 2021 by manually checking the webpage of research databases A-Z on AHSL websites. A complete member list of AHSLs was obtained from the Association of Academic Health Sciences Libraries (AAHSL) website. L. The majority of examined research databases are essential for comprehensive literature searching services like systematic review and bibliometric services, including Web of Science (WoS) core collection, WoS other products (i.e., Journal citation reports, InCites analytics, InCites Essential Citation Index, & Derwent Index), Scopus, Elsevier SciVal, Dimensions, Ovid Medline, UptoDate, ACM Digital Library, and IEEE Xplore. A descriptive analysis was performed to summarize all findings.

Results: A total of 163 AAHSL member libraries in the United States and Cananda were included in data analysis. During the examined period, 47.3% (77/163) of these libraries had subscriptions to both WoS (core collection) and Scopus providing access to their own affiliates. Particularly, the percentage of libraries having a subscription to WoS (77.3%) is higher than the libraries with a subscription to Scopus (61%). Regarding WoS other products, 122 libraries had subscriptions to Journal Citation Reports, 15 libraries had InCites Analytics, 64 libraries had InCites Essential Citation Index, and 45 libraries had Derwent Index. Among the 99 libraries with a Scopus subscription, some of them also had Scival (13) and Pure (3). Twenty libraries listed Dimensions on their webpage, but only four of them indicated that they had the commercial version. About 83% libraries (113) subscribed to Ovid Medline and UpToDate. Approximately 52.1% libraries (85/163) had both ACM Digital Library and IEEE Explore. However, more libraries subscribed to IEEE Xplore (96/163) than ACM Digital Library (92/163).

**Conclusions**: Research databases are the most important resources for health sciences or medical libraries to provide core services. Our survey results will help libraries with database selection and collaboration strategies across institutions.

### Publication Trends of LIS Faculty Teaching Health-Related Courses

Practice Area: Education

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Jeffrey T. Huber - Director and Professor, University of Kentucky, Lexington, Kentucky

Robert M. Shapiro, II - Director, SEAHEC Health Sciences Library, Wilmington, North Carolina

Emily B. Kean, AHIP - Associate Senior Librarian (Former), University of Cincinnati, Cincinnati, Ohio

**Emily Vardell, AHIP** - Assistant Professor, Emporia State University School of Library and Information Management, Olathe, Kansas

**Background and Objectives**: Bibliometrics studies of faculty scholarly output in multiple disciplines have been performed; however, the publication characteristics of Library and Information Science (LIS) faculty teaching health courses have not been analyzed and reported. The purpose of this bibliometric analysis was to examine publication patterns (2011-present) of full-time LIS faculty that teach health-related courses for library science programs in the United States and Canada.

**Methods**: Full-time LIS faculty teaching health-related courses in American Library Association (ALA) accredited programs were identified through several approaches: searching course listings, faculty profiles and syllabi from ALA-accredited School websites, and contacting Deans and Directors of Schools. As a result of this process, 29 LIS faculty were identified and met the inclusion criteria comprising the study sample. In September 2021, the 29 faculty members were contacted via email and invited to voluntarily share their curriculum vitaes (CVs) for analysis. A total of 16 respondents provided their CVs representing a 55% response rate. This was supplemented by locating any additional CVs publicly available online for those faculty that did not respond, adding five CVs to the study sample and resulting in a final sample of 21 (N=21). Publication information (2011-present) was collected from the CVs of 21 faculty and analyzed by the research team using descriptive bibliometrics.

**Results**: This bibliometric analysis resulted in the identification of several patterns and trends. Faculty published in a range of LIS and interdisciplinary journals. The top five journals for peer-reviewed and non peer-reviewed publications were: Medical Reference Services Quarterly, Journal of the Association for Information Science and Technology, Journal of Medical Internet Research, Journal of the Medical Library Association, and Biomedical Informatics. Journal articles were the most popular venue, followed by published conference proceedings. Joint authorship patterns were the most common, highlighting the collaborative nature of research. Finally, highly cited papers appeared in health-specific journals reaching broader audiences (e.g., Health Psychology, Frontiers in Public Health)..

**Conclusions**: Insight and implications pertaining to LIS education, practice, and knowledge dissemination will be presented. Future research should explore publications authored by adjuncts and faculty in other departments teaching health-related courses in MLIS programs. Additionally, an examination of research topics would be useful. This study represents the first step in examining the research output for this LIS community of scholars.

## A Qualitative Study of MLIS Graduate Students' Perceptions of and Interest In Health Sciences Librarianship: Final Results

Practice Area: Professionalism & Leadership

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**Samantha Kennefick Wilairat, MAT, MLIS** - Associate Fellow, National Institutes of Health, National Library of Medicine, San Jose, California

**Objectives**: At a health sciences library on a medical campus, the library has two to three employment positions available for MLIS graduate students. Despite having two MLIS programs close to the medical campus, the graduate assistant supervisor generally sees few applications for the positions when they are available. The supervisor hypothesized that students were generally uninterested in health sciences librarianship. This study seeks to understand what students think of graduate employment in health sciences librarianship using a think-aloud protocol with structured follow-up questions.

**Methods**: Eighteen interviews were conducted. Participants were asked to read and think-aloud about four health sciences graduate employment position descriptions. Following the position descriptions, three follow-up questions were asked about students' interest in health sciences librarianship before and after reading the position descriptions. The interviews were coded inductively by two researchers who used thematic analysis to look for themes.

**Results**: Results will look at what MLIS students think health sciences librarianship entails and their understanding of specific health sciences terminology in position descriptions. Specifically, results about the understanding of job titles, job duties, and qualification of students will be explored. Finally, themes will be reported about student desires for general position details, such as location, salary, and working hours.

**Conclusions**: While there is research about the benefits of graduate employment in libraries for MLIS students, there is little research about what student preferences are for graduate employment positions. We hope that this study will provide insight about how to provide desirable graduate employment opportunities within health sciences librarianship to improve the pipeline to health sciences librarianship.

### Reflecting on Article Keywords from Health Sciences Librarianship Journals: Creating a Taxonomy for Trend Analysis

Practice Area: Innovation & Research Practice

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**Natasha Williams, MLIS, AHIP** - User Services Librarian, Harriet F. Ginsburg Health Sciences Library University of Central Florida College of Medicine, Orlando, Florida

**Objectives**: To create a medical library terms taxonomy in order to find trends in the medical library literature. To explore trends in scholarly publishing by health sciences librarians in the last five years, we examined keywords from articles published in four health sciences library journals during this time. From our initial review we determined that: author-created keywords are not always based on a controlled vocabulary; MeSH subheadings do not include terms unique to librarianship; and Library of Congress taxonomy is too broad. Thus, it was necessary to create a taxonomy by grouping similar keywords into categories to accurately identify trends.

**Methods**: Citations from four health sciences library journals from 2016-2020 were exported from PubMed and EBSCO Academic Search Premier into EndNote X9. Keywords from all citations were exported from EndNote as a text file and then imported into Microsoft Excel. Pivot tables were used to determine the number of times each keyword was used and to aggregate identical keywords. A team of six librarians with a variety of skill sets and backgrounds reviewed each keyword to determine how to categorize and group terms to create a taxonomy.

**Results**: 8,806 keywords from the journals were downloaded into spreadsheets and aggregated. Pivot tables were used to combine identical terms resulting in 2,801 unique keywords which are currently being categorized to complete the taxonomy.

**Conclusions**: Choosing keywords for an article without the use of a controlled vocabulary allows for flexibility and customization. It may also result in better retrieval during natural language searching. However, what we discovered through this project is that choosing keywords without the use of a controlled vocabulary makes it difficult to conduct a keyword-based trend analysis.

# Reflecting on Collection Development Implications from the Impact of COVID-19 on Interlibrary Loan in Health Sciences Libraries

Practice Area: Information Management

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Margaret A. Hoogland, AHIP - Clinical Medical Librarian, Mulford Health Science Library

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Kristine M. Alpi, AHIP, FMLA - University Librarian, OHSU Library, Portland, Oregon

**Objectives**: COVID-19 has presented unparalleled challenges for information exchange globally, including a strain on interlibrary loan (ILL). This research focused on differences in DOCLINE interlibrary loan borrowing

and lending from 15 academic, hospital and association health sciences libraries before and during the COVID-19 pandemic. We describe preliminary findings on differences in fill rates, characteristics of journals, including publication year and language, and journal price.

**Methods**: Aggregate DOCLINE filled and unfilled request data from 15 health sciences libraries was supplied for the stage of the pandemic from March to August 2020 and the same time period in 2019. We compared these time periods to each other and to system-wide fill rates for the same time periods. Data associated with journal prices was provided by EBSCO, and language data from the National Library of Medicine journal database were integrated into the data set. We cleaned and normalized data using OpenRefine, calculated descriptive statistics and odds ratios, and conducted 2-proportion z-tests of differences before and during COVID-19.

**Results**: In our sample of 14,891 requests, the odds of having an unfilled request were 2.7 times higher in 2020 than 2019 (OR=2.69, 95% CI=2.37-3.06, p < .0001). The pandemic did not change the amount of non-English language content requested. However, there was a significantly higher proportion of unfilled requests for non-English language content (16.3% vs. 32.7%, p < .00001). While there was no difference in 2019, in 2020 there was a statistically significant difference between the proportion of older articles (p < .00001) with a higher proportion of older articles in 2020.

**Conclusions**: The COVID-19 pandemic had a significant impact on the fulfillment of ILL requests from March-August 2020. The numbers of unfilled requests emphasize the need for journals to be available electronically and the potential for the digitization of older materials to improve access. Although our findings from this sample of HSLs call attention to a focused subset of content, libraries of all types could consider how their own collection development strategies incorporate the purchase of backfiles to increase the accessibility of older articles. Future research may focus on the availability, utility, and expense of the materials more likely unfilled in order to further inform collection development practices.

## Reflecting on the Development of Librarian Research Connections

Practice Area: Information Services

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**Dede Rios, AHIP** - Director of Optometric & Clinical Library Services, UIW Libraries / Rosenberg School of Optometry, San Antonio, Texas

**Objectives**: The increasing trend of research collaboration among library professionals across health sciences disciplines has been observed in the literature. As librarians continue doing more work outside of the perimeters of their physical library with remote education, interprofessional education, multiple clinical/campus locations, and community outreach, so too their research collaborations may expand beyond the limits of the library. The purpose of this research is to explore how health science librarians find collaborative research partners, how they build these relationships, and what scholarly products are produced.

**Methods**: An online survey was distributed through various professional library and academic listservs during Fall 2021. The survey was a combination of multiple choice questions and open-ended questions. Health Sciences librarians were queried about where they found collaborative partners, how they built collaborative relationships, and products produced during these collaborations. Librarians were also asked to reflect on successful and unsuccessful collaborations. Open-ended questions will be reviewed for themes related to successful and unsuccessful collaborations.

**Results**: The survey returned 142 overall survey responses. The majority of respondents found collaborators within their institution, and had collaborated both with library and outside faculty in their careers. Librarians collaborations more frequently produced conference presentations followed by publications, while collaborations with outside faculty showed the opposite trend. Most collaborations were maintained through regular communication, having defined roles, and forming interpersonal relationships. Successful projects relied on a common topic of interest, frequent communication, good team dynamics, and strong project management. Conflicts were reported, however, many were resolved through communication, and projects were completed.

**Conclusions**: With research trends shifting to open science and open data, it behooves medical librarians to have a clear path to pursuing research connections outside of their physical library, developing research partnerships with nonlibrarians, and increasing the scholarly products their research collaborations yield. Librarians should maintain good relationships with past colleagues, and work to network within their current institutions and through conferences. Collaboration takes time and effort, so selecting your partners is as important as developing the relationship. Early discussion of scope, theme, roles, and the end product is always important to project completion and avoiding conflict. Conflict doesn't equate unsuccessful projects, however, it may create hesitancy towards future collaborations.

# Reporting of the Identification of Studies Through Other Means in Evidence Synthesis: A Cross Sectional Study

Practice Area: Information Services

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**Alyssa A. Grimshaw, MSLIS, IPI PMC** - Clinical Research and Education Librarian, Cushing/Whitney Medical Library, Yale University, West Haven, Connecticut

**Objectives**: Recent reporting guidelines have established higher standards for the reporting of search strategies in evidence synthesis projects. In reviews compliant with PRISMA 2020, readers can in principle calculate how many included studies were identified via "other methods" (than database/registry searching). We will study reviews which appear to comply with PRISMA 2020 to find out what proportion of the included studies in those reviews were identified through other methods, and whether and how the authors of those reviews discussed the implications of a low or high proportion of included studies having been identified through other methods.

**Methods**: We used Citation Chaser to identify more than three thousand unique articles in the Lens database which cite the preprint or VoR of PRISMA 2020 or the PRISMA 2020 E&E paper. We screened these articles to find review papers with PRISMA 2020-compliant flowcharts. We conducted a pilot study by extracting data from 100 reviews: -Stated review type -Stated PRISMA-S compliance -Number of included papers in total, from the traditional searching branch, and from the other methods branch For reviews which mention other methods, we also extracted: -Which other methods were reported (using PRISMA-S categories: online resources and browsing, citation searching, contacts, and other methods) -Any discussion by the authors of the implications of the yield of their other methods branch

**Results**: Our results will be shared via an OSF project as well as the conference paper. We found that most papers using PRISMA 2020 are systematic reviews and meta-analyses. Many authors state that they are using PRISMA 2020 (inappropriately) as a methods guideline. Only a small number of PRISMA 2020-style flowcharts include an other means column. The proportion of included studies identified through other

means (when other means were attempted and details were reported) varied from 3% to 40%. The yield of "other methods" searches was not discussed by authors.

**Conclusions**: The results of our study will be useful for librarians helping evidence synthesis authors comply with PRISMA 2020 and PRISMA-S. Our results may also be useful to evidence synthesis authors deciding whether to use other methods as part of their study identification process. Finally, our results suggest that the development of a potential search quality indicator that does not require librarian-level search literacy, based on the yield of a review paper's other identification methods, is a long way off.

# A Scoping Review on Librarian and Information Professionals' Contributions to Health Literacy to Inform Future Practice

Practice Area: Professionalism & Leadership

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**Kathryn M. Houk, AHIP** - Undergraduate Medical Education Librarian, UNLV School of Medicine Library, Las Vegas, Nevada

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**Objectives**: Library involvement in and leadership of health literacy-related training, research, and interdisciplinary projects continues to increase, highlighting health literacy's growing importance to the profession. Three health librarians conducted a scoping review to understand the scope and depth of librarian involvement in health literacy. During the review process, the team learned important lessons about the unique challenges related to defining terms, establishing inclusion and exclusion criteria, and extracting data from a heterogeneous set of social science scholarship. Join this presentation to learn and discuss issues regarding developing and conducting a scoping review that are not addressed in most training materials.

**Methods**: In this presentation, the co-authors will discuss their process for developing and conducting the scoping review. After developing a protocol, searching the existing literature in a variety of relevant databases using librarian-created search strategies, and exporting the results into appropriate management software, the co-authors conducted the title/abstract and full-text screening process. The co-authors reflect on each stage of the process, including unforeseen challenges in the full-text review process, to the development of a data extraction tool appropriate for activity-based social science work. The co-authors also discuss their varying levels of experience in conducting evidence synthesis projects and how this impacted the process.

**Results**: Reflections and key takeaways from the process will be discussed, along with key numbers and decision aids created for the project. After title/abstract screening, the project team developed a more refined set of inclusion criteria based on findings from the initial results. The team also developed a data extraction instrument after failing to find adequate examples in the literature. Preliminary perceptions of trends from the initial review stages will also be discussed.

**Conclusions**: Once complete, the review's results will inform conclusions on the current state of health literacy work in librarianship and future areas for collaboration, projects, and research. However, librarian involvement in comprehensive reviews from start to finish have proven to be a valuable and informative experience that can give librarians a unique perspective on the challenges their patrons face in the mysterious silence that occurs after they deliver search results, and can inform how librarians instruct

patrons on comprehensive review methodology going forward.

# Semi-automated Systematic Review Search Strategy Development Tools: A Guide for Expert Searchers

Practice Area: Innovation & Research Practice

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Alison Hedden-Gross, MLS, MS - Senior Medical Librarian, ECRI Clinical Evidence, ECRI-Penn Evidence-based Practice Center

**Claire J. Twose, MLIS** - Lead Informationist, Research Services, Welch Medical Library, Johns Hopkins School of Medicine, Baltimore, Maryland

**Christiane E. Voisin, MSLS** - Research Associate, RTI-UNC Evidence-based Practice Center, Durham, North Carolina

**Objectives**: A plethora of new and established semi-automated systematic review (SR) information retrieval tools exist but keeping up with this fast-moving field is time consuming for busy biomedical SR searchers. We created a quick and intuitive guide for expert searchers, organizing the tools by search strategy development phase and evaluating key features using standardized criteria to make choosing and using tools easier.

**Methods**: List of search tools primarily drawn from the SR Toolbox website and categorized by search phase: initial scoping/seed citation list development, keyword/phrase/subject term identification, search logic, strategy evaluation, database translation, grey literature search, and deduplication. We analyzed the tools using an overarching, across-categories set of criteria (ex. registration required, web-based/download, file import/export) in addition to search strategy development phase specific criteria. We developed a data visualization reporting format for intuitive navigation of the results.

#### Show Me the Data! Reflecting on the Data Sharing Practices Demonstrated in Published Research at the University of Massachusetts Chan Medical School

Practice Area: Information Management

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**Kimberly MacKenzie** - Research Data and Scholarly Communications Librarian, Lamar Soutter Library, UMass Chan Medical School, Worcester, Massachusetts

**Objectives**: In the interest of making data findable, accessible, interoperable, and reusable (FAIR), the National Institutes of Health (NIH) will institute a new Research Data Management and Sharing Policy in January 2023. This policy will require researchers applying for NIH funding to submit a Data Management and Sharing Plan. As 63% of grant dollars received by University of Massachusetts Chan Medical School (UMass Chan) researchers comes from the NIH, we explored whether UMass Chan researchers are currently sharing data associated with their published research.

**Methods**: PubMed was searched for articles published in 2019 with a UMass Chan researcher as either the first or last author. These articles were examined for evidence of original or reused data, the type of data, whether the article stated that data was available, and where and how to find that data. The format of the datasets shared, the license attached to the datasets and whether the datasets had a permanent unique identifier was also noted.

**Results**: Of the 713 articles found with a UMass Chan first and/or last author, 535 were research articles that produced original data or reused existing data. Of those articles with data, 57.4% (307) were NIH funded and 17.4% (93) had a data availability statement. The storage location of most datasets was not mentioned and those not found in a repository were available upon request or hosted on the journal website. The most popular repositories metnioned shared genomic data. 46% of the datasets found had a permanent unique identifiers and most were using Creative Commons Licenses. 86% of reused data noted in the articles was someone else's and most articles did not mention how to access reused data or linked to reused data in the methods. We also found that articles published open access were not more likely to share their data.

**Conclusions**: The predominance of genomic data sharing and how data is being shared mirrors the results of previous studies (Borghi, 2021; Hampton et al., 2013) This paper will highlight how the results of the study inform our library services surrounding data sharing, as well as how other libraries can support researchers as new data management and sharing policies come into effect.

# A Systematic Investigation of Librarians' Contribution and Impact in Pharmacy Research, Education, and Clinical Care Through a Bibliometrics Approach

Practice Area: Innovation & Research Practice

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**Fei Yu, PhD, MPS** - Health Technology and Informatics Librarian, Health Sciences Library at the University of North Carolina at Chapel Hill, Cary, North Carolina

**Emily P. Jones, MLIS, AHIP** - Health Sciences Librarian, UNC Health Sciences Library, Chapel Hill, North Carolina

**Objectives**: The value added by librarians to health sciences research and scholarship is well documented in literature, however no study currently demonstrates the entirety of librarian contributions to pharmacy and pharmaceutical research, education, and healthcare delivery. This paper presents a bibliometric analysis of librarian and pharmacist co-authored publications to identify 1.) the scholarly contributions made by librarians to pharmacy literature; 2.) patterns within co-authorship networks; and 3.) gaps in the literature that point to future interprofessional scholarship opportunities. Overall, the paper will document librarian contributions as co-authors and add knowledge into the state of collaborative research between librarians and pharmacists.

**Methods**: The authors conducted a comprehensive search of the published and grey literature. The databases PubMed, Embase, Scopus, Web of Science, Library & Information Science Abstracts, and Dimensions were queried using a combination of keywords, subject headings, author affiliation terms, and journal names. All unique citations were screened to ensure they meet inclusion criteria of having at least one pharmacy co-author and one librarian co-author. Relevant citations underwent bibliometric analysis and data mining at the micro and macro levels to map the distribution and pattern of the included literature, including the trajectory of the literature over time, document type, citation impact, topic areas, and the most productive and collaborative institutions and authors. Bibliometrics tools VOSviewer, Tableau, and Excel were used for analysis and visualization.

**Results**: Database searches resulted in 2,644 unique citations and after screening 554 relevant publications were included in the analysis. Librarians from 29 countries and 255 libraries contributed to the included publications, which were published in a total of 183 sources. Most publications were review articles, including systematic reviews, scoping reviews, and meta-analyses, but original research and non-research papers were also found. The publications represent a wide spectrum of research topics, from clinical research, pharmacy education, drug research, the roles of pharmacy and pharmacists, health sciences and services, and animal-based lab research. After comparing the citation impact with similar publications in the same year and field, 77% of the included studies have higher citation impact than average (i.e., Scopus' citation percentile benchmarking). The citation impact of these papers is also slightly higher than 50% of NIH-funded papers (i.e., Relative Citation Ratio).

**Conclusions**: Overall, this analysis shows that librarians are contributing to high-impact research publications around the world, although the number of co-authored publications to which librarians contributed is very small when compared with the number of publications produced by pharmacy researchers.

#### Systematic Reviews and Retractions: A Reflection on Quality

Practice Area: Innovation & Research Practice

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**Nicole Theis-Mahon, AHIP** - Liaison Librarian & Collections Coordinator, University of Minnesota, Minnesota, Minnesota

**Sarah Jane Brown, MSc** - College of Pharmacy and Medical School, Duluth Campus Librarian, Health Sciences Library, Minneapolis, Minnesota

**Objectives**: Retracted publications continue to be cited in systematic reviews even after their retraction notices are issued. The presence of retracted publications in evidence synthesis prompts many questions about the impact of these retracted publications and the quality of the citing reviews. This study aims to assess the quality of systematic reviews and evidence synthesis citing retraction publications and the nature of those citations.

**Methods**: Building on previous research, we selected a set of 287 systematic reviews that cited retracted articles related to pharmacy, toxicology, and drug design after their retraction. Using a modified version of AMSTAR2, we assessed the quality of the citing systematic reviews and evidence syntheses. We also conducted a sentiment analysis to determine whether the retracted publication was cited positively, neutrally, or negatively in support of the findings of the systematic review. We will provide descriptive statistics outlining the quality of systematic reviews citing retracted research and investigate the association

between the quality of a systematic review and the sentiment of the citation to a retracted publication.

**Results**: 70% (199/286) of the systematic reviews in our sample were found to be of critically low quality according to AMSTAR 2 criteria, while 17% (49) were low quality, 7% (21) were moderate quality, and 6% (17) were high quality. The 286 systematic reviews cited retracted research 324 times. Of these citations, 42.6% (138) were supportive, treating the retracted research as valid; 20.1% (65) refuted the findings or named the work as retracted (contrasting); and 37% (121) mentioned the research but neither supported nor contradicted it. We found statistically significant associations between quality and sentiment, with high quality studies being associated with contrasting citations and critically low quality studies being associated with supporting citations.

**Conclusions**: The prevalence of supportive citations to retracted research in systematic reviews is problematic. Associations between low methodological quality and uncritical use of retracted research may indicate that, although existing best practices may be effective in addressing retracted research in systematic reviews, the abundance of low-quality systematic reviews that do not abide by these best practices may be problematic when we consider how the scientific literature corrects itself.

### Virtual Reference at Health Sciences Libraries in the Time of COVID-19

Practice Area: Information Services

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Lindsay E. Blake, AHIP - Clinical Services Coordinator, UAMS Library, Little Rock, Arkansas

**Kay Strahan** - Assistant Professor/Research & Learning Services Librarian, University of Tennessee Health Science Center, Health Sciences Library, Research & Learning Services, Memphis, Tennessee

**Objectives**: Virtual reference services have become a staple in many libraries of today. These services reached a new level of importance when in-person library reference services shut down worldwide in early 2020 due to the COVID-19 pandemic response. As many libraries begin reopening and once again providing in-person services, what does the future hold for virtual reference in health sciences libraries? This research project aims to discover how health sciences librarians are utilizing virtual reference services including chat, email, text, and video consultations, to perform reference duties in their institutions, and how a pandemic has changed the use of these technologies.

**Methods**: Librarians developed and distributed a survey to health sciences librarians within the United States. The survey addresses the status of virtual reference services before and during the COVID-19 pandemic as well as any changes that are being seen as libraries reopen and students return to campuses. Questions focus on the types of virtual reference provided, if libraries found increased or decreased use in virtual reference during the pandemic, and if the pandemic forced an expansion or change in virtual services provided. The survey attempts to understand the level of service change, if any, health sciences librarians experienced with virtual reference services.

**Results**: Responses to the survey were focused on academic health sciences and hospital settings. The majority of libraries pre-pandemic relied on email as their main virtual reference source with less than one half using any sort of video conferencing. While only 87% of librarians worked at home, for any length of time, video conferencing became the medium of choice for virtual reference, with email still being heavily used. Of the virtual services libraries had available, every service showed an increase in usage overall, with

video conferencing, email and chat seeing the highest increase. Most libraries did not purchase new virtual reference software, but many did expand upon software solutions they had already implemented. Most institutions simply responded by adding Springshare LibGuides solutions or expanding Zoom or Microsoft Teams subscriptions to accommodate needed uses.

**Conclusions**: These changes remained even as libraries returned to in-person work, showing a potential permanent shift in how reference will be performed in the future. Next steps include qualitative analysis and future dissemination.

# Which Consumer Health Information Websites Appear Most Often in Google, and How Reliable Are They? An Analysis Using DISCERN, CRAAP, and HONcode

Practice Area: Clinical Support

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Catherine V. Johnson, MLIS - Research and Instruction Librarian, Wilson Library, La Verne, California

**Ivan A. Portillo, AHIP** - Coordinator of Rinker Campus Library Services, Chapman University, Irvine, California

**Objectives**: Online health misinformation is a growing problem, and health information professionals and consumers would benefit from an evaluation of health websites for reliability and trustworthiness. An analysis of consumer health information websites was performed to determine the most reliable source of information.

**Methods**: To replicate common health information searches, a list of 65 search terms was gathered from the COVID-19 Search Trends symptoms dataset. These search terms, taken from a dataset of several hundred symptoms, were chosen to generate a representative sample of health-related search terms that a health consumer may search for on Google. The quality of the resulting top five websites was evaluated independently by two authors using the DISCERN instrument and CRAAP test. For the DISCERN instrument, each website was evaluated against the sixteen questions from the DISCERN Instrument. For the CRAAP test, the two authors independently evaluated each website based on five CRAAP criteria. The top five resulting websites were also reviewed for HONcode certification.

**Results**: The top five websites that appeared most frequently were WebMD, Mayo Clinic, Healthline, MedlinePlus, and Medical News Today, respectively. All websites, except Medline Plus, received HONcode certification. Based on DISCERN and CRAAP scores, MedlinePlus was found to be the most reliable health website, followed by Mayo Clinic, WebMD, Healthline, and Medical News Today.

**Conclusions**: This study aimed to evaluate the quality of top-ranking health websites in Google's search results using the DISCERN instrument and CRAAP (Currency, Relevance, Authority, Accuracy, and Purpose) test. The results of the study revealed that MedlinePlus was the most reliable and trustworthy website based on its DISCERN and CRAAP scores. Although MedlinePlus was the highest scoring website, three other websites appeared more frequently in Google's search results. Health information professionals and those in the healthcare field may recommend MedlinePlus as the most reliable consumer health information website that frequently appears on Google.

#### **Workplace Burnout among Academic Medical Librarians**

Practice Area: Professionalism & Leadership

**Robyn B. Reed, AHIP** - Biomedical Informatics and Emerging Technologies Librarian, Harrell Health Sciences Library, Hershey, Pennsylvania

**Objectives**: The goal of this research project is to examine workplace burnout rates and stressors among academic librarians in the United States.

**Methods**: An IRB-approved research survey containing the Copenhagen Burnout Inventory and research questions of known workplace stressors was distributed to librarians via listservs. Data collection is complete and resulted in 1,363 usable responses from librarians across the country. Highlights of the survey will be presented, with particular emphasis comparing results of medical and health sciences librarians to all subject areas.

# PAPERS: PROGRAM DESCRIPTION ABSTRACTS

Papers in this section are sorted by title in alphabetical order.

## Accelerating Research Discovery in a Pandemic: Lessons from the NIH Preprint Pilot

Practice Area: Information Management

**Kathryn Funk** - Program Manager, PubMed Central, National Library of Medicine, National Center for Biotechnology Information, Rockville, Maryland

**Katherine B. Majewski, MLS** - Librarian, National Library of Medicine / Office of Engagement and Training, Bethesda, Maryland

**Background**: Preprints are complete drafts of scientific documents, not yet certified by peer review. Researchers use preprints to share findings quickly and widely with the research community and to gather feedback to improve the work. The COVID-19 public health emergency has spurred biomedical researchers to share preliminary research results as preprints at increasing rates and highlighted the benefits and challenges introduced by preprints into the scholarly communications landscape.

**Description**: The National Library of Medicine (NLM) launched the National Institutes of Health (NIH) Preprint Pilot project in June 2020. It built on guidance from NIH encouraging preprint posting to speed the dissemination of research and enhance the rigor of a work. In the first phase of the project, NLM made COVID-related preprints posted to eligible preprint servers and reporting research funded by NIH available via PubMed Central and, by extension, PubMed, to improve the discoverability of and maximize the impact of NIH research. To assess its impact, NLM has monitored how and when preprints – and resulting journal publications — are shared, discovered, and cited, and analyzed how public engagement with preprints may increase scientific rigor. Through user focus groups and surveys, the pilot is also investigating how views may be changing about the role of preprints in biomedical research.

Conclusion: To date, NLM has found that inclusion of preprints in PMC accelerates and expands access to NIH-supported research. Preprints in PMC have also provided a mechanism for increasing the transparency and openness of federally-funded research, though further engagement with NIH investigators is needed to increase rates of open licensing and data sharing. Engagement through different channels with various user groups during the first phase of the pilot has indicated that the discoverability of preprints is valued by the research community, while also identifying knowledge gaps among different user groups around preprints and other research products. Guidance from librarians about open research practices, what sources are appropriate for a particular purpose, and education on how to evaluate the quality of research have the potential to be of great value to many audiences as the role of preprints in scholarly communication expands.

### Animal Topiary: Animal Search Hedges to Improve Searching for Animal Use Alternatives

Practice Area: Information Services

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Jessie Carder - Supervisory Technical Information Specialist, USDA/NAL

**Melissa C. Funaro** - Clinical Research & Education Librarian, Harvey Cushing/John Hay Whitney Medical Library, New Haven, Connecticut

**Suzanne Fricke, AHIP** - Animal Health Sciences Librarian, Animal Health Library/Washington State University Libraries, Pullman, Washington

**Background:** The Animal Welfare Information Center (AWIC) at the National Agricultural Library (USDA) provides trainings on conducting literature searches for animal use alternatives [i.e., 3Rs (replacement, reduction, refinement of animal use)] as part of the Animal Welfare Act's regulations. This regulation states that researchers must consider alternatives for research involving animals. The goal of the 3Rs is to reduce animal use, replace animal models, and refine laboratory procedures to minimize animals' pain and distress. Researchers have reported challenges in finding 3Rs citations due to the limited use of 3Rs terminology in publications. 3Rs search hedges (pre-determined strings of keywords and controlled vocabulary) can help researchers find 3Rs literature.

**Description:** This paper will describe the process of developing and testing the efficacy of 3Rs search hedges. AWIC staff members developed search hedges for common laboratory animal species such as mice, rats, ferrets, pigs, and non-human primates, as well as for selected 3Rs concepts such as environmental enrichment, social housing, alternatives to oral gavage, and abnormal behavior. Users may search each hedge as a single string or combine them with species hedges. AWIC developed hedges in PubMed syntax as well as for Web of Science, Scopus, and other databases. AWIC and members of the Animal and Veterinary Information Specialists caucus of the Medical Library Association formed a Search Strategies Working Group (SSWG) to develop and provide feedback on these hedges. Members stated that librarians would be the hedges' primary users. The group recommended simplifying PubMed hedge syntax and developing additional procedural and species hedges. Lastly, the SSWG advocated publishing and maintaining the hedges in a public repository.

**Conclusion:** The AWIC search hedges will require revision and user testing before posting them in a repository such as the National Agricultural Library website. AWIC plans to work with the SSWG to revise the current hedges and develop additional ones. Lastly, AWIC also plans to validate and publish at least one of the hedges. Disclaimers: This presentation was supported by the U.S. Department of Agriculture, Agricultural Research Service. The findings and conclusions in this presentation are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy. Mention of trade names or commercial products in this publication is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the U.S. Department of Agriculture. USDA is an equal opportunity provider and employer.

# Breaking Down Professional Silos: Librarian Contributions to the Development of a School of Dentistry Grand Rounds Curriculum

Practice Area: Education

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**Pauletta G. Baughman** - Clinical Professor at University of Louisville's School of Dentistry, and a 1981 graduate, Comprehensive Dentistry, Louisville, Kentucky

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**Background**: In May of 2019 the Dean of the School of Dentistry charged curriculum members to develop D1 through D4 courses that integrate basic sciences, clinical sciences, and behavioral sciences principles and enhance clinical reasoning and critical thinking skills. The program was implemented January 2021. Research indicates that interprofessional team-based experiences enhance dental education. Faculty model and provide students with crucial knowledge, skills, and values to work across professional silos throughout training and professional life. Vertical Education Teams, comprised of first-, second-, third-, and fourth-year dental student members, collaborate to present challenging clinical case presentations in a Grand Rounds setting.

**Description**: Course creators and mentors were interprofessional faculty team members including a basic scientist, behavioral scientist, librarian, and clinical dentists. Faculty guided vertical teams in applying critical thinking, evidence-based dentistry, and patient-centered care. The faculty advisory role of the librarian focused on assisting in the development of the evidence-based curriculum rubric, educating students about the creation of an answerable question (PICO), providing information-seeking assistance, and offering guidance in literature assessment in regards to the Hierarchy of Evidence Pyramid. The student presentation involves a treatment controversy, ethical conundrum, or situation derived from a case in the third- or fourth-year patient pool. To assess the effectiveness of the program, teams are evaluated on five areas of performance. Students may volunteer to anonymously answer ten to fifteen Likert scale, IRB approved questions that correspond to the learning objectives.

**Conclusion**: The measurable outcomes for the Grand Rounds curriculum are built around a rubric of five criteria of performance: Presentation quality, critical thinking, behavioral sciences, basic sciences, and evidence-based dentistry. Each criteria has clearly defined expectations that can be evaluated as: 3-Exceptional, 2-Acceptable, or 0-Needs Improvement. As team leaders, D-4 students must complete an independent high stakes written exam at the end of the semester that includes the explicit discussion of the meaning, importance, and application of critical thinking as it relates to Grand Rounds. An IRB approved survey allows students to voluntarily evaluate the program. The resulting data will be used to assess the Grand Rounds program and make improvements as needed,

# A Bridge Over Troubled Waters: Leveraging Connections for Innovative Professional Development During Turbulent Times

Practice Area: Professionalism & Leadership

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**Rebecca L. Bayrer, MLIS, AHIP** - Manager, Library Services, Kaiser Permanente Health Sciences Library, Oakland, California

**Background:** Over the past year and a half, many librarians have had to curtail or forgo professional development activities. The pandemic, natural disasters such as wildfires, as well as regional blackouts and other interruptions have disrupted daily routines, upended access to physical workspaces of our colleagues, while scheduled conferences and classes were cancelled. This paper provides an update on a long-standing, peer-led professional development program, with a specific focus on how the program continued to meet the professional development needs of librarians despite the disruptions to ensure that the librarians were able to adapt to rapidly evolving conditions.

**Description:** Seeing the immediate need for training in relevant technologies and resilience needed for work-from-home settings, our long-standing Professional Development Committee adapted an existing program of continuing development classes to support librarians in the fully remote work setting. Offerings included journal clubs, search workshops, technology sessions and one-off instructional classes for a diversity of learning experiences. We rapidly created a Libguide featuring wellness resources and published a calendar of external professional development opportunities. Online surveys after each session measured the relevance of the class, evaluated overall satisfaction with the program, and gathered suggestions for improvement. Additionally, this program provided opportunities for the librarians to stay connected, motivated, and engaged.

**Conclusion:** Our professional development program provided continuing education, professional growth opportunities, and wellness resources during the recent pandemic. An end-of-year survey provided information on librarians' participation and the benefits of the initiative to be continually responsive. We determined that despite the significant challenges and increased workloads many librarians faced, the program provided continuity, improved skills, and helped librarians weather the storm.

### Browser Friendly: Developing Data Catalog Metadata Using MeSH Terms

Practice Area: Information Management

Michelle Yee - Senior Data Catalog Coordinator, NYU Health Sciences Library, New York, New York

**Background**: The NYU Health Science Library maintains a data catalog to help researchers locate data for reuse and make their data discoverable by others. Data and supporting resources (e.g., software code) are added to the data catalog through outreach to researchers and periodic review of new publications. The NYU Data Catalog employs "subject domains," a set of high-level descriptors, to assist users who prefer to browse rather than perform targeted searches. These subject domains were developed based on the initial datasets entered in the catalog with a focus on clinical and population health research. To accommodate growth of the size and scope of the data catalog, the team needed to expand the subject domains to include more concepts.

**Description**: After consultation with other librarians who are addressing similar issues at their institutions, a project coordinator determined that an output-informed approach through the assessment of publications by researchers at the institution would best support growth. Utilizing R to access NCBI Entrez API, the

coordinator developed a methodology to determine which Subject Domains should be added to the data catalog to facilitate user browsing. Through the API, the coordinator compiled a list of PubMed publication identifiers by authors affiliated with the institution, extracted MeSH terms, ordered the terms by frequency of use, then judged their applicability as subject domains as opposed to other metadata fields that already existed in the data catalog. The data catalog team continued the curation process by evaluating the appropriateness of each term's granularity, whether or not MeSH term meanings would be apparent to researchers, and possible overlap between terms. The team reviewed these findings and reached consensus for each subject domain term.

**Conclusion**: Out of 9,412 extracted MeSH terms, the top 214 terms (representing 49.9% of all publications) were further screened. 5 new MeSH terms were selected and 3 prior terms were combined, overall increasing the pool of existing subject domains by 28%. Using the newly expanded set of controlled vocabulary, the data catalog team will re-catalog over 300 datasets, then assess user adoption through web analytics on browsing versus searching trends. This approach to creating a set of controlled vocabulary has other potential applications in the development of local data discovery platforms .

# Collaborating with Pharmacy Faculty and Fellows to Improve Student Experience with Drug Information

Practice Area: Education

**Jason B. Reed** - Assistant Professor and Health Sciences Information Specialist, Purdue Libraries and School of Information Studies, West Lafayette, Indiana

Amy Sheehan - Professor of Pharmacy Practice, Purdue University College of Pharmacy

Divya Desai - Drug Information Fellow, Purdue University

**Background:** Librarians and pharmacy faculty both train pharmacy students to become experts in answering drug information questions. Since the summer of 2017, a librarian, pharmacy faculty member who specializes in drug information, and the drug information fellows have used a model of continuous improvement to increase the efficacy of drug information instruction embedded in the pharmacy curriculum. They have collaborated to improve consistency of information presented to students through their respective instructional activities, including a drug information course and skills laboratory sessions. They also collaborate with faculty throughout the pharmacy professional program to ensure students receive evidence-based medicine throughout the curriculum.

**Description**: In this session, you will hear from all three perspectives (librarian, faculty member, and a fellow) about how they are involved in drug information and health information literacy throughout the pharmacy curriculum. Together, we have formed an evidence-based medicine team that actively collaborate with each other in teaching and research. Importantly, this collaboration has resulted in more consistency of how drug information is presented throughout the curriculum and has resulted in opportunities to work with students throughout the entire program through a combination of required and elective courses.

**Conclusion:** Through the nature of continuous improvement, there is no end date, however to date the collaboration between pharmacy faculty and a health sciences librarian has resulted in multiple improvements. Students are engaging more with drug information through an increased quantity and relevant activities during drug information lectures. This collaboration has also resulted in more consistent information and resources being shared with students across multiple classes. Ongoing projects related to this collaboration include a scholarship of teaching and learning project evaluating the impact of a new drug information activity in a skills laboratory session and students' performance on a drug information assignment and incorporation of more library instruction in drug information related classes.

# A Collaborative Effort to Build an Evidence-Based Practice Project Repository

Practice Area: Clinical Support

Kate Daniels, AHIP - Clinical Librarian, Children's Healthcare of Atlanta, Atlanta, Georgia

Christine Willis, AHIP - Clinical Information Librarian, Children's Healthcare of Atlanta, Atlanta, Georgia

**Background**: The librarians and nurse scientists had discussed the need for a searchable database of EBP projects for many years as the number of EBP initiatives had increased exponentially. Once two hospitals achieved Magnet status and were looking toward Magnet reaccreditation, it became increasingly evident that a project database was not just a wish but was a necessity moving into the future. The project describes an effort to build upon partnerships with nurses by establishing an Evidence-based Practice (EBP) project repository for clinical nurses to access via a hospital intranet.

**Description**: Excel documents were created to reflect the various areas of practice in the hospital and projects related to those areas were organized accordingly. Keywords were added to make searching easier. These documents were then saved and uploaded to the intranet page for nurses to view. If they want detailed information on a project, there is a request form they can complete and be connected with a nurse scientist to answer additional questions.

**Conclusion**: This project resulted in not only a repository but also led to the involvement of librarians earlier in the research process and led to more options to track how the completed projects were utilized by clinicians. These two outcomes in particular allowed for further involvement of librarians in the Magnet reaccreditation process. Additionally, the contributions of the librarians raised awareness of the roles they can take in EBP and Magnet efforts.

# Communicating COVID: A Series of Panel Discussions Focusing on the Strategies, Struggles, and Stories around Communicating Reliable Information about COVID-19

Practice Area: Education

Dana L. Ladd, AHIP - Health and Wellness Librarian, VCU Libraries, Lanexa, Virginia

**Oscar Keyes** - Multimedia Teaching & Learning Librarian, VCU Libraries / Innovative Media, Richmond, Virginia

**Background**: Misinformation about COVID-19 has paralleled the spread of the novel coronavirus. Misinformation spreads insidiously and leads to poor health outcomes. Similar to there being no cure for COVID-19, there remain no clear methods for combating misinformation. Never has the relationship between health literacy and media literacy been so visible or intertwined. What messages can we disseminate about COVID-19 when not everyone shares the same underlying beliefs about COVID? An academic library's consumer health librarian and multimedia and teaching librarian sought to create a series of panel discussions focusing on the strategies, struggles, and stories around communicating reliable information about COVID-19.

**Description**: The librarians identified and invited health communications experts and community health leaders to participate in two panel discussions. Group members solicited topics from the communities they serve and identified key discussion topics: COVID-19 overview, information overload; misinformation; communication with community members and diverse populations; vaccine safety; vaccine overview; vaccine eligibility and access; guidance after receiving the vaccine; vaccine hesitancy, and strategies to share reliable information. Prior to the live event the panel discussion sessions were advertised via various channels. The live session was broadcast via YouTube Live in order to make it publicly available to all audiences. The open source program Open Broadcast Software (OBS) was used to connect Zoom to the YouTube platform, which also allowed for more creative flexibility for screen sharing. The librarians moderated the session and guided the discussion on COVID-19 communication.

**Conclusion**: We measured the number of live viewers for each panel discussion and the number of subsequent viewers for each panel discussion. The COVID-19 Library guide URL will also be shared with viewers (link provided). We collected statistics on the number of hits on the library's COVID-19 Library guide following the programs and will share statistics. Additionally, we will discuss the challenges and lessons learned in creating and conducting the Communicating COVID panel discussions.

#### A Comparison of Research Analytics Tools

Practice Area: Information Services

**Terry K. Selfe** - Translational Research and Impact Librarian, University of Florida, Academic Research Consulting and Services (ARCS), Gainesville, Florida

**Suzanne Cady C. Stapleton, MS** - Agricultural Sciences & Digital Scholarship Librarian, University of Florida, Marston Science Library, Gainesville, Florida

Michelle Leonard - Assistant Director, Education & Training Programs, UF Research, Gainesville, Florida

**Tara T. Cataldo, MLS** - Biological Sciences Librarian, George A. Smathers Libraries/Marston Science Library, Gainesville, Florida

**Background**: Librarians at our institution often receive requests for information about research metrics, but lack the tools required to most efficiently obtain the required data. Therefore when our university's research office indicated their potential willingness to cover the cost of a new research analytics tool, our library-based group was quick to take the lead on assessing three popular products, Elsevier's SciVal, Digital Science's Dimensions Analytics, and Clarivate's InCites Benchmarking and Analytics. Our purpose was to assess the research analytics tools and compile a report comparing the products and providing our libraries' recommendations to our research office.

**Description**: Our library-based research metrics and impact group, composed of librarians from the science, health science, and main libraries, arranged for free trials of each of the tools, and invited stakeholders including administrators, research deans, and librarians and other faculty members to explore the products and provide us with feedback. The trials were conducted consecutively: SciVal in April, Dimensions in July/August, and InCites in September of 2021. An Excel spreadsheet summarized our findings for each tool, including information on their strengths, weaknesses, annual subscription fee, and data sources. In addition, we noted whether the libraries have access to other products from the vendor (e.g., Clarivate's Web of Science, Elsevier's Scopus) and if any other units are independently purchasing access to some of the research analytics tools under consideration. We synthesized the evidence and submitted our report of findings to the research office and other stakeholders.

Conclusion: Our comparison of SciVal, Dimensions Analytics, and InCites revealed many similarities, and

key differences among the products. Some of the main differences that influenced our recommendations included the tools' reported metrics, sources of information, and cost. In addition, our access to other products from the vendors was weighted heavily given it affects functionality, and potentially cost, of their research analytics tool. Our preliminary findings indicated the health sciences appeared to be adequately served by all three analytics tools. As far as choosing one product over another, we framed the recommendation based on whether the main consideration was price, coverage, or design. InCites and Dimensions were, by far, the most economical; Dimensions had the largest discipline coverage and data sources; and SciVal was deemed the most user-friendly system. Our group would be pleased with any of these products.

## Connecting With GME: Building on Previous Efforts, Structuring Outreach, and Increasing Engagement

Practice Area: Information Services

Julia C. Stumpff, MLIS - Instructional Design Librarian, Indiana University, Indianapolis, Indiana

**Background**: After intermittent outreach to Graduate Medical Education (GME) residents, fellows, and faculty, a medical school library assigned one librarian to be the liaison to GME. After designating a GME liaison, engagement with GME students and departments improved with increased numbers of orientations. Further outreach approaches were diversified and designed to meet the needs of students, staff and faculty. An MLA 2020 poster highlighted the lack of literature about GME liaison librarians and their experiences. This paper provides a variety of ideas for librarians who want to connect with GME stakeholders in a medical school.

**Description**: Previous outreach to the GME consisted of tabling during general new resident orientations, email offers for library orientations sent to resident coordinators, and regular search consultations provided to two departments' residents who lead journal clubs. To increase contact, the liaison librarian expanded previous efforts by designing a robust multipronged outreach approach, including: scheduling earlier communication to GME departments, providing updated lists of contacts to departmental liaisons, collecting and sharing GME news and information with other liaisons, reaching out to newly-established residencies across the state, working with colleagues to develop a scholarly publishing research guide, establishing a regular class with Family Medicine residents, and implementing assessment of resident library orientations. When GME general orientations were held online during the pandemic, a Zoom room was created and an interactive handout was developed. Interaction was incentivized with "swag bags" sent through campus mail.

Conclusion: In 2018, seven sessions with new residents were provided after twenty-seven emails to 27 GME departments were sent in June. After tracking email timing 2018-2020, the GME liaison determined that communication sent March-April before residents arrive in June received the most responses from resident coordinators. In 2021, GME departmental information and tracking sheets were reorganized to better match liaison departmental areas. Forty GME departments were contacted via 48 individualized emails (including follow-up emails to non-responders), and 16 library orientations were scheduled for new residents and fellows. During the pandemic, more than thirty-seven residents and fellows attended the library's general orientation Zoom room in 2020. Twenty-nine residents and fellows interacted with the library's ORCiD handout in 2021. Additional GME initiatives include: a scholarly publishing LibGuide, regularly-scheduled instruction sessions with Family Medicine residents during their scholarship rotation, and efforts to begin tracking GME trainee publications.

#### Contact Tracing as Information Service: A Librarian's Reflection

Practice Area: Health Equity & Global Health

Ann M. Dyer - Health Sciences Librarian, Spokane Academic Library, Spokane, Washington

**Background**: This paper examines the experience of an academic librarian working as a contact tracer during the COVID-19 pandemic. The Librarian's experience providing information services to both colleagues and clients provided an opportunity to use their Library experience and education in a public health role. Objective: Reflect on the suitability of an information professional to provide a value-added service to their community through the role of contact tracer.

**Description**: This Librarian was hired by a contracted, not-for-profit public health organization to provide contact tracing services to their local community. After receiving training on data collection, contact tracing, and local services, they worked in a team setting to support COVID-positive community members and their contacts by contacting individuals and receiving in-bound calls through an informational call center. Within the team setting, the Librarian was able to provide additional training to colleagues on providing information services, answering reference questions, and considering information ethics in the course of their work. In addition, they provided information resources on relevant topics, and assisted in the development of a vaccine outreach program for home-bound individuals. Experience conducting reference interviews proved especially important in providing a high-quality community service, as many conversations included questions that required exploration to determine the individual's information need and knowledge gaps.

**Conclusion**: Librarians, particularly in STEM fields, are particularly well suited to provide services such as contact tracing, due to their training and experience working with people who have information needs, and providing high-quality, reliable information in an effective and ethical manner. Including information professionals in the public health team provides added value for the clients as well as for the other team members, who can benefit from learning many of the standard practices and skills of librarians.

# COVID Keepers: Maintaining Strategies for Motivation, Encouragement, and Teamwork Throughout a Pandemic

Practice Area: Professionalism & Leadership

**Catherine B. Soehner, AHIP** - Associate Dean and Director, Univ of Utah / Eccles Health Sciences Library, Salt Lake City, Utah

**Heidi Greenberg** - Associate Director, Operations and Logistics, Spencer S. Eccles Health Sciences Library, Salt Lake City, Utah

**Carmin Smoot** - Digital Publishing Coordinator, Spencer S. Eccles Health Sciences Library, Salt Lake City, Utah

**Background**: During the 18 months of the Covid-19 pandemic, leadership and employees at an academic health sciences library developed new ways to connect with one another, maintain morale, and remain productive. Some of these strategies were more successful than others, especially those used to address daily communication with work colleagues and reactions to the trauma of experiencing a pandemic, including many personal losses and the disruption of our regular work routines. After simple assessments, the successful strategies were identified and remain a permanent part of doing business at our library.

**Description**: The Covid-19 pandemic was a significant disruption to work life and over time, it became clear

that different approaches were needed to address issues of morale, productivity, and the high levels of stress. Informal conversations among health science library leaders frequently focused on these issues, but very little is published about new approaches of working together at a distance in health sciences libraries. We aim to fill that gap with a simple assessment of new strategies such as weekly all staff meetings, the use of Teams as a main communication channel, and the introduction of virtual wellness challenges. As we transitioned to a mix of telecommuting and work in the library, strategies were adjusted, and new methods were employed including the creation of a 4-question survey to invite more and anonymous feedback while increasing communication across the library.

**Conclusion**: Attendance, participation, and feedback became the hallmarks of success or failure of strategies employed at one academic health sciences library. These simple assessments allowed us to determine the best approaches to manage communication, morale, and high levels of stress. Our work lives continue to change because the pandemic has not been eradicated and as the result of trying new mixes of telecommuting and working in the library building. Review of the responses to the 4-question survey as well as the amount of employee participation in methods deployed will provide the assessment to new or adjusted approaches. As we make note of successful methods, we will continue those strategies as mechanisms to maintain high morale, improve communication, and reduce stress.

# **Creating a Digital Repository of Departmental Research to Enhance and Measure Research Impact**

Practice Area: Information Management

**Tenley N. Sablatzky** - Medical Librarian, Prairie View A&M University, Undergraduate Medical Academy, College Station, Texas

**Background**: Our department has been active in research and educating pre-health science students since 2004. As of 2020, the department has 321 alumni, 12 full-time faculty members, and 74 undergraduate students. However, with a lack of internet presence, the majority of research from the department remains unknown. Upon the hiring of a liaison librarian in early 2020, the idea of creating a digital repository to organize and promote departmental research emerged. The goal was to create a repository to help secure grant funding for future research endeavors, measure research impact, and encourage incoming students to join the scholarly conversation.

**Description**: The librarian came to the decision to use Zotero Groups because of its accessibility and ease of use. From there, faculty, staff, and current students were contacted and asked to provide a current CV or a link to an academic profile online. A list of alumni names, graduation years, post-graduation plans, and contact information was obtained from the department's admissions staff. The librarian used this information to locate all the department's publications and added them to the collection. Each publication item in the Zotero collection with a pre-determined schema for easy navigation. Once the collection was complete it was made public on the department's web page. The librarian then turned to determining the research impact of the department by looking at the total number of publications and total citations of each keeping track of everything in Microsoft Excel.

**Conclusion**: The librarian plans to keep track of how the repository is used over the next year and get faculty feedback on how it has increased awareness of the department's research. The librarian will also continue to keep the repository current as new citations are published. The librarian is on track to have the research impact by the end of 2021 and will make promotional images for the recruitment team. The librarian will also use the collection in instructional classes to incentivize students to begin their own research projects. The overall usage and impact of the collection will be assessed after a year through

faculty and student feedback. Suggestions for improving the collection will also be solicited.

# Defining the Librarian's Role in a Continuing Evidence Monitoring Pilot Project

Practice Area: Innovation & Research Practice

**Molly Higgins, MLIS** - Systematic Review Librarian, Panum Group | USDA, Washington, District of Columbia

Gisela Butera - Biomedical Librarian, National Institutes of Health Library, Bethesda, Maryland

**Background**: With the increase in published research and need for updated evidence-based guidelines and policies, methods for updating systematic reviews have become an emerging area of interest for researchers and librarians alike. Our organization recently developed and piloted a new model for continuous evidence monitoring (CEM). The CEM model was created to improve the process of updating searches, compiling results, and screening, and analyzing relevant articles on an ongoing, periodic basis to better distribute the work involved in the production and updating of reviews across a longer period of time.

**Description**: To develop our CEM methods, we formed an interest group of five systematic review analysts and two systematic review librarians to pilot the program. As a result of the successful pilot, the team is now using CEM across a larger number of systematic reviews. The librarian's role in the CEM model, as with other systematic reviews, involves creating and peer-reviewing the literature search, and running, compiling, and documenting the results. Traditionally, systematic reviews searches are created and run twice. In CEM, searches must be run on a continuous basis leading up to publication. CEM requires that search strategies incorporate new terms to ensure the currency of the search. This presentation will discuss strategies for updating searches periodically, deciding the frequency on which searches are run, and operationalizing manual and automated searches across various databases.

**Conclusion**: The transition to CEM requires changes to the librarian's workflow in literature searches—librarians must work with the research team to determine search update frequency and operationalizing searches across the databases and software used by the team. Conducting the literature search and screening process across a longer timeline provides librarians and researchers more flexibility to balance their workload, but does not decrease resources, time or staff needed to complete a review. As the approach to updating reviews evolve, librarians play an important role in advancing new developments in actively monitoring, gathering and disseminating research evidence.

# Developing an Employee Code of Conduct for an Academic Medical Library

Practice Area: Professionalism & Leadership

**Kathryn M. Houk, AHIP** - Undergraduate Medical Education Librarian, UNLV School of Medicine Library, Las Vegas, Nevada

Ruby L. Nugent, MA LIS - Biomedical Science Education Librarian, UNLV School of Medicine Library

Xan Goodman, AHIP - Health Sciences Librarian, UNLV University Libraries, Henderson, Nevada

Aidy Weeks, AHIP - Director, UNLV School of Medicine Library, Las Vegas, NV

**Background**: This presentation describes the work of faculty and staff at the University of Nevada, Las Vegas' School of Medicine Library to collaboratively develop an employee code of conduct (Code). A meeting of the library faculty in 2019 discussed microaggressions and a lack of civil and inclusive discourse, particularly during promotion review; which led to historically excluded and junior faculty expressing feelings of being unsafe and disrespected. This discussion led to the suggestion and adoption of a project to create an employee Code at the medical library to foster respectful, inclusive communication, and serve as a model for the University Libraries.

**Description**: The University Libraries' Conduct Policy focuses on patron behavior, but there is not a similar policy for employees. To address this, the medical library team decided to craft a code of conduct during team meetings throughout 2020. To start, the team collected examples of community agreements and codes of conduct from public, private, and academic institutions to use as inspiration. We then used an iterative, collaborative approach to determine final policy and wording. The final Code was launched in March 2021 and links to the document are included in team meeting agendas. We are now beginning an evaluation and improvement process for the Code to ensure it is meeting the original goal of the project.

**Conclusion**: This project was a necessary and successful bottom-up initiative for several reasons. As a highly diverse team of employees, this project allowed us to articulate and create a framework of shared values to put into practice. We used a collaborative, iterative and shared-leadership approach that allowed for broad ownership and buy-in within the team. The Code allows employees to operationalize expectations and actions with shared language. We hope that our work serves as an example of how employees can take positive, concrete action to create a more inclusive and accountable work environment.

# Developing searchRxiv: An International Transdisciplinary Repository for Search Strategies

Practice Area: Information Management

Neal R. Haddaway, PhD - Senior Research Fellow, Stockholm Environment Institute

**Melissa L. Rethlefsen, AHIP** - Executive Director & Professor, Health Sciences Library & Informatics Center, Gainesville, Florida

**Cristina A. Ashby** - Head of Researcher Experience & Product Owner, CABI, Wallingford, England, United Kingdom

**Background**: Documenting, saving, and sharing search strategies is an important component of transparent reporting for systematic reviews. It is also helpful for individual practice, enabling valuable search "blocks" on a myriad of topics to be shared, modified, and reused. Though documentation and sharing are critical, these activities have been scattered across dozens of resources, from individual journal supplemental files to, rarely, institutional repositories. Shared search block resources that have been developed previously have never been adopted broadly; successful platforms for documentation and sharing have been local. We sought to develop a transdisciplinary platform to share search strategies and their documentation.

**Description**: We collaborated with CABI to develop searchRxiv, a new subject agnostic platform for documenting and sharing search strategies. Initial conversations led to the development of a proposal for a standardised file type for documenting systematic searches, which outlined the key background issues shaping the platform, including the current state of poor reporting quality of search strategies, the need for librarians to receive credit for their intellectual contributions, and a lack of accessibility to search strategies as a contributor to research waste. We proposed creating a platform which would: improve accuracy of search strategy documentation, create citable records for each search strategy, and be openly available to improve accessibility. We established an Advisory Group to provide feedback on the proposal, data

elements, and standards required for maximum benefit and reproducibility. 27 data elements were proposed after review by the Advisory Group.

**Conclusion**: Using the initial proposal, plus the data elements and standards proposed by the core group and the Advisory Group, CABI developed searchRxiv (searchrxiv.org) in mid-2021, built on CABI's existing technology infrastructure. searchRxiv enables individuals to create a DOI-stamped record of a search strategy or a search block. Fields captured include title, the search strategy, the date of the search, update dates, the review question, a description, keywords, validation information, whether the search was peer reviewed, links to publications, and database details. searchRxiv remains in active development as feedback from the user community is received. Long-term, the vision for searchRxiv is to connect it to major search platforms to enable automatic uploading to searchRxiv to improve documentation.

# Devising a Practicum Experience Using the Medical Library Association Professional Competencies: A Program Review

Practice Area: Education

Cayla M. Robinson - Health Sciences Librarian, University of Kentucky

Emily B. Kean, AHIP - Associate Senior Librarian (Former), University of Cincinnati

**Background**: A practicum experience was created in collaboration with a library science student from the University of Kentucky, and a Health Sciences Librarian from the University of Cincinnati. The aim of the practicum was to ensure that the library science student had a good grasp of the professional competencies before entering a full-time librarian position. The competencies that the student and librarian felt were best accomplished during the practicum included the Instruction & Instructional Design competency, and the Evidence-Based Practice & Research competency.

**Description**: The development of this practicum began with meetings between the student and the Health Sciences Librarian. The two discussed what competencies the student felt like she needed to focus on the most, and included a discussion on research interests. This discussion led to the creation of two projects. Project One was research-based, and Project Two focused on analyzing how librarians were instructing at the University of Cincinnati. Implementation focused on meeting the University's practicum requirements. The student would work 140 hours over the course of the semester. Due to the nature of the first project, the student and librarian decided that the student would work 2 hours a day for the entire semester.

**Conclusion**: Outcomes of this practicum included three separate deliverables all with ties to the professional competencies. The student completed a survey review of over 150 articles for a research project, wrote a report focusing on strengths and areas of growth for the University of Cincinnati library instruction, and developed a multi-media project to meet the university course requirements. A combination of hands-on experience, project deliverable development, and a focus on the professional competencies led to a highly successful practicum experience. The final purpose of this paper is to discuss how the projects related to the competencies, the benefits of the experience for both librarian and student, and recommendations for implementing such a practicum experience across different institutions.

### Elevating the Voices and Experiences of LGBTQ+ Health Providers in Medical Education

Practice Area: Education

**Lauren E. Adkins, MLIS/AHIP** - College of Pharmacy Liaison Librarian, Health Science Center Libraries/University of Florida, Gainesville, Florida

**Jane Morgan-Daniel, AHIP** - Community Engagement and Health Literacy Librarian, University of Florida Health Science Center Libraries, Gainesville, Florida

Chloe Hough, AHIP - Reference Librarian, Tampa Bay Regional Campus Library, Florida

**Nina Stoyan-Rosenzweig** - Archivist and Historian, Health Science Center Libraries/University of Florida, Gainesville, Florida

**Background**: The University of Florida Health Sciences Libraries' Diversity, Equity, and Inclusion Team collaborated with the University of Florida's College of Medicine to host an educational panel for the College's 2020 and 2021 Celebration of Diversity Week. Celebration of Diversity Week has rallied students, faculty, and staff around issues of inclusion and equal representation within all aspects of health care. The purpose of the panel, titled "Honoring LGBTQ+ Health Stories," was to educate future health providers on the health needs of the LGBTQ+ community, as well as to provide an opportunity for panelists to share their experiences as health care providers who identify as LGBTQ+.

**Description**: The DEI Team collaborated with University of Florida faculty members who agreed to speak on the panel. We took intersecting identities into considered when selecting speakers and tried to represent all facets of the LGBTQIA+ community along with healthcare professions. The team developed a set of interview questions that sought to address the positive and challenging experiences of being LGBTQ+ and share their advice with health science center students on how to improve healthcare experiences for LGBTQ+ patients. The panel also incorporated a question and answer session which allowed attendees to ask questions such as how to improve LGBTQ+ services and patient care in their healthcare practice and how the health science center colleges could improve their LGBTQ+ initiatives. The 2019 panel was hosted in person and the 2021 panel was hosted completely on Zoom due to Covid-19 pandemic.

**Conclusion**: Overall, there was positive feedback about the structure of the event, the panel speakers, the subjects covered, and the questions posed. There were over 100 attendees at the in-person 2019 panel and 73 attendees at the 2021 Zoom panel. The DEI Team has strengthened relationships with health science center college leadership and faculty, which has led to further collaboration on DEI initiatives and resource sharing. From the feedback we received, we will try to increase the time of the panel to allow for a longer question and answer session. Future panels will focus on broadening the topics of LGBTQ+ healthcare and there are plans to create a LGBTQ+ patient panel for next years event.

### **Expanding Our Horizon: Library Research Training Series for Clinical Researchers**

Practice Area: Innovation & Research Practice

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**Derita Bran** - Director of Administration, Tennessee Clinical and Translational Science Institute, Memphis, Tennessee

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**Margaret Lynn** - Director of Clinical Research Development, Tennessee Clinical and Translational Science Institute, University of Tennessee Health Science Center, Memphis, Tennessee

**Jenessa M. McElfresh, AHIP** - Systematic Review Service Coordinator / Senior RLS Librarian / Associate Professor, UTHSC Health Sciences Library / Research & Learning Services, Memphis, Tennessee

**Tamara M. Nelson, MLIS, EdS, AHIP** - User Services Coordinator / Senior Research & Learning Services Librarian, The University of Tennessee Health Science Center Health Sciences Library, Memphis, Tennessee

**Jess Newman McDonald** - Research Data & Scholarly Communications Lead, Health Sciences Library, Memphis, Tennessee

**Kay Strahan** - Assistant Professor/Research & Learning Services Librarian, University of Tennessee Health Science Center, Health Sciences Library, Research & Learning Services, Memphis, Tennessee

**Background**: Library services targeting clinical researchers have been limited and their research needs may be underserved. Increasing ILibrary visibility on campus has created more collaborative opportunities. This study describes the development and implementation of a collaborative research training series for clinical researchers between the library and the Office of Research. The intended outcomes are (1) to increase participants' awareness of library resources and librarian expertise valuable to support research activities and (2) to better understand their research needs to direct future library services and training programs. Continuing medical and nursing education credits are awarded to participants upon completion of the program.

**Description**: The Office of Research (OR) has organized training programs for clinical researchers on variety of topics, but few have related to library resources and services. The team included two OR directors and eight librarians. After a meeting to discuss and identify needs, the library proposed eleven topics aimed to engage, educate, and support clinical researchers. The topic content covers general search skills, database content and availability, access to information, citation management, and scholarly publishing. Each session was recorded and made available for later access. A training satisfaction survey was sent to participants after each session to get their feedback. Before and throughout the series, sessions were continuously marketed/advertised to to the university campuses and to the clinical researchers' listserv. A library research guide was developed to supplement the training series and to continue library support for clinical researchers.

Conclusion: Eleven sessions were delivered with a total of 157 attendees across the state. As of February 2022, session recordings had a total of 100 views and the research guide had a total of 251 visits. In addition to demographic information, the satisfaction survey asked the participants to rate each training session regarding content and trainer attributes on a 5-point scale with 1 being the lowest and 5 being the highest. All 11 sessions were rated, on average, between 4.2 and 5.0 in all ratings in both categories. When asked "Overall, how would you rate this training?" Library Overview (LO), Enhancing your Searching Skills (ESS), Data Visualizations (DV), and Understanding Research Impact (URI) were rated highest. ESS, DV, and URI were rated most relevant to attendees' jobs/duties. The most useful sessions were LO, ESS, Library Support Services for Systematic Reviews, and URI. The feedback may help direct future library services and training programs for clinical researchers.

## Exploring a New Clinical Librarian Position Through a Library Residency Program: Plans, Pivots, and Potential

Practice Area: Clinical Support

**Kaitlyn Van Kampen** - Kathleen A. Zar Clinical Library Resident, University of Chicago/John Crerar Library, Chicago, Illinois

Debra A. Werner - Director of Library Research in Medical Education, John Crerar Library, Chicago, Illinois

**Background**: New positions that meet emerging needs can be difficult to establish in medical libraries. The University of Chicago Library created a residency program to explore new positions and demonstrate their value by hiring recent graduates with new skills for two-year residencies. The objective of the Clinical Library Resident (CLR) position was to demonstrate the benefit of additional medical librarians who provide point-of-need services and information support to medical professionals at The University of Chicago Library serving the Pritzker School of Medicine and UChicago Medicine. Services included embedded rounding with medical teams and providing instruction sessions and research consultations to medical students, residents and faculty.

**Description**: The plan: The CLR started their residency by working with hospital administration to introduce the new embedded rounding service to different specialties and successfully partnered with 5 clinical teams. Two months later, the pandemic shut down the University and remote work began. The pivot: With the disruption, the CLR quickly shifted, establishing the COVID-19 Educational Support Team to perform literature syntheses and answer COVID-related questions for frontline clinicians. The CLR soon began rounding remotely, joining teams with established virtual rounds and initiating virtual rounding services with teams that were in-person. The CLR also began teaching and consulting remotely during this time. When onsite work resumed, the CLR returned to in-person rounds, helped design a medical school elective, and partnered to create critical appraisal workshops for nurses and a nursing journal club. The potential: a full time position is currently being created.

Conclusion: The CLR position was created to address the University of Chicago and UChicago Medicine's need for additional clinical information support and to expand the library's staff of medical librarians. The impact of the CLR position was assessed via an informal survey of the rounding teams, which demonstrated the value of the service. The CLR increased the number of rounding teams from one to six, provided over 50 consultations, and led over 30 instruction sessions that otherwise would not have occurred. The CLR-led COVID-19 Educational Support Team directly resulted in the creation of the ASAP (Ask-Search-Appraise-Perform) elective, a critical appraisal elective for the medical school. The objective of the CLR position was achieved, as shown through survey results, increased services provided, and creation of a full-time clinical librarian position.

### Friend-Raising: Successful Fundraising Techniques for Academic Health Sciences Libraries

Practice Area: Professionalism & Leadership

**Catherine B. Soehner, AHIP** - Associate Dean and Director, Univ of Utah / Eccles Health Sciences Library, Salt Lake City, Utah

**Melissa L. Rethlefsen, AHIP** - Executive Director & Professor, Health Sciences Library & Informatics Center, Gainesville, Florida

**Background**: One of the Performance Indicators of the Leadership and Management professional competencies as identified by the Medical Library Association (MLA) is "Secures and manages external funding," which includes implementing fundraising strategies. There is very little written about fundraising for health sciences libraries. One of the more recent publications that mentions fundraising as an important aspect of a director's duties was written in 2000 titled, Administration and management in health sciences libraries, edited by Rick B. Forsman and Alison Bunting. We will begin to fill that gap with an assessment of

fundraising activities in two different academic health sciences libraries.

**Description**: Two health sciences library directors new to fundraising executed a series of development activities including a friend-raising event, outreach to individuals with oral histories on file, directed donation campaigns, and holiday greetings to name a few. Both directors began with assistance from a university development specialist, however, staffing changes removed that expertise for some time for one of the directors. Monthly consultations between the two directors allowed for an exchange of ideas with encouragement and the implementation of similar activities when appropriate. Limitations on staff time, the directors' time, and funding available to execute fundraising programs were noted along with strategies to overcome some of these challenges. Evaluations of each activity were simple, but these assessments quickly determined which activities yielded quick and satisfying results.

**Conclusion**: After each implemented fundraising measure, an assessment followed that included but was not limited to recording the number of participants in an event, the amount of planning effort required, the amount of money spent, the number of contacts made, the feedback received, and the amount of money raised. A list of fundraising activities that yielded the best results, the amount of effort required, along with lessons learned, will be presented.

## From Digital Commons to Alma/Primo: A Systems Interoperability Project

Practice Area: Information Management

**Sara Hoover** - Metadata and Scholarly Publishing Librarian, Himmelfarb Health Sciences Library, Washington, District of Columbia

**JoLinda L. Thompson, AHIP** - Associate Director (Interim), Library Operations & Systems Librarian, Himmelfarb Health Sciences Library, George Washington University, Norfolk, Virginia

**Background**: In 2018 our library migrated to Ex Libris's Alma and its discovery service Primo. Alma allows content from OAI-PMH compliant archives to be loaded to Primo for discovery. Our library has a Digital Commons institutional repository (IR) system and librarians were eager to explore including IR content in Primo. Post-migration a feed was established between the IR and Primo, but there were issues with adding all IR content and the feed was removed. Consequently, we wanted to explore alternatives that would allow for the integration of more selective IR content.

**Description**: For our pilot project, we explored the possibility of integrating a single Digital Commons collection into Alma and Primo. Our Doctor of Nursing Practice (DNP) projects collection was well suited to this project because the majority of items are full-text and unpublished elsewhere. We identified two potential import profiles in Alma that would integrate content—the Discovery Import Profile which allowed loading of Dublin Core or MARC 21 bibliographic records directly into the Primo Central Discovery Index and the Repository type Import Profile which allowed bulk loading of bibliographic records directly into Alma. To improve management of metadata and maintenance we selected the Repository type Import profile and mapped IR content to the MARC 21 format. Using an XLSX file, we successfully added 89 DNP project records to Alma, making them available in Primo for direct discovery.

**Conclusion**: What are the benefits of integrating OA content from an IR into a library catalog or discovery service? In the fall of 2021 we began tracking collection downloads from our IR as well as Alma OpenURL requests and Primo access requests. Going forward we plan to continue to track these figures. We believe that avenues for readership for the DNP collection can be enhanced through inclusion in the library catalog and that broader access to these practice projects could in turn enable quality healthcare improvements. In

the future, we plan to integrate additional IR collections using the methodology established during the pilot phase of our collection level IR to Alma/Primo integration.

## Gearing Up for Citizen Science: Designing a MOOC with an Environmental and Community Health Focus

Practice Area: Education

**Alexa Mayo, AHIP** - Associate Director, Research and Information Services, University of Maryland, Baltimore HSHSL, Baltimore, Maryland

**Katherine Downton** - Head of Research and Education Services, Health Sciences & Human Services Library, Baltimore, Maryland

**Thom Pinho** - Lead Instructional Technology Specialist, Health Sciences and Human Services Library, baltimore, Maryland

**Background**: Citizen scientists are members of the public who collaborate with scientists in collecting and analyzing data to answer research questions. In some cases, motivated citizen scientists – especially those wishing to bring attention to environmental challenges in their communities – may investigate a research question on their own. A team at the Library developed a course that builds research skills in citizen scientists, focusing on developing projects in environmental and community health. The course uses the edX Massive Open Online Course (MOOC) platform and it is open to everyone. An award from the NNLM/SEA funded the project.

**Description**: A team-based approach was used to design Citizen Science: Gearing Up for Discovery, an asynchronous 5-week course for citizen scientists aspiring to investigate health-related issues in their communities. A project planning team contributed experience in course design, online instruction, and knowledge of the field of citizen science. This paper will describe the course curriculum: an introduction to citizen science; steps in planning a successful project; strategies for collecting and managing data; and communicating results. Instructional methods integrated short lectures, quizzes, and learning activities and, to engage learners and make the course come alive, the team applied a narrative storytelling approach. The process of developing the MOOC will be explained. The Library released the course in May 2021 and promotion is ongoing.

**Conclusion**: Course evaluation methods and outcomes will be presented, including enrollment data, course engagement, and assessment outcomes. Challenges related to participant demographics and MOOC completion will be discussed. Opportunities and challenges for libraries interested in MOOC development and team-based course planning will be explored, along with opportunities for broader involvement in citizen science initiatives in libraries.

### Hear Me Now: When Storytelling Meets a Health System Library

Practice Area: Professionalism & Leadership

Heather J. Martin, AHIP - Director, System Library Services, Portland, Oregon

Amanda Schwartz - Digital Asset Librarian, System Library Services, Missoula, Montana

**Background**: A chance encounter at work led to an innovative and rewarding partnership between a large health system library and a storytelling program whose mission is to give patients, loved ones, and caregivers a sacred space to share their stories and make healthcare more humane.

**Description**: Providence System Library Services leadership collaborated with palliative care communication managers to support the mission and growth of a health system storytelling program. The program includes professionally produced podcasts, multimedia video and audio stories from patients/families/employees, and other online content. Library involvement was multifaceted including fact checking and literature searching to support the podcast; identifying opportunities for social media content; and creation of a unique metadata structure and thesaurus by our Institutional Repository staff to organize and archive multimedia "stories" making them more accessible now and in the future.

**Conclusion**: The storytelling initiative was a successful partnership between the Library and a division of marketing-communication. This expansion into a previously untouched area of the health system business brought an opportunity to showcase the diverse skill-set library staff and push beyond the boundaries of clinical research and education. The Library was even asked to share their own story in a podcast episode of COVID-19 unsung heroes in the health system giving greater visibility to pandemic impacts on nonclinical departments.

### Impact of PRISMA 2020 Reporting Guideline on Systematic Review Services

Practice Area: Information Services

**Alyssa A. Grimshaw, MSLIS, IPI PMC** - Clinical Research and Education Librarian, Cushing/Whitney Medical Library, Yale University, West Haven, Connecticut

**Background**: The new PRISMA 2020 updated was published in March 2021. The new guideline advances the methods of systematic reviews with more detailed reporting recommendations including a revised and expanded 27-item checklist, a new abstract checklist, and a revised flowchart.

**Description**: This presentation will include examples of methods and workflows created to aim for better adherence to PRISMA 2020 and improve the quality of systematic reviews. This presentation will also discuss the challenges and barriers that one librarian has experienced when trying to implement PRISMA 2020 in her research teams, in addition, to the successes and lessons learned along the way.

**Conclusion**: PRISMA 2020 when followed will produce more transparent and reproducible reviews. Librarians can help facilitate the adherence to the new recommendations by making small practice changes.

# Implementation and Assessment of An End-to-end Open Science & Data Collaborations Program

Practice Area: Innovation & Research Practice

**Huajin Wang** - Senior Librarian/ Co-director for Open Science & Data Collaborations, Carnegie Mellon University Libraries, Pittsburgh, Pennsylvania

**Melanie Gainey** - Librarian/ Co-director of Open Science & Data Collaborations Program, Carnegie Mellon University Libraries, Pennsylvania

**Patrick Campbell** - Project Coordinator, Open Science and Data Collaborations program, Carnegie Mellon University Libraries, Miami, Florida

**Background**: There is an increasing need to share data and other research products in accordance with open science principles. Open science not only helps satisfy funder and publisher mandates and accelerate the dissemination of research, but importantly, facilitates collaboration and makes research more reproducible and reusable. Many academic institutions have established institutional repositories (IR) and open-access programs to support open data and publishing. However, these initiatives often emphasize the end product of research. At [an R1 institution], we implemented the Open Science & Data Collaborations (OSDC) program, within University Libraries, that helps embed open science practices into the entire research lifecycle.

**Description**: The OSDC program was created in 2018 by subject and data librarians and specialists, many with deep research backgrounds in various disciplines. The implementation had 3 phases: the foundation phase that focused on launching essential services, the expansion phase that added more services and generated buy-in and partnerships on campus, and the current assessment phase, in which we plan to use data-driven approaches to further extend services and evaluate impact. The program has 5 pillars: 1) Tools that facilitate collaboration and sharing of research data, code, protocols, and more; 2) Training opportunities that build basic data science competency essential for producing transparent and reproducible research; 3) Events to connect research communities and promote a cultural shift; 4) Collaboration opportunities for researchers to work on data projects together; 5) Assessment that evaluates the impact of open science on research.

**Conclusion**: The OSDC program supports numerous researchers and has strong partnerships on campus. It is among the first end-to-end open science programs in North America, and is uniquely led by the Libraries, allowing for interdisciplinarity and synergy with related services such as open data and publishing and research data management. We are working on developing metrics to evaluate the program's impact. As proof of concept, we collected data that includes platform usage, event / workshop registrations, and outreach efforts. Based on initial analysis of this dataset, we developed a metrics framework for future program assessment. This framework, together with a logic model, will guide us to develop targeted surveys and identify priority service areas. Our program can serve as a model for other universities implementing open science initiatives, and we welcome partnerships to form an alliance of open science programs.

## Interdisciplinary Collaboration in the Creation of Digital Flashcards to Enhance the Pre-Clinical Pharmacology Curriculum

Practice Area: Education

Juliana Magro - Education and Research Librarian, NYU Health Sciences Library, New York, New York

So-Young Oh - Assitatnt Director, New York University Grossman School of Medicine, Flushing, New York

Nikola Koscica - Data Analyst, New York University Grossman School of Medicine, Flushing, New York

**Jillian Lieber -** Instructional Designer, New York University Grossman School of Medicine, Flushing, New York

Durga Kullakanda - Medical Student, NYU School of Medicine

Michael Poles - Asst Dean, New York University Grossman School of Medicine, Flushing, New York

**Background**: Facilitating the study of pharmacological concepts is often a challenge for medical schools, as the AAMC National Graduation Questionnaire report showed in highlighting pharmacology as an area in the curriculum requiring improvement. Providing pharmacopoeias to students in table format is an inadequate solution, as massed presentation of content has proven to be suboptimal for learning. These challenges lead students to seek extracurricular support through the use of digital flashcards such as Anki, a popular open-source software. This presents its own challenges, as producing flashcards is time-consuming and initially challenging, and student-created cards may convey inaccurate medical content.

**Description**: To address these challenges, we formed an interdisciplinary workgroup, consisting of a librarian, instructional designers, a data scientist, medical faculty, and school leadership. This workgroup developed and implemented ancillary flashcards across all organ systems in the spring of 2021. In total, the workgroup created 22 Anki flashcard decks with 501 individual flashcards in 5 organ system pre-clinical modules. Each flashcard tested Indications, Mechanisms of Action, and Major Side Effects, and links to the institution's drug formularies. To optimize learners' cognitive load, the flashcard design included different instructional and multimedia design principles, which will be covered in this paper. After implementation, we sought to examine the impact of the newly introduced flashcard decks by measuring student exam performance and their digital experience as provided in end-of-module feedback surveys, compared to the previous cohort who did not use school-provided flashcard decks.

Conclusion: While the results did not show that using flashcards correlated with improved student performance on tests, we did find an improvement in student attitudes regarding the difficulty of pharmacology. After the implementation, fewer students mentioned that pharmacology was a difficult topic. Students continuously rated the pharmacology flashcards as a useful resource in the curriculum. We believe that this innovation is an important improvement in the pharmacology curriculum, as it enables students to study using self-directed and spaced repetition learning techniques. In addition, the librarian's involvement led to the inclusion of drug formulary links, ensuring that the flashcards continue to be relevant. Because of its success and positive reception, the school is now continuing to improve the availability of pre-made flashcard decks to pre-clinical students,, expanding it to other areas, such as hematology glossaries, and illness scripts.

### Journal, Article, and Author Metrics: A Just-In-Time Video for P&T Committee Members

Practice Area: Information Services

Mirian Ramirez Rojas - Research Metrics Librarian, Ruth Lilly Medical Library, Indianapolis, Indiana

Julia C. Stumpff, MLIS - Instructional Design Librarian, Indiana University, Indianapolis, Indiana

**Hannah J. Craven, MLIS** - Research & Scholarly Communications Librarian, Ruth Lilly Medical Library, Indianapolis, Indiana

**Background**: Over the last three years, a Midwest medical school's library has collaborated with the schools' research affairs and assessment committees to support promotion and tenure (P&T) administrators and educate the academic research community. The library's role includes preparing and delivering training sessions and workshops on scholarly metrics for early-career faculty and P&T candidates. To help P&T chairs, administrators, and candidates become acquainted with research metrics, two librarians worked in partnership with the medical school's faculty professional development committee and with the library's instructional design librarian to create an asynchronous video presentation.

**Description**: Due to previous library outreach initiatives focused on scholarly metrics, the librarians were asked to convert a current training session into a video. The librarians were asked to provide further details

about the most popular scholarly metrics used for traditional academic research assessment. To develop and create an asynchronous video presentation, the librarians of the library's research team partnered internally with the library's instructional design librarian, who has expertise in creating instructional videos. Collaboration with the instructional librarian was key to designing effective learning material including applying the storyboarding technique to organize the content and enhance the final video. The video provides introductory information about scholarly metrics for responsible research assessment. Using existing materials and content as a starting point, the librarians worked together to outline the video's script, storyboard, and produce the video with attention to the professional development committee's request.

**Conclusion**: This successful and efficient partnership with the faculty professional development committee and the library's instructional librarian led to the creation of a nine-minute video. The final product was posted on YouTube and is embedded in the library's Scholarly Impact LibGuide. As part of the outreach activities regarding impact metrics, this educational material is an important component for sharing ideas and driving conversations regarding the responsible use of metrics and research assessment. We plan to create additional videos that provide a breakdown of the content covered in the first video and provide further details and hands-on activities. This initiative has to led to additional requests for training on these concepts and increased understanding of research metrics among faculty preparing for P&T.

#### Librarian Collaboration in Guideline Development

Practice Area: Clinical Support

**Emily Brennan, MLIS** - Research and Education Informationist, Medical University of South Carolina Library, Charleston, South Carolina

**Elaine Attridge** - Quality & Performance Improvement Librarian, University of Virginia Claude Moore Health Sciences Library, Charlottesville, Virginia

Tara Brigham, AHIP - Librarian & Supervisor, Mayo Clinic in Jacksonville, FL, Jacksonville, Florida

**Background**: This paper describes the experience of three librarians from different institutions working together on a national guideline, the benefits of that collaboration, a suggested approach, and the questions that should be asked beforehand to ensure the experience is efficient and the guideline is of the highest quality.

**Description**: Participating in guidelines is challenging because of the need to balance best practices, time constraints, and researchers' needs. Most clinical guidelines include faculty authors from multiple institutions. When a librarian is invited to join a guideline development team, often times the librarian's role is poorly defined. Before agreeing to participate in a national guideline, librarians should consider authorship versus acknowledgment, time commitment, number, and complexity of clinical questions, project management, research team support, team experience with guideline development, and cross-institutional librarian collaboration.

**Conclusion**: Collaborating with librarians from other institutions has many benefits: the burden of completing search strategies is shared; librarian partners can serve as a sounding board for problem-solving; opportunities are provided for librarians to learn new skills, databases, and technology not subscribed to by their own institutions; and peer review improves the quality of the searches, thus ensuring the highest quality guidelines. Lastly, involving more librarians strengthens relationships between librarians and faculty from their own institutions which could lead to other opportunities.

### A Library Guide for Anti-Racist Research: Development, Evolution, and Reflection

Practice Area: Information Services

Shanda Hunt - Public health librarian, Health Sciences Library, Minneapolis, Minnesota

**Amy L. Riegelman, MLIS** - Social Sciences Librarian, University of Minnesota Libraries, Minneapolis, Minnesota

Soph Myers-Kelley, MLIS - Medical Librarian, Laupus Library, St. Paul, Minnesota

**Background**: Mid 2020, after George Floyd's murder, faculty researchers began asking librarians how to incorporate BIPOC scholars into their work. There is no simple answer to this question from an information science perspective, and as librarians began consulting with one another, we realized this need was cross-disciplinary, frequent, and pressing. It became clear that we needed to collate the information in a LibGuide for accessibility to the university community and beyond.

**Description**: Two librarians and a library intern - all white-identifying with expertise in the areas of psychology/social science, public health, and social justice activism - authored the LibGuide, with invited input from all institutional librarians. Initial meetings focused on defining the scope, audience, and organization of the Guide. The scope: share resources and strategies for conducting anti-racist research rather than pointing to anti-racism readings. The audience: students, staff, and faculty - from any institution - who wish to incorporate anti-racism into their research. Organization of the guide: clearly name the problematic practice and offer strategies for mitigation. Some disciplinary librarians (e.g., liaison to Native American studies) were asked for their feedback, and then feedback was solicited from all librarians via anonymous Google form. The presentation will highlight particularly useful resources and strategies from the Guide.

**Conclusion**: Since January 2021, the Guide has had 19,000+ views. We have been asked to present the Guide at various campus conferences (e.g., health sciences education, design ethics, data diversity) and were asked to write a book chapter based on the information shared in the Guide. The successes of the Guide have been surprisingly plentiful, but authoring it does not come without challenges. We have received negative feedback from colleagues, a campus affiliate, and an outside source. We'll discuss how we've navigated management of an educational resource that is viewed as controversial, and share how we plan to maintain the Guide with reflexivity.

#### **Making Sense of Basic Science Culture**

Practice Area: Information Services

**Stacey E. Wahl, PHD, AHIP** - Research and Education Librarian- Basic Sciences, Health Sciences Library/Research and Education, Richhmond, Virginia

**Stephanie J. Schulte -** Professor/Assistant Director, Research & Education, The Ohio State University Health Sciences Library, Columbus, Ohio

Margaret A. Hoogland, AHIP - Clinical Medical Librarian, Mulford Health Science Library

Laura M. Lipke, AHIP - Medical Librarian, A. T. Still Memorial Library, Kirksville, Missouri

**Background**: Basic science research conducted outside of the clinic, without a direct application to patients, is an integral part of research universities and academic medical centers. The scientists involved in this work are less likely to seek research support from librarians than their clinical counterparts. Library research has recognized this problem, but has yet to provide insight into the causes. The culture of these labs, and the differences between it and clinical research culture are potential causes of this utilization difference. What can we learn from basic science cultural approaches to research that will help us better serve this community?

**Description**: To address this question, the Basic Science Caucus hosted an interactive panel in the Fall of 2021. A panel of three basic scientists-turned-librarians reflected on their experiences in the lab and how those experiences inform their roles as librarians. Prior to the panel discussion, facilitators guided attendees through a brainstorming exercise about their perceptions of basic science culture. These impressions were utilized in the panel discussion, along with three preformed questions and additional audience questions. The goals of the discussion were to identify correct and incorrect perceptions of basic science culture, from the librarian perspective, and to understand how the culture of the lab affects how individual scientists view the library and librarians.

**Conclusion**: This presentation will discuss a summary of the panelists' experiences in science and their reflections on how that informs their librarian practice. An analysis of attendees' perceptions of basic scientists prior to the workshop will be introduced along with key takeaways of the workshop discussion. Practical recommendations for planning outreach programs and services for basic scientists will be shared along with further recommendations on how to learn about basic science culture.

### **Needs Assessment for Research Data Management Services at the Medical Campus**

Practice Area: Information Management

**Donghua Tao** - Assistant Director for Information Services/Professor, Medical Center Library, St. Louis, Missouri

Angela Spencer, AHIP - Health Sciences Librarian, Saint Louis University, St. Louis, Missouri

**Background**: Research data management involves methods and tools of the data lifecycle that are associated within the research lifecycle. The Medical Center Library has been receiving requests from faculty, students and research staffs regarding assistance with research data management. Librarians, as experts in information management, should be at the frontline to provide new services to fulfill research data management needs. In order to identify the data management service scope, content, and format, we carried out a needs assessment via survey and focus group interviews. This paper is to share our experience of needs assessment for developing research data management services.

**Description**: To gather the needs of faculty, students and research staff at the medical campus on research data management, a survey and the focus group were conducted in early 2021. A total of 138 library users responded to the survey. We found: 1. As to data organization, training and services on data management plan, file naming conventions, and bibliometrics were significantly needed. 2. For data storage and preservation, work computer hard drive, web-based storage (e.g., Drop Box, Google Drive), and an external hard drive were used most. Only 11% of respondents stored on a closed repository site, such as organization provided data repository space. 3. In terms of data sharing, cloud-base space (e.g., Dropbox) is used most, followed by the university's network drive, external drive, and thumb drive. 70% of respondents had guidelines and procedures in place for handling sensitive data.

Conclusion: The needs assessment brought us ideas to plan research data management services. Here are a few ongoing action items: 1. Develop a libguide as an information "portal" with the information of data management knowledge and the related trainings, research, and services. 2. Collaborate with the Office of the Vice President for Research to draft data management plan templates that follow policies of different federal government agencies (e.g., NIH, NSF), and explore data repository tools. 3. Provide basic training and/or consultations on data management resources and tools (e.g., ICPSR, RedCap, R, Dedoose, Covidence); data management process documentation; quality control issues (e.g., file name conventions, file version control, and metadata); laws and regulations on copyright, licensing, data ownership, and legal and ethical concerns and restrictions.

### No, Bananas Don't Cure HIV, nor Will Garlic Cure COVID-19: Searching For, Assessing, and Consuming Health Information

Practice Area: Education

**Kathleen (Kat) Elizabeth Phillips** - Nursing & Allied Health Librarian, Penn State University Libraries / Life Sciences Library, University Park, Pennsylvania

**Background**: Librarians have long pioneered source evaluation as the first step to healthy civic learning. Traditionally, systematic source evaluation focuses on content, but twenty-first century source evaluation must begin reflectively, and begins when the researcher takes personal inventory on their emotions attached to the investigative topic. How does personal opinion or worldview impact information learners' search for, and use of information in today's revolving doors of information, where misinformation and disinformation have taken root and flourished? The IF I APPLY method is an updated approach to source evaluation, asking learners to address personal biases before evaluating a source.

**Description**: Health information is particularly susceptible to misinformation and disinformation, with potentially negative consequences. In teaching about source evaluation, what points are most important to drive home? How does an instructor separate a student from their own personal stances, and encouraging them, instead, to search for information beyond their own blinders? How easy is that for librarians to do in our own research and evaluation? Methods like the CRAAP Test are not viable options for instruction, as source evaluation must be dynamic, not rote. Evaluation instruction can evolve. Shorter sessions can focus on evaluating authority, purpose, and inclusion in any given resource, or into a longer learning exercises can focus on methods such as IF I APPLY where folks first truly investigate their own biases and how this is reflected in their research and source evaluation.

**Conclusion**: Source seeking, selection, and evaluation is no small task, and its instruction is in need of an updated approach. Encouraging learners to address personal bias, and bias within a source is one step in the direction away from misleading information, and towards reliable resources. Methods like IF I APPLY are a vital aspect of the source evaluation conversation. Incorporating new techniques in teaching opportunities positively impacts learners and provides them with tangible skills they employ in future information seeking endeavors. The IF I APPLY method has proven successful in courses in STEM and other fields across the United States and is an easy addition to any source evaluation conversation.

# Paging Dr. Grey: Implications for Embedding Grey Literature Instruction in Nursing Education

Practice Area: Education

**Kathleen (Kat) Elizabeth Phillips** - Nursing & Allied Health Librarian, Penn State University Libraries / Life Sciences Library, University Park, Pennsylvania

Stephen Woods - Social Science Librarian, Penn State University Libraries, University Park, Pennsylvania

**Andrew M. Dudash** - Librarian for Political Science, Policy Studies, and Government Information, Penn State University Libraries, University Park, Pennsylvania

**Background**: Librarians play a key role in the understanding, retrieval, and assessment of grey literature. This includes the incorporation of grey literature in evidence-based nursing, but grey literature understanding is not widely disseminated to learners, leaving research knowledge gaps. With a general increase in scholarly works, and in curriculum specific requirements of evidence-based research, such as systematic reviews, grey literature instruction is becoming more of a necessity than a side-thought. Librarians and educators have a unique opportunity to develop and incorporate grey literature instruction into nursing curricula, with specific focus on its definition, value, discoverability, evaluation, and synthesis.

**Description**: Grey literature instruction can be daunting for both the instructors and the learners, but if it is approached specific goals in mind, it becomes a manageable and constructive learning experience. The structured approach to grey literature instruction includes: Goal 1, Define: Understand what "grey literature" is & define specific types (conference proceedings, government documents, news, corporate organizations, theses and dissertations, and higher education). Goal 2, Value: Understand the difference between popular, potentially less credible, information and grey literature. What is the value of each type of grey literature — what is each's contribution? Goal 3, Discover: Understand where and how to look for grey literature, tying it into the research question, and this process's challenges. Goal 4, Evaluate: Understand how to assess each type of grey literature. Goals 5, Synthesize: Understand how to incorporate grey literature findings into evidence-based research.

**Conclusion**: Grey literature instruction has the potential to grow student and faculty knowledge bases. It will lead to stronger researchers capable of locating, analyzing, and absorbing this subset of resources into their spheres, enhancing the scholarly conversations. The limited literature about grey literature instruction, as well as current application in a graduate nursing curriculum, has shown it to be beneficial. While this session focuses on nursing education, grey literature instruction is not limited to this field. This approach is applicable to a broader medical and allied health education spectrum, as well as other STEM and Social Sciences fields.

## Peer Reviewing Systematic Review Searches: an Academic Library Adapts the PRESS Checklist

Practice Area: Information Services

Elaina Vitale - Research and Education Librarian, Dartmouth College, Hanover, New Hampshire

**Background**: A team of librarians at our academic medical library adapted the PRESS (Peer Review of Electronic Search Strategies) checklist and introduced a standardized method of librarian peer review into our systematic review process. While the PRESS checklist is daunting, our adaptations and documentation have made it seamless to incorporate into our process. Attendees will understand the rationale for implementing an additional step into the already lengthy systematic review process. Attendees will have access to our adapted PRESS checklist to implement in their own systematic review workflows, as well as examples of our documentation.

**Description**: Two years ago, our systematic review team at an academic medical library adapted the PRESS checklist, incorporating librarian peer review into our systematic review process as a step towards

improving the quality of our searches. Peer review adds a significant additional time burden to an already lengthy process, but has improved the quality and sensitivity of our searches since implementation. Since introducing peer review, our team has peer reviewed over 20 systematic review searches, many of which are in the publication stage currently. More than just quality control, the practice of peer reviewing our systematic review searches has made our team better searchers and has deepened our knowledge of subject and non-subject databases. In this presentation, we will share our process, show examples of our peer reviewed searches, and describe the added value of peer review for our researchers.

**Conclusion**: We are comparing published searches from researchers at our institution that use our librarian systematic review service to published searches from researchers at our institution which did not use our service in terms of: 1) search quality and 2) search sensitivity. An area of future study for our team is to retrospectively peer review published searches from our institution which did not use our service and compare our peer reviewed/updated search result to those which did not use our service. We anticipate retrieving more relevant results from our retrospectively peer reviewed searches. These results will demonstrate the value of our librarian peer review and allow us to continue peer reviewing search strategies for our systematic review service.

# Promoting Usage of Library E-Resources Among University Faculty: A User-Centric Approach to Information Literacy in a Developing Country Medical School

Practice Area: Information Services

**Grace A. Ajuwon, BA, MLS, PhD** - Acting Medical Librarian/Acting Director, E. Library College of Medicine, University of Ibadan, Ibadan, Nigeria

**Samuel A. Bello, Samuel Akande Bello, MLIS, MIT, BLIS.** - Certified Librarian, E. Latunde Odeku Medical Library/Outreach, Ibadan, Oyo, Nigeria

**Background**: Academic libraries are an integral part of the university and remains the hub for learning, teaching and research. Tools for accessing library resources have been remarkably transformed by the Internet. Availability of electronic resources ushered in new attitudes by the library users. The number of faculty that visit the library has reduced drastically, many rely on the internet for needed information, this, called for urgent action by librarians. The aim of this outreach user centric program was to sensitize and teach faculty how to search, and retrieve reliable up-to-date information from databases, Research4Life resources, digital archives, and institutional repositories.

**Description**: E. Latunde Odeku Medical Library, College of Medicine, University of Ibadan, is the oldest and the largest health sciences Library in Nigeria. It was established in 1966 and named after the first African neurosurgeon, Professor E. Latunde Odeku. The library provides biomedical literature resources in support of teaching, learning and research in the health sciences and related fields

**Intervention**: In 2014, the Library, designed an information literacy (IL) user centric program targeting faculty members. Training contents included information sources/resources, list of databases accessible through the Library, information searching tools, techniques, and citation and referencing using Mendeley reference manager. The training was conducted in the departments from 2014-2019; four librarians facilitated the training yearly in 26 Departments. Letters were written by the Library and sent to departments to schedule convenient date that the librarians can deliver the training. A questionnaire was administered to faculty to illicit demographic information as well as use of electronic resources. The program was evaluated using key informant interviews.

**Results**: A total of 350 faculty members were trained, 252 completed and returned the questionnaire. Two third (64.0%) were males, 54.0% were within the age of 30-35 years. Majority (88.4%) are aware of availability of electronic resources in the Library. Key informant interviews with 20 faculty revealed that literature searching skills, retrieval and use of e-resources - was enhanced by the training. Conclusion: The user centric program brought significant turnarounds for the Library. The program saw library and librarians as agents of change and partners in capacity development. Value of library was established; librarians earned more recognition. Also, awareness about resources in the Library and skill sets of librarians in support of teaching, research, and patient care was revealed to the faculty. It was observed that faculty contacted librarians more on phone, email while others visited the Library with questions.

#### **Providing EndNote Instruction through Interactive Tutorials**

Practice Area: Education

**Rachel H. Suppok** - Research and Instruction Librarian, Health Sciences Library System, University of Pittsburgh, Pittsburgh

**Background**: The author teaches classes on EndNote, a citation management software, multiple times per semester at a large university's health sciences library. However, even though the class is offered frequently, not everyone who is interested in the class is able to attend it. Therefore, the author created a series of interactive LibWizard tutorials designed to be used as either a replacement for or a supplement to the live classes, in order to provide instruction to a greater number of patrons.

**Description**: The author used LibWizard, a Springshare product, to create three interactive tutorials on using EndNote: "EndNote Part 1: Getting Started with EndNote 20," "EndNote Part 2: Obtaining Full-Text," and "EndNote Part 3: Cite While You Write." The author sought feedback and made revisions to the tutorials before publishing them on the library's citation management LibGuide. To promote these tutorials, the EndNote librarians send them to individuals who cannot attend the live classes, as well as to people who attend the classes but may want further guided practice. Usage reports in LibWizard show how many people complete the tutorials and if they answer the questions correctly. Each tutorial also has a certificate at the end that the user can save or print as proof of completion, which would allow instructors to make them a required part of a course.

Conclusions: Between September 1, 2021, and March 31, 2022, Part 1 was completed sixteen times; Part 2, nine times; and Part 3, eight times. Part 3 contained one quiz question that half of the users missed, which suggests that the question may need to be revised. Despite the fact that the identity of tutorial users remains anonymous if they do not elect to save the certificate of completion, the low usage numbers on the tutorials—particularly Parts 2 and 3—indicate that many of the students in courses in which the tutorials were encouraged or even assigned did not complete the tutorials. Future goals include increasing awareness and usage of all the tutorials. Despite relatively low uptake of the tutorials, they do seem to be a satisfactory supplement to the other citation management instruction and resources that the librarians provide.

### Race Card Wall Project: Reflecting on the Role of Race in Medical Education

Practice Area: Education

**Lauren E. Adkins, MLIS/AHIP** - College of Pharmacy Liaison Librarian, Health Science Center Libraries/University of Florida, Gainesville, Florida

**Jane Morgan-Daniel, AHIP** - Community Engagement and Health Literacy Librarian, University of Florida Health Science Center Libraries, Gainesville, Florida

Chloe Hough, AHIP - Reference Librarian, Tampa Bay Regional Campus Library, Florida

Mary E. Edwards, MLIS, EdD - Associate University Librarian, University of Florida, Health Science Center Libraries, Gainesville, Florida

**Nina Stoyan-Rosenzweig** - Archivist and Historian, Health Science Center Libraries/University of Florida, Gainesville, Florida

**Background**: Librarians from the University of Florida Health Sciences Libraries' Diversity, Equity, and Inclusion Team collaborated with the University of Florida's College of Medicine to host a Race Card Wall Project for the College's 2021 Celebration of Diversity Week. The global Race Card Project was created by journalist Michele Norris in 2010. The goal of the University of Florida Health Sciences Libraries' Race Card Project was to create an educational conversation around race in medical education and professional practice. Participants were asked to share their thoughts or experiences concerning race. Through sharing personal stories, individuals can listen and learn from each other's experiences while gaining a deeper understanding of societal challenges.

**Description**: The original goal of the project was to have a physical wall in the form of two whiteboards that displayed participants' Race Card submissions. Due to COVID-19, the team provided both an in person and virtual way to participate anonymously in the project. In person participants were given a physical card that prompted them to share their thoughts or experiences concerning race. An online survey was created so participants could participate virtually and sent out to all health science center students and advertised on the University of Florida Health Sciences Libraries' website. Online responses were added to the physical whiteboard display. All responses were screened for blatant offensive and divisive content. The whiteboards were placed in the College's education building from April 5th to April 9th. They were then moved to the health sciences library until the end of May 2021 for additional participation.

**Conclusion**: While COVID-19 limited the amount of in-person participation due to fewer people on campus, overall the project had a positive response and received 40 submissions, 20 of which were virtual. In their submissions, participants discussed how race has impacted their lives and motivated them in their academic and professional journeys. The response from participants and leadership was positive, with the College of Medicine suggesting that it would be useful to include this project in future Diversity Week events. The subteam has brainstormed ways to enhance and expand the activity. Through these types of collaborations, the Diversity, Equity, and Inclusion Team is able to build impactful relationships with community stakeholders and enhance awareness of the importance of having educational DEI conversations.

### Reflecting on Librarians' Needs: Renewing a Systematic Review Service

Practice Area: Innovation & Research Practice

**Jill Deaver** - Associate Professor / Library Liaison, Lister Hill Library of the Health Sciences / Clinical and Research Engagement, Birmingham, Alabama

**Emma C. O'Hagan, AHIP** - Clinical Services Librarian, Lister Hill Library at University Hospital, Birmingham, Alabama

**Rebecca Billings** - Assistant Professor / Library Liaison, Lister Hill Library of the Health Sciences / Clinical and Research Engagement, Birmingham, Alabama

**Background**: As demand for librarian expertise in systematic reviews has grown, Health Sciences Libraries have stepped up, developing special services to support researchers. The reference unit at UAB's Lister Hill Library launched their service in 2016 and more recently began to question whether this service was operating efficiently for users and librarians. Rather than focus on what systematic review service users want, we chose to first consider what the librarians running the service need. With this objective in mind we will conduct a needs assessment to identify needs of our librarian stakeholders and to reimagine our systematic review service.

**Description**: The purpose of a needs assessment is to identify gaps between the current state and the ideal scenario. In the pre-assessment phase, scope will be determined and existing data identified to determine what is already known. In the assessment phase, surveys will be distributed to UAB health sciences reference and liaison librarians to identify gaps in how the service operates. Finally, in the post-assessment phase, the identified needs will be reviewed for common themes which will then be scored by two librarians to identify the gaps which need attention first. Using the Plan-Do-Study-Act (PDSA) model, we will conduct a short quality improvement cycle and review the results before making changes and proceeding with a second PDSA cycle. This process will be repeated with incremental improvements made in each PDSA cycle until the librarian users are satisfied with the outcomes.

**Conclusion**: Survey data will be gathered from survey responses in order to identify commonly expressed needs which will then be scored based on factors like severity, feasibility, cost factors, and importance. Based on the results of this process, an intervention will be identified to improve the systematic review service and will be implemented and measured using the PDSA model. The success of the new interventions will be measured based on factors appropriate to the intervention but could include number of requests, number of completed reviews, number of librarian co-authored publications, training sessions for current staff, or competency measures for staff.

#### Reflections on Building a Medical Humanities Collection

Practice Area: Health Equity & Global Health

**Kathryn M. Houk, AHIP** - Undergraduate Medical Education Librarian, UNLV School of Medicine Library, Las Vegas, Nevada

**Background**: This presentation will describe the successes and challenges of advocating for and building a collection of physical titles to support the medical humanities in a mostly digital academic health sciences library. When opened in 2017, the University of Nevada, Las Vegas' School of Medicine Library contained no shelving for physical books, and collection development focused almost exclusively on textbooks and databases. Now there exists a small but yearly budget for the development of the health humanities collection, and widespread support within the library team.

**Description**: An interest in student wellness and holistic health led the librarian to promote medical humanities within the library and to the school of medicine (SOM). A large part of this awareness and advocacy work included the provision of physical books to read that were unrelated to coursework. Through a combination of proposals to library leadership, SOM student input, building alliances with other librarians and School of Medicine (SOM) faculty, and perseverance, a medical humanities and graphic medicine collection were created. Challenges included promotion of the collection, acquiring shelving, overcoming preconceived attitudes, gathering usage statistics, and keeping track of the books. Employee changes in both the [University] School of Medicine Library and the SOM, along with changing interests of the SOM students have led to greater interest and integration of the medical humanities collection into student life and curriculum.

Conclusion: Through advocacy, partnerships and perseverance, the medical humanities collection has

become an integral part of the [University]'s School of Medicine Library. The collection now has a yearly budget, a grant to expand and diversify titles has been secured, and new ways to promote the books and engage with our community are currently being planned.

### Reflections of our Vision Science Caucus Journey: The Road from SIG to Caucus

Practice Area: Professionalism & Leadership

**Dede Rios, AHIP** - Director of Optometric & Clinical Library Services, UIW Libraries / Rosenberg School of Optometry, San Antonio, Texas

Heather Edmonds - Director of Library Services, New England College of Optometry

Deborah Goss, MLS - Medical Librarian, Howe Library, Boston, Massachusetts

Caroline Allen - Librarian, C.S. O'Brien Eye Library, Iowa City

C. Brooke Caldwell, MA MSIS - Electronic Resources Librarian, Southern College of Optometry, Memphis

**Background**: When Medical Library Association (MLA) transformed the organization to be more supportive, inclusive, and accessible for all members, the opportunity for special interest groups (SIGs) to dissolve or transform into caucuses gave the Vision Science Librarians Special Interest Group (VS-SIG) a renewed purpose. We embarked on a journey to become a formal caucus as we believed the group could make valuable contributions to the mission and goals of MLA. Unlike other SIGs, the VS-SIG did not have fundamental organizational structures in place, and this made VS-SIG appear to be very insular. Reconnecting, renewing, and reflecting were drivers to our success!

**Description**: Throughout 2020 and 2021, VSC held multiple online meetings to determine how the group could transform into an MLA Caucus and increase participation within MLA. Communication via the listserv with weekly updates happened to keep members informed, and we offered members various opportunities to provide input along the strategic plan process. It was important to include members in the process as we wanted everyone's perspective and their voices to be represented in our strategic plan. VSC engaged more with MLA and participated in the MLA Open Forum Month. VSC scheduled their meeting to accommodate international participation, and librarians from Australia and India attended. VSC continues to grow and improve on the foundational structure to have a solid caucus that will provide its members with a place to grow, gain important professional insight and experience, and network.

**Conclusion**: The renewing of our commitment to MLA and the transformation from a SIG to a Caucus was a positive experience for us. Reflecting on our history, exploring how members view us, connecting to our larger entities, and contemplating where we'd like to be as a caucus in the future, helped members to reconnect. Our strategic plan process has enlightened our caucus by allowing all voices to be heard, all ideas to be incorporated, and is aligned with the larger MLA strategic plan. We feel empowered to create the future we want to see, and our members are engaged to work our plan. This has been a valuable lesson for us all!

# Renewed and Refreshed: Reflections on a Systematic Review Guide and Protocol Development Experience Using DMPTool

Practice Area: Innovation & Research Practice

**Lauren E. Robinson** - Medicine Liaison Librarian, University of Kentucky Medical Center Library, Lexington, Kentucky

**Stephanie M. Henderson** - Nursing Liaison Librarian, University of Kentucky Medical Center Library, Lexington, Kentucky

**Rebecca J. Morgan** - Health Sciences Librarian, University of Kentucky Medical Center Library, Lexington, Kentucky

**Background**: A systematic review guide can be a helpful tool for faculty and students who are undertaking these projects. Our guide contained useful information about the steps in the process, data management tools, database tutorials, and a consultation form. Two years post implementation, we saw a need to update our systematic review guide. In the new guide we wanted to highlight resources that our librarians had developed in support of systematic reviews including workshops and a protocol development tool.

**Description**: Our goal was to create a guide based on user orientated tasks. In our previous guide much of the main content was buried under steps in the systematic review process. We wanted to bring that content to the homepage and use action-oriented statements to steer users quickly to the needed information. Concurrently, we designed a novel approach to protocol developing using DMPTool. Using the PRISMA-P extension, we developed a DMPTool template that can be used as a teaching modality. DMPTool allows for hints, descriptions, and links to be embedded into the template. These features allow for students to explore the concepts of systematic reviews and ultimately produce a protocol. These protocols are both educational and productive since a PDF can be created and then submitted to registries.

**Conclusion**: The redesign of the guide and the launch of the DMPTool template allows for the librarians to provide an asynchronous learning experience, while saving time. The guide gave faculty members quick access to standard resources for conducting systematic reviews. These tools allow for more hands-on and productive meetings with students who are first encountering review methodologies.

# Reproducibility Is Not Rigor: Teaching Open Practices to Empower Researchers

Practice Area: Innovation & Research Practice

Hao Ye - Reproducibility Librarian, University of Florida, Academic Research Consulting & Services (ARCS)

**Background**: Over the last decade, there has been a substantial increase in interest in research reproducibility, including news coverage of the "Replication Crisis" in non-academic media, such as The Washington Post, The New York Times, and National Public Radio (NPR). Concerns about the reliability of medical research and pre-clinical studies, in particular, have resulted in new policy, such as NIH Rigor & Reproducibility guidelines on reporting research findings, sharing data and materials, and additional requirements when applying for research funding. However, research reproducibility is a multifaceted and multifarious concept, touching upon much more than whether research is "rigorous" and "reliable".

**Description**: A newly developed program within a health science library provides instruction in research reproducibility through the lens of empowering researchers. Rather than focus on policies from funding agencies and institutions, instructional sessions introduce skills that are both beneficial to the researchers, and which represent or lead to best practices in open scholarship and reproducibility. Examples of topics include: organizing data in spreadsheets, version control with GitHub, writing reproducible reports using RMarkdown, data cleaning with OpenRefine, and more. Instruction draws on pedagogical principles from The Carpentries to "meet learners where they are at": giving examples of real problems that researchers face and that the new skill addresses, demonstrations of performing simple tasks with the new tool or

method, and a set of curated resources providing pathways for further self-learning or reference.

**Conclusion**: From the perspective of the author, the instructional sessions seem well-received, with positive comments from attendees, and signups for other sessions in the same umbrella program from attendees who initially registered for and attended one session of interest. Other evidence of program effectiveness comes from a guest session taught at an NIH Data Science Hackathon. After instruction, the organizing host reported an increase in activity on shared GitHub repositories, suggesting attendees were successfully converting learning into practice. Finally, to meet learner needs, video recordings of the sessions are provided to all registered attendees (regardless of actual attendance), and all instructional content is publicly available on individual workshop websites, linked from a common libguide, to function as an accessible resource.

### Scholarly Snippets Sessions: A Collaborative Research Series Among Six College of Osteopathic Medicine Libraries

Practice Area: Education

Joanne M. Muellenbach, AHIP - Director, California Health Sciences University, Clovis, California

Molly Montgomery - Director of Library Services, ICOM Library, Meridian, Idaho

Abbey Griffith, MLS - Medical Library/Library Manager, D'Angelo Library, Kansas City, Missouri

**Meghan Di Rito, MLIS** - Education and Outreach Librarian, Philadelphia College of Osteopathic Medicine, Georgia Campus, Suwanee, Georgia

**Lisa A. Ennis, MA, MS, MPH** - Library Director / Professor of Information Sciences, Alabama College of Osteopathic Medicine, Dothan, Alabama

**Kyle D. Robinson, MLIS** - Electronic and Technical Services Librarian, California Health Science University, Coarsegold, California

Katie Hoskins, AHIP - Research and Instruction Librarian, California Health Sciences University, CLOVIS, California

**Kelli Hines, AHIP** - Scholarly Communications Librarian, Western University of Health Sciences, Harriet K. & Philip Pumerantz Library, Pomona, California

**Background**: In spring 2020, leaders at the American Association of Colleges of Osteopathic Medicine (AACOM) expressed the critical need for AACOM to enhance its research footprint. In response, six College of Osteopathic Medicine (COM) libraries worked together to create the Scholarly Snippets webinar series as a means of improving the research skills of our faculty, staff, and students. Collaborating with librarians from other COMs allows us to offer a broader range of research-focused topics than would be possible on our own and increases the value and visibility of COM libraries overall.

**Description**: The six collaborating COM libraries created the Scholarly Snippets research series to meet the needs of developing researchers and promoted it to their faculty, staff, and students. The series consists of 30-minute live Zoom webinars scheduled to be convenient for multiple time zones, and the webinars are recorded and archived for future viewing on the Scholarly Snippets LibGuide, as well as on our respective library guides. The initial Spring 2021 series consisted of eight webinar topics: Cochrane Library, copyright, finding reusable images, LibKey Nomad, open access, predatory journals, PubMed, and systematic reviews. In Fall 2021, we delivered nine more webinar topics, and another 13 webinar topics will be offered between

January and June 2022.

**Conclusion**: The Scholarly Snippets collaboration has been a great success. It has opened new possibilities for librarians from a variety of COM institutions to collaborate and teach new scholarly topics. The webinars have also helped us become more familiar with our partnering libraries' institutions and their key initiatives. Inviting the AACOM COOL members and extending the webinar invitation to all AACOM faculty, staff, and students expanded our participant pool and resulted in excellent public relations. In the future, we hope to adapt session topics for course-integrated instruction and offer research "snippets" at committee and departmental meetings. We also hope to conduct pre/post assessments to identify the impact that this research webinar series had on faculty, staff, and student participants.

# Subject and Data Librarians Collaborating to Reach the School of Medicine About the 2023 NIH Policy for Data Management and Sharing

Practice Area: Information Services

**Stacey E. Wahl, PHD, AHIP** - Research and Education Librarian- Basic Sciences, Health Sciences Library/Research and Education, Richmond, Virginia

**John W. Cyrus, MA, MLIS** - Research and Education Librarian, VCU Health Sciences Library, Richmond, Virginia

Nina Exner - Research data librarian, Virginia Commonwealth University Libraries, Richmond, Virginia

**Background**: NIH grant data sharing expectations are changing with the arrival of a new Final NIH Policy for Data Management (NIH DMS) in January 2023. This change demands awareness-building support from both data management and subject liaison librarians. The new NIH DMS policy includes several issues designed to promote "culture change" in data and reproducibility behaviors by faculty. To make faculty aware and start supporting this culture change, we have started an awareness and training partnership. We will report on this partnership between our research data librarian, medical librarian, and basic sciences librarian.

**Description**: Building on our existing strategic coordination of our liaison services this is a focused outreach program. While the libraries will attempt to reach all NIH-funded stakeholders to talk about NIH DMS policy, departments in the School of Medicine (SOM) need special attention because of their wide variety, reliance on the NIH as a major source of funding, and particular researcher pressures. We organized our outreach program into the following phases: analysis of NIH DMS policy by research data librarian, engagement with university-wide research deans, creation of brief educational materials and learning objects, targeted outreach to key programs and personnel, broad outreach to the SOM research community through programming and instruction.

**Conclusion**: Our program measures at this time include counts of outreach invitations, training sessions held, and range of stakeholders we have reached. We have specific strategic targets that we count as particular successes, such as invitations by the associate dean of research and other research leaders in the SOM. We will share our successes and challenges so far, so that session attendees will come away with ideas for how to raise awareness of the NIH Data Sharing Policy to both clinical and basic science units in their own schools of medicine.

## **Supporting First-Generation Graduate Students in an Academic Health Sciences Library Setting**

Practice Area: Education

**Carly Schanock** - Education and Information Services librarian, Boston University Alumni Medical Library, Boston. Massachusetts

Kate Flewelling, AHIP - Director, Alumni Medical Library, Boston University

**Background**: First-generation ("first-gen") college and graduate students face a number of obstacles to academic success and a sense of belonging on campus. As a center of campus life and a key academic support service, academic health sciences libraries can be key partners in supporting these students. This program will identify ways library staff can guide and mentor first-gen students. The primary objective is for library staff to personally communicate with students throughout the semester to provide them with academic support and share library resources. Another objective is to create campus partnerships to amplify library presence and support in existing first-gen students.

**Description**: In Fall 2021, the main campus library asked our library to participate in a "personal librarian" and mentorship program for first-gen students. A welcome session introduced first-gen students to both the new center for first-generation students and the mentorship program. A health science librarian introduced themselves and the library at this session. Later, they were assigned students based on the health sciences campus. A template provided to the librarian was tailored to the needs of the students, and the first letter was sent. Five letters, introducing the librarian and highlighting different library resources will be sent out this and next semester. The library volunteered to do a special orientation for these students. The library director, a former first-gen graduate student, participated in the pilot program. Library staff also completed training to be listed in a university-wide directory of first-gen allies.

**Conclusion**: As of October 2021, these programs are in progress. Both process objectives have been met. Long-term goals are to ensure first-generation students have the same sense of personal and academic achievement that their continuing-generation peers have in their first year of graduate education. Evaluation done by partner programs will measure that. Additional evaluation will assess how additional library support and mentorship affects students' sense of belonging and academic achievement.

### Synergism at Its Best: An Online Evidence-Based Practice Course for Clinicians in the US & Armenia

Practice Area: Health Equity & Global Health

**Lynn Kysh, MLIS, MPP** - Clinical & Research Librarian, Children's Hospital Los Angeles, Los Angeles, California

Mindy Lee, BA - Senior Service Designer, Innovation Studio

**Background**: Providing high quality continuing education is a global dilemma and evidence supports collaborative efforts between high- and middle-income countries. By creating a network between an American pediatric hospital and the Republic of Amernia Ministry of Health, we are working to improve pediatric healthcare outcomes through education and data. We created an online interactive evidence-based practice (EBP) course aimed at primary care and pediatric clinicians to meet international standards and overcome the barrier of location among rural clinicians. While our primary goal was to support and educate Armenian clinicians, we see the benefit of providing the same course to American audiences.

**Description**: Through a collaboration with a medical librarian and course designers, we developed and tested an English online interactive EBP course based on the framework of ask, acquire, appraise, apply, and assess. We partnered with the Armenian Pediatrics Association to ensure content was tailored to the Armenian context, including open access resources and databases available in Armenian or Russian. Scripted audio was recorded, and designers created motion graphic videos to accompany and demonstrate core concepts, each of which were accompanied with forums, activities, additional reading, and quizzes. We invited clinicians with education or EBP expertise to test the site (n=4) and incorporated their feedback. The course was then translated into Armenian through a partnership with the Armenian Eyecare Project and will undergo a similar user testing process through the Armenian Pediatrics Association.

**Conclusion**: We will collect data about participants who enroll in the course including their location, clinical role, device used, and fluency level of languages they speak. We will collect data while they interact with the course including modules and activities they complete, how long they spend in each module, and their performance on assessment pieces including pre/post quizzes. Additionally, we will collect participant feedback through an anonymous online survey and may solicit learners who complete the course to participate in semi-structured interviews to gather additional qualitative data.

## Synthesizing Services: Sharing and Comparing Systematic Review and Evidence Synthesis Services in Academic Libraries

Practice Area: Information Services

**C. Cozette Comer** - Evidence Synthesis Coordinator, Research Collaboration and Engagement at the University Libraries at Virginia Tech, Blacksburg, Virginia

**Jenessa M. McElfresh, AHIP** - Systematic Review Service Coordinator / Senior RLS Librarian / Associate Professor, UTHSC Health Sciences Library / Research & Learning Services, Memphis, Tennessee

**Emily Brennan, MLIS** - Research and Education Informationist, Medical University of South Carolina Library, Charleston, South Carolina

**Michelle Demetres** - Scholarly Communications Librarian; Systematic Review Service Coordinator, Samuel J. Wood Library, Weill Cornell Medicine, New York, New York

**Anna Liss Jacobsen, MA, MLS** - Medicine & Research Services Librarian, University of Washington, Health Sciences Library

**Teresa E. Jewell, AHIP** - Senior Assistant Librarian, Team Science & Research Services, University of Washington Health Sciences Library, Seattle, Washington

**Patti McCall, MA, MLS** - Systematic Review Librarian, University of Florida, Academic Research Consulting & Services (ARCS), Gainesville, Florida

**Laura Wright** - Research Support Librarian- Systematic Reviews, Rudolph Matas Library of the Health Sciences, Tulane University, New Orleans, Louisiana

**Background**: This session seeks to compare the processes of developing and maintaining systematic review and evidence synthesis services in health sciences and academic libraries. The session will explore the similarities and differences among service models, documentation, staffing, and growth through the pre-recorded experiences of the librarians who coordinate these services. The session will include discussion of the creation of an open online repository of systematic review and evidence synthesis service narratives and

supporting documents, as well as a summary of themes across narratives.

**Description**: Systematic Review and Evidence Synthesis services help support the needs of researchers in complying with guidelines, conducting searches, and completing the robust documentation necessary for these reviews. The process of developing and implementing these library services can vary based on the needs and resources of the institution, and thus there is no prescriptive path to success for a fledgling systematic review or evidence synthesis service. This session presents themes related to the development, implementation, and revision of these services from interviews with multiple coordinators and service providers conducted prior to the conference. The session also includes rationale and overview of a multi-institutional online open repository for service documentation (e.g., policies, forms, patron agreements) and audience Q&A.

**Conclusion**: The success and impact of systematic review and evidence synthesis services can be measured in many ways, including the number of users assisted, number of completed reviews, number of published reviews, and even in the successful launch of the service itself. Recorded narratives of librarians who work with systematic review and evidence synthesis services at their institutions will share how they identify and evaluate the outcomes identified to measure the success of their services. Session attendees will become familiar with approaches to developing these types of services, assessment techniques, and how outcomes can enhance the services at their institutions, in addition to access to the online repository of systematic review and evidence synthesis documentation.

## Tracking Professional Growth: Developing a Digital Professional Portfolio Training

Practice Area: Professionalism & Leadership

Rachel Whitney, AHIP - Research & Education Informationist, MUSC Libraries, Charleston, South Carolina

**Background**: Creating a professional portfolio is important for promotion, tenure, annual evaluation, and professional certification. As an early career health sciences librarian, I was advised to track my accomplishments as they happened to make applying for a promotion easier in the future. After successfully creating and utilizing a digital professional portfolio of my own, other librarians asked me to teach them how to develop digital portfolios. An in-service program was created that would provide training, support, and a template for both new and experienced library faculty.

**Description**: After investigating options for an electronic method of organizing and tracking my professional accomplishments, I chose Microsoft OneNote for its user-friendly interface, level of customization available, and integration with existing Microsoft programs. In 2021, the library hired several first-time faculty members who were not familiar with the need to create a professional portfolio. It was decided that the first in-service training session would be offered to this group. The training, which would provide an explanation of the portfolio and potential uses, was scheduled. This session also included a hands-on demonstration of both an active portfolio and the blank template. Future sessions have been scheduled to provide the in-service training and template to remaining library faculty. The blank template has also been shared with faculty outside of the institution – but no external training has been provided at this point.

**Conclusion**: The digital portfolio in OneNote was successfully used for the self-assessment portion of my annual evaluation, applying for AHIP, and achieving two MLA specializations. While the program is still ongoing, comments regarding increased organization and effectiveness have been received and have been overwhelmingly positive. Outcomes that I am expecting to measure include: whether the digital portfolio helped with tracking professional accomplishments, if the portfolio was used to apply for any certifications or specializations, if it was helpful when completing an annual evaluation, and if other uses have been

discovered for the portfolio. These outcomes will be measured by an anonymous survey distributed to inservice attendees who have also received the blank template.

#### **Turning Feedback into Action**

Practice Area: Professionalism & Leadership

**Dana Haugh** - Web Services Librarian and Coordinator of Marketing and Communication, Cushing/Whitney Medical Library, Yale, New Haven, Connecticut

**Caitlin Meyer, MLIS** - Research and Education Librarian, Cushing/Whitney Medical Library at Yale, New Haven, Connecticut

**Background**: Library staff completed two surveys to assess workplace satisfaction. The first survey was administered as part of the university-wide satisfaction assessment and took place in 2019. The second survey was administered to library staff only in October 2020, and focused on staff satisfaction during the extraordinary circumstances of COVID-19. The Workplace Satisfaction Survey Action Planning Team was formed to assess results from both surveys, identify areas for improvement, and develop recommendations for moving forward.

**Description**: The Workplace Satisfaction Survey Action Planning Team reviewed both survey results and comments and then conducted listening sessions and collected email responses for additional feedback. This feedback helped the Team understand why some areas scored poorly and identify other topics not covered by the surveys that could pose challenges to becoming a better workplace. The Team then compiled a Workplace Satisfaction Report which organized the feedback from focus groups, interviews and emails. The feedback was sorted into six categories and each category included an executive summary, common themes, selected comments that elucidated each theme, and a list of recommendations for remediation.

**Conclusion**: The final document was emailed to all library staff and discussed during an all staff meeting. Library leadership categorized the document's recommendations into three areas: library-specific, system/university-level, and needs more discussion. Recommendations and policy changes that could be implemented locally helped inform the library's 2021 action plan for improving the workplace. Recommendations for improving the library system or university are being brought to senior library and university leadership to raise awareness of the issues. Recommendations that needed further discussion have been covered at subsequent staff meetings to determine appropriate steps to remediation.

# Updating the NAHRS Nursing Essential Resources List: Utilizing Expert Knowledge and Peer Review Processes to Create a Reproducible Resource and Workflow

Practice Area: Information Management

Rebecca Raszewski, AHIP - Associate Professor, University of Illinois at Chicago, Chicago, Illinois

**Rachel Keiko Stark, AHIP** - Health Sciences Librarian, California State University, Sacramento Library, Research and Instruction, Sacramento, California

**Rachel C. Lerner, MSLS, AHIP** - Reference & Instruction Librarian, Edward & Barbara Netter Library / Quinnipiac University, Hamden, Connecticut

Karen Alcorn - Reference and Instruction Librarian, Library and Learning Resources, MCPHS University

Carolyn Ching C. Dennison, AHIP - Librarian, University of Hawaii at Manoa Library

**Alissa Fial** - Head, Research & Instructional Services, Associate Librarian, Raynor Memorial Libraries Marquette University, Milwaukee, Wisconsin

**Diane Kearney, AHIP** - Lead Medical Librarian, Northern Virginia Community College, Medical Education Campus Library, Springfield, Virginia

**Sarah Wade, MLS, AHIP** - Assistant Medical Librarian, Campbell University School of Osteopathic Medicine, Lillington, North Carolina

**Background:** The Interagency Council on Information Resources in Nursing (ICIRN) Essential Resources list has been through many iterations, from its initial publication in 1966 to its last published edition in 2012 (26th). An MLA NAHRS caucus subgroup, making the decision to continue where the dissolved ICIRN left off, aims to reimagine the list. This update includes designing a new online interface, and creating a reproducible peer review rubric for new materials. Volunteers for the NAHRS Nursing Essential Resources List (NNERL) were recruited from NAHRS and have been working on the project since fall of 2020.

**Description:** The goal of the NNERL working group is to create a nursing resource list that is available to a wide audience, represents current materials and formats, and utilizes a process that is transparent and reproducible. To that end, the NNERL group has focused not only on updating the list, but also creating procedures that will ensure that future versions of the NNERL will continue to be comprehensive and meet established criteria. The NNERL group has three areas of concentration: format and accessibility of the NNERL, evaluation of current and prospective list items, and item-level meta-data creation to ensure that resources are easily findable.

**Conclusion:** The NNERL group has completed a multi-stage review of all current NNERL resources. Each item was first reviewed for timeliness/availability. Next, a subgroup created a rubric to assist with impartial evaluation. Using the rubric, each current item was reviewed by at least two librarians. This will be repeated for new resources. An additional subgroup reviewed the list's original areas of interest list and created/updated meta-data tags, generating peer reviewed scope notes based on MeSH and CINAHL subject headings. A draft of the NNERL is expected to be completed in the coming months.

### We're Virtually There: Providing Health Sciences Education and Wellness Through Virtual Reality Experiences

Practice Area: Education

Gail Kouame - Director, Charles M. Baugh Biomedical Library, Mobile, Alabama

**Jennifer Davis, MA, MLIS** - Scholarship and Data Librarian, Robert B. Greenblatt, M. D. Library/Augusta University, Grovetown, Georgia

Lachelle Smith, M.Ed., MSLIS - Instructor Librarian, Greenblatt Library, Augusta, Georgia

**Background**: The purpose of the two projects described in this presentation are to: 1) Host a shared virtual reality space at a health sciences library for use by students, faculty and staff. 2) Increase access to new and existing virtual reality learning experiences to facilitate highly experiential education in the health and information sciences. 3) Familiarize health sciences students with ethical research data management best

practices through the use of a virtual reality-based escape room. 4) Promote wellness and relaxation through the use of immersive virtual reality experiences.

**Description**: Faculty librarians at a health sciences library designed two innovative approaches for incorporating virtual reality (VR) experiences in health sciences education. The first project involves using VR to develop an escape room that introduces players to research data management principles and best practices. The second project incorporates curriculum-based VR experiences developed for the university's undergraduate medical students and makes them available through a public space in the health sciences library. The library is centrally located on campus and is open extended hours, allowing for increased access to the VR experiences. Additionally, because burnout and stress are common in the health sciences, relaxation experiences are also available for use. Both projects included partnerships with the university's School of Computer and Cyber Sciences. One project also included a collaboration XXX State University's Department of Software Engineering and Game Design and Development.

**Conclusion**: All modules of the escape room are available for use on a regular computer, and one complete module has been deployed via virtual reality, with plans to develop the remaining modules. The game was well-received and received positive feedback from students who piloted it. The equipment for the virtual reality space in the library is on site, and the space is almost ready to open. Students benefit from and enjoy engaging with highly experiential learning using virtual reality. VR can be leveraged to teach concepts such as data management principles as well as empathy for patients with chronic conditions. Implementing VR takes time and dedication from members of a multidisciplinary team, but it is worth the investment.

## We're All in This Together...So Seamless Access Is a Thing, And the Browser is Changing, What Do I Need to Do or Know?

Practice Area: Information Management

**Linda Van Keuren, AHIP** - Assistant Dean for Resources and Access Management, Dahlgren Memorial Library, Georgetown Univ. Med. Ctr., Washington, District of Columbia

**Michelle Volesko Brewer** - Market Intelligence Manager, Wolters Kluwer, Learning Research & Practice, New York, New York

**Background**: This practical session features speakers who have decades of experience in librarianship and publishing and the provision of access to scholarly information . The presentation is grounded in creating and implementing practical solutions to library access issues.

**Description**: This session will provide background on recent developments impacting authentication such as SeamlessAccess.org and planned privacy changes to browsers. How both publishers and librarians are navigating this changing landscape will be discussed, particularly as it relates to transitioning to a federated authentication model for access to resources. Real world examples and suggestions for talking points for further conversations between publishers, libraries, IT departments and other stakeholders will be shared.

**Conclusion**: With browser vendors making changes that may impact IP based authentication, informed knowledge of alternatives such as federated authentication positions both librarians and publishers to make informed decisions about future access to library resources. This presentation aims to provide a starting-point for librarians and publishers to have meaningful discussions about federated authentication and access, privacy and security.

### LIGHTNING TALK: RESEARCH ABSTRACTS

Papers in this section are sorted by title in alphabetical order.

# An Analysis of Health and Science Library and Information Science Courses and Faculty Experience at ALA-Accredited Programs Across the United States

Practice Area: Professionalism & Leadership

Catherine Staley - Training Specialist, National Library of Medicine/Office of Engagement and Training

**Nalini Corcy, MHA** - Senior Public Health Specialist, National Library of Medicine/Office of Engagement and Training

**Eden A. Kinzel, BSc, MLIS** - Public Services Librarian, Health Sciences Library at Memorial University of Newfoundland, BETHESDA, Newfoundland and Labrador, Canada

**Objectives**: This talk will highlight findings of a data collection and analysis project designed by the Office of Engagement and Training of the National Library of Medicine (NLM) to identify opportunities for collaboration between US ALA-accredited LIS programs and health sciences or medical libraries. It will also briefly introduce ideas for outreach to and engagement with these programs.

**Methods**: The project included an inventory of all LIS program offerings (i.e., courses, certificates, and joint programs) with health or science (H/S) content at 54 ALA-accredited programs and all LIS faculty members with H/S experience (e.g., relevant education, instruction, research, funding, or professional memberships). Data were collected from a variety of sources, including course catalogs, program websites, class schedules, faculty directories, faculty CVs, faculty webpages, publication databases, Google searches, and the Association for Library and Information Science Education (ALISE) 2018 data. Additionally, the project also included an analysis of ALISE 2018 demographic data relating to the racial/ethnic diversity of students attending each program.

**Results**: Across all 54 ALA-accredited programs, 4% of LIS courses included H/S content and 43% of faculty had H/S experience with most having three or more experiences. The most common H/S courses were health librarianship and health informatics. Thirteen institutions offered H/S-relevant LIS certificates and nine offered H/S-relevant joint LIS programs. Seven institutions had a significant proportion of students across three or more racial/ethnic groups.

**Conclusions**: The low proportion of H/S LIS program offerings (4%) compared to the high proportion of LIS faculty members with H/S experience (43%) suggests the need and potential for efforts strengthening H/S LIS offerings and more opportunities for diverse LIS students interested in health sciences librarianship. Recommendations for outreach and engagement will be discussed. This work was carried out by staff of the National Library of Medicine (NLM), National Institutes of Health, with support from NLM.

### Badging as Incentive to Complete Library Modules in the Curriculum: A Case Study

Practice Area: Education

Darell Schmick, MLS, MBA, AHIP - Director of Library Services, Noorda-COM Library, Provo, Utah

Alice Akunyili, MD - Assistant Dean, Academic Affairs, Noorda-COM Library, Provo, Utah

Steven Embley, DO - Department Chair of Clinical Science, Clinical Affairs, Provo, Utah

**Objectives**: Increase participation and completion of the library scavenger hunt, which was a practical learning module within a first semester medical school course that challenged students to engage with the library content and resources.

**Methods**: A scavenger hunt was incorporated into a first semester medical student course to meet the learning objectives of demonstrated competence in library navigation and searching, article retrieval, bibliometric support tools and Interlibrary Loan basics. Students were given access to content and provided instructions. They were then allowed to progress through the content and the scavenger hunt at their own pace. They were required to submit their completed scavenger hunt to the library. In order to increase the rate of response, a badge was created and awarded to everyone that had completed the scavenger hunt with their final submission. This badge offered no other academic benefit beyond a printable certificate, bragging rights and recognition on an open access badging platform. Neither the total number nor which students earned the badge was known to any of the students at the time.

**Results**: While all the students completed the content, initially submission on their work on the scavenger hunt was lagging. After we created the badge and offered them recognition for their work, 63 of 90 students, over 2/3rds of the class, submitted their work for badge credit.

**Conclusions**: There are many skills related to library sciences that students often do not realize are important to acquire until they need them. In addition to formally integrating these elements into the curriculum, recognizing students who can demonstrate practical application of these skills is not only an important component of competence-based education, our experience demonstrates it is also motivating for students.

### Bibliometric Analysis as a Method to Justify Library Personnel

Practice Area: Professionalism & Leadership

**Jamie Saragossi** - Interim Associate Dean of Collection Strategy and Management, Health Sciences Library, Stony Brook, New York

**Objectives**: The objective of this project is to use a bibliometric analysis to quantify faculty output to assist in the justification of a new library faculty line to support systematic review and evidence synthesis activities at the university.

**Methods**: Evidence syntheses such as scoping reviews, systematic reviews, and meta-analyses have been of increased interest across disciplines as a research methodology. Therefore, the analysis for systematic review support justification will span across several databases including; PubMed, PsychInfo, Web of Science, and CINAHL. A systematic search will be run in each of these databases using the author's institutional affiliation, and a selection of keywords and controlled vocabulary terms to represent the

evidence synthesis review methodology. The results will be analyzed to show trends in authorship for these various types of evidence syntheses over time.

**Results**: There has been a consistent increase in the output of evidence syntheses at Stony Brook University over time. The number has doubled since 2014. Based on first quarter publications for 2022 it can be inferred that we will double last year's output. Additionally, from 2015-2021 the output has increased by 75% while library personnel has remained consistent at 5 full-time health sciences librarians.

**Conclusions**: These data can be useful when explaining the importance of systematic review support to both internal and external stakeholders. While institutions are hiring sparingly having data to support new faculty requests are essential. Additional investigation is warranted to analyze subject headings and specialties to target outreach and garner support for additional library services.

# The Case of the Disappearing Librarians: Analyzing Documentation of Librarians' Contributions to Systematic Reviews

Practice Area: Information Services

**Amelia Brunskill** - Assistant Professor & Information Services and Liaison Librarian, University of Illinois Chicago, Library of the Health Sciences, Chicago, Illinois

**Rosie Hanneke, AHIP** - Associate Professor & Head, Information Services and Research, Library of the Health Sciences, University of Illinois Chicago, Chicago, Illinois

**Objectives**: The study aimed to analyze the documented role of a librarian in published systematic reviews and meta-analyses whose protocols mentioned librarian involvement. The intention was to identify how, or if, librarians' work was formally documented, how their contributions were described, and how other metrics correlated with this documentation.

**Methods**: Publications with PROSPERO protocols registered in 2017 and 2018 that specifically mentioned a librarian were reviewed. These publications were analyzed for documentation of the librarian's work, including authorship status, mentions in the body of the paper, or mentions in the acknowledgements. Language used to describe the librarian and their work was gathered and coded in terms of what type of work was described and how it was described. Additional information collected included the title of the journal, number of authors on the paper, mentions of systematic review software, and details of the search strategy.

**Results**: The majority of the reviews, 78%, mentioned the contributions of a librarian within the body of the paper, 44% named a librarian in the acknowledgements section, and 28% listed a librarian as an author. In 31% no librarian was mentioned by name, and in 9% no reference to a librarian was found at all. Language about librarians' contributions usually only specified work with search strategy development, and did not mention other contributions. Publications with librarian co-authors typically described the work of the librarian in active voice that centered the librarian, while publications without a librarian co-author usually did not.

**Conclusions**: Even among this set of reviews, where librarian involvement was specified at the protocol level, librarians' contributions were often described with minimal, or even no, language in the final publication.

### An Exploration of Wikipedia's Utility as Consumer Health Information

Practice Area: Education

Denise A. Smith - Librarian III, Health Sciences Llbrary, McMaster University, Hamilton, Ontario, Canada

**Objectives**: Wikipedia has been situated and is well established as a valuable resource for the general layperson wishing to learn more about their health or the health of a loved one. This research, grounded in LIS theory, explores the role of Wikipedia in consumer health information behaviour (CHIB).

**Methods**: Drawing on current health information behaviour models and relevant theoretical frameworks in LIS, the author frames Wikipedia as an under explored consumer health information resource. This mixed-methods qualitative study utilized demographic surveys and one-on-one interviews to investigate the role of Wikipedia in consumer health information behaviour: namely whether its use by consumers i influenced by information need, socio-economic status, educational background and more.

**Results**: The data collection phase (survey and interviews) is now complete and early analysis of data has identified some key patterns worth noting: namely that education and Wikipedia use are not necessarily correlated, but how or why one engages with Wikipedia's health content is related to educational background. Wikipedia has been found to influence a patient's ability to engage in constructive dialogue with their clinician. Additionally early results will be shared during this lightning talk.

**Conclusions**: At this time, the author can only conclude that Wikipedia is an under explored resource in our understanding of consumer health information. Further, this is the first study to explicitly focus on WIkipedia's users and investigate their use of this resource through an LIS lens. Once results of this study have been finalized and published, more research will be necessary to develop a richer body of knowledge on this topic.

## Information Needs and Practices of Student Health Clinic and Counseling Personnel

Practice Area: Clinical Support

Meghan Wanucha Smith - Health & Human Services Librarian, Randall Library, Wilmington, North Carolina

**Objectives**: Colleges and universities play a critical role in testing, surveillance, and vaccination distribution during the global pandemic. Student health center and mental health practitioners on the front lines provide care to students, coordinate management of psychological crises, and promote healthy behaviors related to COVID-19 and beyond. Academic libraries have partnered with these units to promote student health and wellbeing. But what about the information needs of the clinicians? This lightning talk will explore existing literature on the information needs and practices of student health center and other clinic personnel, align library services with those needs, and identify areas for development.

**Methods**: This study used narrative review methods to discover research in libraries, higher education, student health, and mental health support services on college and university campuses. PubMed, Web of Science, ERIC via ProQuest, APA PsycInfo, Library and Information Science Abstracts, and Google Scholar were searched for articles relevant to the research questions. Reference lists and individual journals in the library and information science, counseling, and student health clinic fields were reviewed for additional material. In particular, this research focused on higher education institutions without medical schools or other clinical affiliations.

**Results**: Literature on the information seeking behaviors of higher education health clinic personnel is scarce. Campus health and mental health services literature describes perceptions and attitudes towards evidence-based practices and barriers to their implementation. Little research was found describing how these personnel consult the literature and what resources and services support those efforts. Library literature focuses on case studies about student health and well-being events and activities. Discussions about how libraries can collaborate with campus health and counseling centers are limited to services that address student health promotion and health literacy.

**Conclusions**: Additional research is needed to understand the information and EBP habits of clinicians practicing in the college and university clinic setting. Existing collaborations between libraries and campus health clinics help advance shared goals around student health and wellness. Libraries are well positioned to take these partnerships to the next level by working directly with student health clinical and counseling staff to mitigate barriers to EBP in their daily work. Understanding how campus clinicians consult evidence in their daily work can inform how libraries approach partnerships and direct service offerings to this unique subset of users in the academic environment.

## The NURSLITT Study: Nurses' Understanding Regarding Search Limits Informing Their Topics

Practice Area: Information Services

**Eleanor Truex** - Medical Librarian, Chicago Metro Region for AMITA Health, AMITA Saint Joseph Hospital, Chicago, Illinois

**Susan C. Vonderheid, PhD, RN** - Clinical Assistant Professor, UIC; Director Nursing Research, UIH, College of Nursing, University of Illinois Chicago (UIC); University of Illinois Hospital (UIH), Chicago, Illinois

**Emily N. Spinner, MSIS, MA** - Research Innovator and Informationist, Ellis Medical Library, Schenectady, New York

**Sarah Wade, MLS, AHIP** - Assistant Medical Librarian, Campbell University School of Osteopathic Medicine, Lillington, North Carolina

**Jean Hillyer, MAE, MLS, AHIP** - Assistant Director, Learning Resource Center retired, Baylor University, School of Nursing, Double Oak, Texas

Courtney Calhoun, DNP, RN-BC, CNE, CHSE - Nursing Instructor, Nursing, Bailey, North Carolina

Grace Wolf, MLS - Instruction and Outreach Librarian, Central Carolina Community College, North Carolina

**A'Llyn Ettien, MLIS, AHIP** - Collections Management Librarian, BU Alumni Medical Library, Boston, Massachusetts

Rebecca Hedreen, MLIS, MAEd, MSBio - Librarian, Research & Instruction, New Haven, Connecticut

**Layla Heimlich, MILS** - Medical Librarian, William B. Glew, MD, Health Sciences Library, MedStar Washington Hospital Center, Bethesda, Maryland

**Annie Nickum, BSN MLIS AHIP** - Assistant Professor & Information Services Librarian, Library of the Health Sciences, University of Illinois Chicago, Chicago, Illinois

**Objectives**: To explore the use of common stringent literature search criteria (i.e. the 5 year rule; nurse as author, and primary study) applied by nursing students and nurses, and their subsequent attitudes toward and engagement in evidence-based practice and research from the perspectives of medical librarians, direct care nurses, nursing faculty, and student nurses.

**Methods**: Our design is a qualitative descriptive study using online focus group interviews of the four target populations. We conducted a minimum of 3 focus groups per target population which allowed us to obtain rich, detailed information (saturation) to achieve our study purpose. Sample: Convenience and purposive sampling is being used to create a study sample of medical librarians, direct care nurses, nursing faculty, and student nurses that represents variation in geographical regions across the USA. Inclusion criteria were registered nurses with a terminal degree of ADN or BSN; faculty who teach in ADN or BSN degree programs; health sciences librarian, and undergraduate nursing students. Analysis: Content analysis is being conducted to identify key words and phrases that represent themes throughout the four study populations. Participant socio-demographics and other characteristics will be analyzed using descriptive statistics.

**Results**: We have completed focus groups for all of the four populations. Preliminary analysis reveals several common themes across the populations such as prioritizing a date range ("5 year rule") when searching the nursing literature, "nurse as author", and attitudes toward searching. The limit "nurse as author" was generally viewed as a positive by all nurses, regardless of their current role in the profession. "Primary study" was not commonly used and is seen as a vague term not readily understood by all groups. Attitudes toward literature searching varied, but hesitation due to various reasons predominated. We have completed focus groups with three of the four populations.

**Conclusions**: Our initial premise that the "5 year rule" criterion, a stringent parameter for searching the nursing literature, is ubiquitous appears to be borne out by discussions had with medical librarians, nursing faculty, student nurses, and direct care RNs. This presentation will report on the responses we received regarding those stringent criteria.

### Reflection of Needs: Faculty Survey on Systematic Review Experiences and Expectations

Practice Area: Innovation & Research Practice

**Margaret J. Foster, AHIP** - Director of the Center for Systematic Reviews, Medical Sciences Library, College Station, Texas

**Stephanie Fulton, MLS** - Associate University Librarian, Texas A&M University Medical Sciences Library, College Station, Texas

Molly E. Crews, MLS - Systematic Review Librarian, Medical Sciences Library, College Station, Texas

**T. Derek Halling, MLIS** - Associate Professor/Director, Texas A&M University Libraries/Subject Librarians, College Station, Texas

Bruce E. Herbert, PhD - Director, Office of Scholarly Communications, College Station, Texas

**Robin Sewell** - System & Data Analytics Librarian, Texas A&M University Medical Sciences Library, College Station, Texas

**Objectives**: To describe a survey designed to capture faculty feedback on their perceived needs for resources or support for research syntheses and systematic review projects

**Methods**: A brief online survey was developed to collect faculty reports of activities related to systematic and other reviews. A widely distributed email was sent across campus to all faculty. Details requested include their roles, types of reviews, teaching or mentoring experiences, and training they have received. We queried about resources they have used to support these activities and their familiarity with standards and software. Lastly, we asked about their expectations for students and the resources provided to students.

**Results**: 225 surveys were received, with half of the participants reported being tenured with over 10 years of experience at the university, across 14 colleges or schools. Types of reviews conducted were 30% traditional reviews, 25% systematic reviews, 16%, scoping reviews, and 15% meta-analysis. Familiarity with software or standards and departmental resources were low, while 50% of faculty reported expectations of graduate students to be able to conduct reviews. A quarter of the participants agreed to be part of a follow-up interview,

**Conclusions**: The results of this survey will provide a benchmark for faculty reported activities and expectations related to systematic reviews and help to guide services to meet those needs. The follow-up interviews will be conducted over the spring semester to further explore needs to support conducting and teaching reviews.

## Searching Methods for Rapid Evidence Reviews During Public Health Emergencies

Practice Area: Innovation & Research Practice

**Leah Hagerman** - Research Coordinator, National Collaborating Centre for Methods and Tools, Ontario, Canada

**Emily Clark, MSc.** - Knowledge Broker, National Collaborating Centre for Methods and Tools, Hamilton, Ontario, Canada

**Taylor Colangeli, BSc, MPH** - Research Assistant, National Collaborating Centre for Methods and Tools, Niagara Falls, Ontario, Canada

Maureen Dobbins, RN, PhD - Professor/Scientific Director, School of Nursing, Hamilton, Ontario, Canada

**Objectives**: As Covid-19-related evidence surged early in the pandemic, numerous Covid-specific databases and registries with varying features and functions emerged. Our team established a Rapid Evidence Service to conduct rapid reviews to inform the public health COVID-19 response. The service involved developing novel searching strategies to synthesize and disseminate the most up-to-date evidence available on COVID-19. Here, we outline our lessons learned in searching for evidence related to the COVID-19 pandemic and provide recommendations for researchers and database developers when responding to current and future public health emergencies.

**Methods**: Evidence sources, including databases and registries, used to inform our rapid reviews were evaluated based on three domains: topics and specialties included (i.e., infection prevention and control, disease characteristics, surveillance and epidemiology, equity, policy, and mental health and substance use); level of evidence of indexed citations (i.e., systematic review, single studies, expert opinion); and specific usability and functionality (i.e., advanced search functionality, search filters, citation exports, and citation sorting). These domains were assessed to determine usability and ability to reduce time and effort. To ensure comprehensiveness of our search strategy, our rapid review methods included general databases, specialized databases, and grey literature searching methods.

**Results**: We evaluated a total of 14 evidence sources, including 10 databases and four registries. Of these, three databases and one registry had been newly created in response to the pandemic and indexed only COVID-19 literature, while seven databases and three registries had been adapted from previously existing resources. Content and types of evidence included in each source varied. All databases included at least some advanced search functionality; repositories had limited advanced search functionality. We continue to evaluate the content and functionality of each evidence source and alter our search strategies accordingly.

**Conclusions**: Features and functionality associated with reducing time and effort for conducting rapid reviews included advanced searching features, filters, sorting and export functions. Controlled vocabulary allowed us to efficiently identify the most relevant evidence in a timely manner; the ability to sort and filter evidence by title and abstract allowed us to reduce the search volume; and export functions allowed us to deduplicate results across databases and allowed for transparent screening methods. By understanding the functionality and parameters of each database, reviews can be completed and disseminated in a timely manner for rapid response to public health emergencies. Our experiences can help inform future research strategies and the development of new evidence sources and enhancement of previously existing evidence sources.

## Sequential Systematic Reviews: A Novel Approach to Historical Landscape Mapping in Behavioral Science Research

Practice Area: Information Services

Anna Dorste, MLIS - Medical Librarian, Boston Children's Hospital, Boston, Massachusetts

**Jason Fogler, PhD** - Senior Staff Psychologist, Division of Developmental Medicine, Boston Children's Hospital, Brookline, Massachusetts

**Objectives**: To develop a novel methodology that not only withstands the rigor of a systematic review, but also can expand to capture a historical landscape. A team of clinical psychologists sought to evaluate the history and evolution of the concept of emotional dysregulation, with the aim of cultivating a 'heat map' of the prevailing theoretical frameworks per decade, reaching back as far as possible. We adapted the systematic review methodology to fit these needs, calling them "sequential systematic reviews."

**Methods**: Initial narrative review searches were performed to identify pertinent concepts and keywords. Reference lists of key papers were mined for relevant past citations, which were then tracked chronologically backwards, used for keyword harvesting, mined for further citations, and so on to 1900. Harvested keywords informed a large, systematic search strategy in PsycINFO, Web of Science, ERIC, Global Health Archive, and Google Scholar. Tracking citations backwards allowed the final, full systematic strategy to capture older terminology that otherwise would not have been isolated.

**Results**: Total results from all databases amounted to over 100,000 articles. The team is currently using Covidence systematic review software to inspect the literature by decade, beginning with 1900-1909. To isolate each decade's results, the large systematic strategy is run, and results from that decade are extracted accordingly, resulting in sequential systematic reviews. The reviews are ongoing, but this methodology has presented unique problem-solving opportunities, such as a wealth of literature to deduplicate, restrictions in export options, and difficulty accessing older citations. Books, specifically, are a major challenge given the interlibrary lending restrictions presented by the COVID-19 pandemic.

**Conclusions**: This is a novel methodology that aims to adhere to the rigor and strength of a systematic review but that has been adapted to search an expansive historical landscape. This project is ongoing, and further adaptation and trials will be needed to test its efficacy. However, such novel usage of a robust and

trusted methodology has potentially wide-reaching applications for the medical history literature.

# LIGHTNING TALK: PROGRAM DESCRIPTION ABSTRACTS

Papers in this section are sorted by title in alphabetical order.

#### **Art in Medicine**

Practice Area: Education

Lucinda R. Bennett - Medical Librarian, Lewis P Gundry Health Sciences Library, Baltimore, Maryland

**Background**: Art in Medicine is an ongoing project connecting the dots between the fields of humanities and medical sciences. Historically, these seemingly disparate realms of study were closely entwined. Physicians of the past also delved into philosophy, visual arts, literature and languages. Today, studies proclaim links between the arts in preventing burn-out in healthcare workers, sharpening visual assessment skills and bolstering empathy. This project seeks to distribute this fascinating information to the local healthcare community, foster creative projects and broaden awareness of the health humanities field as can be applied to a hospital setting.

**Description**: Starting as a small visual display, the initial goal of this project was to test the interest in the humanities within a hospital. Each month a new topic is showcased, be it a single work of art, a broad topic, historical or mythological figure. Past subjects include: Avicenna's texts on medicine and poetry, Greek goddesses of healing and their enduring symbols, Rembrandt's "The Anatomy Lesson", and the visual evolution of witches and their connection to female healers. Expansion of this monthly display comes in the form of a LibGuide. Information on art therapy, medical history, resources to health humanities publications and podcasts are updated monthly. Eventually, an annual publication produced by the Ascension Library department would highlight the artistic works of our employees in the visual arts, written pieces and crafts.

**Conclusion**: There is no set end to this project, it was conceived as open-ended. As associates give feedback, insight and inquire, the project will grow. With a goal of highlighting global art, as well as local institutions, there is an overflowing font of knowledge to pull from. Having worked on this project since August of 2020, it has been fascinating to see how it has generated discussion and interaction with hospital associates. This in turn has encouraged a more relaxed environment in the library, where patrons are more comfortable asking for materials and conversing with the librarian.

### Changing Attitudes About Wikipedia as a Trusted Health Information Resource: One Librarian at a Time

Practice Area: Education

**Jennifer Ortiz** - Consumer Health Coordinator/Librarian, NNLM, Region 3, UNT Health Science Center, Fort Worth, Texas

**Margie Sheppard** - Community Engagement Coordinator, Network of the National Library of Medicine/Region 3, Kansas City, Kansas

**Background**: Wikipedia, the free online encyclopedia is the most frequently visited website in the U.S. with more than 1.1 billion estimated monthly visits. Collaboratively edited, the website is known to be a popular source of health and medical information frequently used by the public, students, and professionals. However, skepticism about its value and reliability as a health information resource is common among librarians. This presentation will share the results and takeaways from an online educational course created by the Network of the National Library of Medicine designed to teach librarians about Wikipedia as a health information resource and how to contribute to the body of knowledge by becoming an editor..

**Description**: A free, self-paced, four-week course was developed by medical librarians and NNLM educational support staff with input from a pilot group of users. The course was designed to assist library staff to gain insight into the value of Wikipedia as a viable health information resource. Emphasis was placed on building skills and knowledge needed to evaluate articles on Wikipedia with a specific focus on health and medical topics. Students who enrolled tended to be dubious of Wikipedia overall. Participants were asked about their use and current perceptions of Wikipedia, especially as a source for health and medical information. Discussion forums, readings, and tutorials were used to assist participants in gaining insight into the value of Wikipedia. Instructions on how to improve articles by adding citations were included, therefore leveraging librarians' research skills to make Wikipedia a better resource for all users.

**Conclusion**: Data points to the course being successful in introducing librarians to Wikipedia as a reputable health information resource. Since October 2020 more than 190 participants have enrolled with a completion rate of 47%. 100% of survey respondents stated they learned a new skill they will use in the future. 100% strongly or somewhat agree the training improved their ability to find useful online health information. Post-course comments include: "I now appreciate Wikipedia -based health information and feel I have the tools to contribute authoritative, reliable citations to improve articles" and "This course shifted my perspective on Wikipedia (in a positive way) giving me ideas for how to use Wikipedia to teach health information literacy and/or information literacy in general".

### Citation Management Instruction: Lessons from Reflective Practice

Practice Area: Education

College Bannon, MLIS - Reference & Instruction Librarian, Library

Rebecca Arriola - Research & Instruction Librarian, Midwestern University, Downers Grove, Illinois

**Background**: Citation management instruction for biomedical, physical therapy, and physician assistant students occurs during their first year to prepare them for research projects spanning multiple quarters. These cohorts include 30, 60, and 80 students, respectively. Students arrive to their EndNote class with little knowledge of their programs' preferred citation style, varying levels of computer proficiency, and utilizing a variety of computers, operating systems, browsers, and word processers. To meet these unique challenges, librarians utilized a flipped classroom model, demonstration with dedicated workshop time, and a variety of technologies to facilitate student interaction with the software.

**Description**: Before class, librarians post an overview video, account set up, and software download instructions in the students' learning management system. Time is allotted before class for technology troubleshooting. In the classroom, librarians discuss the importance of citing sources, basic EndNote instruction, and citation style specifics. Students practice pulling and editing references in Physiological Review or AMA citation style. Librarians assess student progress and provide supplemental documentation and videos using Google Sheets and Padlet.

Conclusion: The idiosyncratic procedures of citation management, large cohorts, and dissimilarities in

devices present teaching librarians with a challenge to make learning active and meaningful. Using discussed strategies, students appeared less frustrated and disengaged than in previous years. Verbal feedback from faculty was positive for the new pedagogical approach.

## Citizen/Community Science & Crowdsourcing with the National Library of Medicine

Practice Area: Information Services

**Yamila M. El-Khayat, M.A.** - Outreach Services Librarian/ Communication Specialist and Citizen Sciences Engagement Specialist, AZ Health Sciences Library/ NNLM Region 4, Tucson, Arizona

**Kirsten Crowhurst** - Program Innovation Strategist, Network of the National Library of Medicine Training and Education Center

**Nancy Shin, AHIP** - Outreach and Data Coordinator, Network of The National Library of Medicine (NNLM), Region 5, Seattle, Washington

Stefania Acosta Ramirez - Engagement Specialist, University of Iowa, Iowa

**Michael Balkenhol, MLIS** - Engagement Coordinator, Hardin Library of the Health Sciences, University of Iowa, Pittsburgh, Pennsylvania

**Tess Wilson, MLIS, MFA** - Program Manager, University of Pittsburgh Health Sciences Library System, Pittsburgh

**Darlene Cavalier, MLA** - Professor of Practice, SciStarter and Arizona State University, Philadelphia, Pennsylvania

Caroline Nickerson, MPP - Fellow and Advisor, SciStarter

**Background**: Community/Citizen Science is a priority topic for our organization, working to familiarize the public with scientific research in accessible ways. Through citizen science and crowdsourcing, we can engage communities in addressing societal needs and accelerating biomedical science, technology, and innovation. Collaborations between communities and researchers build capacity to address problems and meet research goals. Community participation in the research process also builds trust between researchers and the communities that we serve. This lightning talk will introduce attendees to projects and resources as well as funding and programming opportunities.

**Description**: In 2019-2020 our organization planned an elaborate and highly successful speaker series, as revealed by our program evaluations, on Citizen Science and Libraries. We invited citizen/community science speakers to speak about their research and the subsequent impact of citizen science projects on them. Our members and the public always have access to a citizen science on-demand course in English and Spanish that our organization collaborated on with another well-known citizen science entity in our community. With growing curiosity in science and research, citizen and community science brings tangible projects to the public to support research projects. Citizen scientists volunteer to collect or analyze data, moving science forward and help researchers understand how things work. We support programming, toolkits, and projects that connect the public to valuable research tools, making a difference directly to the scientific community, and their own!

**Conclusion**: Citizen/community science programming at our organization is ever continuing and evolving - citizen/community science is a program initiative that is highly valued for its community and scientific research impact. We constantly evaluate our programming with member feedback/programming evaluations that measure the success of our program content and the success of our speakers and instructors and we will continue with these evaluations to make our programs more impactful, successful, and accessible.

## Coming Together Around the Prize Wheel: A Health Information Literacy Open House

Practice Area: Information Services

Deborah Farber, AHIP - Health Sciences Librarian, Info Commons/Library, Colton, California

**Background**: After completing construction of the new campus in 2020, the university wanted to showcase the facility and hold an event to bring the community together. University leadership invited the Info Commons (library) to develop and sponsor an open house, which would also demonstrate the University's health and wellness values. With the assistance of a university-wide planning team, the open house was planned to be a week of activities aimed at highlighting the important of health literacy and awareness of health resources in the community. Campus and community partners were invited to join the event, targeted to students, faculty, and staff.

**Description**: The planning committee sought support from the Faculty Affairs group, which provided a popular snow cone station. The Student Affairs group came out in support of the event with a sponsored corn hole game. A week of events took place during Health Literacy Month (October 2021), following midterm exams. The Info Commons hosted de-stressing activities such as coloring pages, crossword puzzles, and a Kahoot-style health trivia event. The main attraction was a Vendor and Resource Fair, which was held outdoors and featured staff from the local county public health office and a library vendor representative. Open house attendees took part in the "Plain Pledge," a social media campaign focused on making health information more understandable by using plain language. Attendees also had the opportunity to win small prizes by answering questions about COVID-19 and spinning a prize wheel.

**Conclusion**: The open house was well received by the campus community. About 50-100 faculty, staff, and student attended the week of events. One important lesson learned was timing: exam week schedules had shifted, preventing some students from attending. Following the event, a survey was sent to the university community to ask about their experience. Of 20 responses, several attendees commented that they would attend the Vendor and Resource Fair in the future and would like to see it expanded over several days. Info Commons staff presented a post-event report to stakeholders. The Info Commons and planning team will come together again to host another open house event in the spring 2022.

## **Coming Together to Combat Health Misinformation: An Academic and Public Libraries Partnership**

Practice Area: Information Services

**Margaret Henderson, AHIP** - Health Sciences Librarian, San Diego State University Library, Ramona, California

Jeffery L. Loo, PhD, MLIS - Clinical Librarian, UC San Diego Library, La Jolla, California

**Background**: In the Fall of 2021, the (redacted) County Board of Supervisors declared COVID Misinformation a public health crisis and adopted a series of measures to actively combat it. A regional group of library directors agreed to work together to support the county efforts to provide reliable health information to the community. Each library sent a representative, which included health sciences librarians from the academic libraries, and adult services librarians who were already involved in health outreach from the public libraries. The group wanted to support the county goals by providing reliable information and building health literacy.

**Description**: The group's first meeting was brainstorming ideas to support the County's campaign measures. These ideas were synthesized into action areas and initiatives. The group then rated each initiative by potential impact and the ease of doing that item. The characteristics of ideal initiatives were projects that were collaborative, with a one year timeline, aligning with existing library services and sustainable with current personnel, and including some community outreach. The final priorities for the group are: build a guide of reliable health information sources, build reference skills of library personnel and a referral guide, develop a network of libraries, conduct instruction and events for the community. The regional directors had priorities to engage public officials, engage community advocates, invite experts to work with libraries, and find ways to train health workers on information literacy issues.

**Conclusion**: After developing the final priorities, the group met with the regional directors to request approval for the collaborative priorities. The timeline for the various initiatives was also approved, so the group will start building a resource guide and collaborating with the regional Network of the National Library of Medicine office for help with training. The group also met with regional public health administrators to align programs and discuss areas of collaboration. Further work and additional resources developed will be shared during the lightning talk.

## Communicating the Value of the Medical Library Early and Often at a School of Public Health

Practice Area: Information Services

**Kayla M. Del Biondo, M.S.L.I.S.** - Simbonis Librarian for Public Health, Harvey Cushing/John Hay Whitney Medical Library, New Haven, Connecticut

**Background**: I analyzed the websites of six schools of public health to see if and how they communicated the value that their medical library and public health liaison librarian(s) bring to the student experience. I shared my findings with the Marketing and Public Relations Team at Yale School of Public Health (YSPH) to inspire and empower them to consider highlighting library services on their website. I was then asked to develop three marketing statements targeting prospective students, current students, and alumni that would promote the medical library's numerous services as well as the dedicated support of its two public health librarians.

**Description**: On each website, I looked at how the school marketed its public health program to prospective students, and whether it mentioned medical library services and/or public health librarian support. I found that while five of the six schools had dedicated public health librarians, only one school communicated this to prospective and current students. Following these findings, I began developing a list of our medical library's services that were quantifiable and added value to the student experience, and these became the backbone of my marketing statements.

**Conclusion**: I submitted the marketing statements to the Assistant Dean of Communications who plans to use them in upcoming promotional efforts for new and prospective students. Additionally, she shared them with the school's Admissions department. I hope that helping the Marketing and Public Relations team better understand what services the medical library provides, and the added support its two public health librarians offer, causes them to promote library services more frequently and accurately. I predict that if students learn about the library in places other than the library's website, then more students will know about these services and take advantage of them.

## Connecting Library and Information School Graduate Students with Consumer Health Information Specializations (CHIS)

Practice Area: Education

**Samantha Nunn** - Program Manager, Spenser S. Eccles Health Sciences Library, Network of the National Library of Medicine, Salt Lake City, Utah

**John C. Bramble, MS, MLIS** - Executive Director, University of Utah Eccles Health Sciences Library, Salt Lake City, Utah

**Emily Vardell, AHIP** - Assistant Professor, Emporia State University School of Library and Information Management, Olathe, Kansas

**Brenda M. Linares, MLIS, MBA, AHIP** - Health Sciences Librarian, A.R. Dykes Library, University of Kansas Medical Center, Kansas City, Kansas

**Background**: This presentation will describe a unique method of connecting library and information graduate students with the Medical Library Association (MLA) Consumer Health Information Specialization (CHIS) program. This project supports several library organizations (NLM, NNLM, MLA, PLA, ALA, etc.) that have been promoting the critical importance that information professionals have in providing factual consumer health information (CHI) to their communities, including having the skills required to keep current with the rapid changes in CHI resources and technologies.

**Description**: The authors have developed a process designed and tested to connect project leads with professors teaching CHI related courses at ALA accredited library and information science (LIS) graduate programs to get their courses approved by MLA so they meet the core competencies required for the CHIS. This presentation will reflect on the lessons learned from professors as well as feedback from students participating in the project.

**Conclusion**: This project continues to provide students with an opportunity to be recognized by MLA as having a specialized skill set in providing accurate and fact-based consumer health information on top of the course credits they earn through their LIS program. Currently, there are two universities actively participating in the program with interest being expressed from two other LIS programs. The next major step in the project is to promote this opportunity to the broader LIS community.

## Coordinating Data Services in the Lab: Connecting The Research Lifecycle

Practice Area: Information Management

Julie Goldman - Research Data Services Librarian, Harvard Library, Boston, Massachusetts

**Background**: A major research challenge is the lack of standardized data workflows across our campus. While administrative and lab safety protocols exist, we identified a significant gap in procedures related to research data, particularly at the crucial points of entering and exiting a lab environment. Through a group partnership, we were able to artfully collect existing documents and resources across the entire data lifecycle, and connect directly with researchers to ensure we captured the essential RDM-related activities, steps, and resources one should consider during the on and offboarding process.

**Description**: Coordinated efforts between data professionals in the library, research labs, and information technology departments can reshape institutional data services. Indeed, such collaborative efforts offer a unique opportunity to implement superior data management workflows while also addressing domain-

specific challenges. Our institutional vision for a more inclusive data management environment involves multiple research data stakeholders working together to support the advancement of health and science. Bringing together multiple stakeholders enabled us to provide solutions for data reproducibility including project synchronicity and advancement. This talk discusses our collective effort to develop and maintain data management templates to assist researchers during the employee onboarding and offboarding processes, and the progress made in marketing those resources to the community.

**Conclusion**: The partnership allowed us to preemptively generate additional templates for creating data management plans (DMPs), in order to prepare labs for new data management requirements stipulated by the National Institutes of Health, coming in 2023. By using the institutionally supported templates with organization-specific guidance, resources, and examples, researchers will be poised to successfully manage data across projects and grants. This presentation is available at <a href="https://dx.doi.org/10.5281/zenodo.6462246">https://dx.doi.org/10.5281/zenodo.6462246</a> and resources at <a href="https://osf.io/pw7ed">https://osf.io/pw7ed</a>.

## Data-Driven Engagement to Underrepresented in Biomedical Research Populations

Practice Area: Innovation & Research Practice

Hacer Karamese - Evaluation Specialist, NNLM All of Us National Program, Iowa City, Iowa

**Sharon Han** - Engagement Specialist, Network of the National Library of Medicine, All of Us National Program, Los Angeles, California

Stefania Acosta Ramirez - Engagement Specialist, University of Iowa, Iowa

**Laura Bartlett, MLS** - Technical Information Specilaist, National Library of Medicine, National Institutes of Health, Bethesda, Maryland

**Asih Asikin-Garmager** - Evaluation Coordinator, NNLM All of Us National Program, Iowa City, Iowa **Brittney Thomas, MLIS** - Associate Director, NNLM All of Us Community Engagement Center, University of Iowa Libraries, Iowa City, Iowa

**Background**: Our organization aims to provide resources to libraries, national and local organizations, and community-based organizations to conduct outreach and engagement activities in their communities. Of particular interest to us is increasing libraries' and organizations' capacity to reach populations underrepresented in biomedical research (UBR). A challenge to our work was identifying libraries and organizations that are located within communities with high UBR populations. To address this, we developed a data dashboard in Microsoft PowerBI that identifies Zip Code Tabulation Area (ZCTAs) to identify areas with significant representation of UBR communities.

**Description**: To define UBR status, we adopted the definitions of UBR and non-UBR for each diversity category described by Mapes et al (2020). We used the 2015-2019 Census estimates and Health Resources and Services Administration (HRSA) data to generate ZCTA data for the UBR race and ethnicity, age, annual household income, educational attainment, and geography categories. The process of developing such a tool requires numerous decisions such as the definition of UBR, community-level data selection, selecting which software to use, and accessibility of the tool. For example, we worked with staff and various stakeholders to determine the thresholds to categorize communities into two groups - UBR and non-UBR - for the dashboard. Furthermore, the development process involved numerous iterations to incorporate user feedback, feasibility constraints, and resolve bugs in a timely manner.

**Conclusion**: During this session, the authors will describe the dashboard development process including using Rstudio to access and manipulate the data, evaluating data visualization tools, and the benefits and limitations of using community-level characteristics data. We will also describe how we use the dashboard to

inform data-driven community engagement activities to identify and connect with libraries and organizations within our community of interests to partner with us to serve their communities. For example, we used the dashboard to prioritize funding projects in areas with high UBR populations. We will also discuss the 2.0 of this tool which will include data about the service-based organizations in ZCTAs to create a composite of strengths and lack of services in communities.

## Developing DRIVE: Creating a Tool to Evaluate and Address Bias in the Learning Landscape

Practice Area: Education

**Amy Reyes, MLIS** - Education and Clinical Services Librarian, Soutter Library, Worcester, Massachusetts **Victoria Rossetti, MSLIS** - Education and Clinical Services Librarian, Lamar Soutter Library, Worcester, Massachusetts

**Jessica Kilham, MLIS** - Associate Director, Network of the National Library of Medicine, Region 7, Worcester, Massachusetts

**Background**: In 2018, in response to learner feedback regarding the need for unbiased education. An interprofessional Working Group was developed to address the bias in the curriculum. The working group represented faculty, staff, and students from across the Schools of Medicine, Nursing, Biological Science, Graduate Medical Education, Diversity and Inclusion Office, the library, Faculty Affairs, and more. This need for an unbiased education led to an evaluation of the curriculum, the development of a new tool to give educators a way to evaluate their lessons, and opened an opportunity for learners to give feedback to strengthen and broaden their education.

**Description**: The demographics of our learners and educators do not reflect the changing demographics of communities they serve or will serve through their work in clinical and research settings. The appraisal tool was designed to foster the creation of bias-free curricula and to enhance the accuracy, representation, and inclusion of diverse populations in our educational environment and activities. The development began with identifying best practices, defining key terms, and setting expectations around what the tool should and should not be. The typical learner-educator relationship creates power imbalances; space for learners to provide feedback and insight without repercussions was created. The intent was never to shame, blame, or accuse educators, but rather to offer them a lens through which to view their curriculum, encourage self-reflective interrogation of their curricula, and create routes for feedback that could help learners feel safe.

**Conclusion**: This tool is empowering educators with self-assessment guidance and resources to address bias in their educational materials, and to support their ongoing professional development in the domains of diversity, equity and inclusion. The creation and maintenance of the assessment tool and supplemental materials and workshops is an ongoing iterative process continually evolving through faculty and learner feedback. The tool is one piece of a larger move towards culture change at the institution.

## Dynamic Design: Creating an Intuitive Search Experience for a Library Resources Page

Practice Area: Information Management

**Michelle Knecht, MSIS, MSL** - Senior Medical Librarian, Florida Atlantic University Charles E. Schmidt College of Medicine

**Tiffany A. Follin, MLIS** - Medical Liaison & Outreach Librarian, Medical and Health Sciences Collections & User Services, Boca Raton, Florida

**Background**: In a recent survey of their medical students, the presenters found that complicated access to library resources via the Medical Library's website was one of the top barriers to library access experienced by students. When the main Libraries switched to OpenAthens/Primo, it gave the Medical Library an opportunity to roll out an equally drastic change as well: a dynamic search experience. Rather than designing a webpage built by and for librarians, the presenters intentionally incorporated direct feedback from students, staff, and faculty as they built the new site to reconnect to and meet the needs of their end users.

**Description**: Early planning occurred in November 2020 and in January 2021 the librarians brought their ideas to the College of Medicine's Learning Resources Committee (LRC) for initial feedback. One librarian then coordinated with Library IT to determine parameters of the library website in order to implement suggestions. Initial organizational ideas were unfeasible and the switch to a dynamic searchable design was developed. The final design allows the user to utilize keyword searches, use a narrow by type field, as well as filter by clinical/ research resources. The beta pages were demoed to the LRC in May 2021 and shared via email to several key stakeholders at the College of Medicine. The page went live August 2021 and the legacy version remained available until December 31, 2021.

**Conclusion**: After the redesigned page's August 2021 go-live date, the presenters made note of pressing issues that arose. Informal feedback included broken heading links and resource links that were formatted in such a way that led to excessive clicking and/or sign-ins by the user. Formal feedback will be gathered via an end-of-year survey of the undergraduate medical education students. Survey results will be used to further reconnect to the medical library users, tweaking and improving their search experiences when connecting to the medical library resources.

## Flipping Z Switch: Adapting Educational Practices for the New Generation

Practice Area: Education

**Rebecca Arriola** - Research & Instruction Librarian, Midwestern University, Downers Grove, Illinois **Colleen Bannon, MLIS** - Reference & Instruction Librarian, Library

**Background**: Despite being "digital natives," Generation Z still requires the skills to critically evaluate information. With the introduction of Gen Z as the primary cohort in health science education we have noticed a change in student participation, educational expectations, and success with materials that have impacted the effectiveness of our teaching strategies. With less time in the classroom and this generation's desire for hands-on learning, point-of-need instruction, and a desire to work alone, we moved beyond traditional lectures. Through generational profiling, trial and error, and increased technology due to the pandemic, the library has made several changes to our instructional toolkit.

**Description**: After trying different methods of online library instruction, we found a software that allowed us, on a learning curve time crunch, to evolve our one-dimensional recorded lectures into embedded, interactive tutorials in which students practice the skills necessary to complete course projects. These tutorials have also been implemented as a tool for flipped classrooms where we then use online tools such as polls and online bulletin boards to allow live, collaborative experiences during the follow-up in-person classes.

**Conclusion**: The instructional changes that have led, anecdotally, to more student interaction, increased librarian presence throughout our academic programs, and improved research skills. We have found that

using online tools allows students to access material at the point-of-need outside of the classroom from any device. Additionally, we have noticed a decrease in last-minute reference questions before specific assignments are due.

## Growing Together: Developing a Comprehensive Continuing Education Program Guided by a Unique Set of Library Competencies

Practice Area: Professionalism & Leadership

**Marian L. LaForest** - Informationist, Augustus C. Long Health Sciences Library at Columbia University Irving Medical Center

**Background**: Previously, our library has had many disparate continuing education efforts - guest speakers, staff lectures, product demos, platforms to share development opportunities, conferences, etc. We are uniting these efforts under one comprehensive continuing education program. Formalizing continuing education efforts will help the program continue regardless of staffing changes and will ensure that each staff member gains something from the program. The goal is to share knowledge, promote continual learning, and develop leadership skills. Additionally, this program will help connect coworkers across units. Learning from each other and different units will increase understanding of the library and library cohesion.

**Description**: We created a policy and procedures document to formalize the continuing education program. Each month, we alternate between journal club and either a staff presentation, a guest speaker, or resource demo. The beginning 15 minutes of every other session will be reserved for recent conference and lecture takeaways. All staff are encouraged to participate. To help staff select a session theme, we created our own set of library competencies. We held a series of unit meetings to determine specific unit needs and compiled the feedback into a master list. Then we held an all staff meeting to par down the long list into a single page table for easy reference. Staff will evaluate each session to help improve future sessions. We will match each session with competencies to see what impact sessions have.

**Conclusion**: We expect to measure an increase in collaboration across units and development of professional skills among staff. This program will empower staff to design, organize, and lead a session that interests them, helping to hone their leadership skills. We will also map each competency to measurable indicators to see how particular sessions help both individuals and the organization. Outcomes from product demos would include tool familiarity, ability to promote tools, and ability to teach effective use of the tool. Finally, we hope to see improvements in presentation skills, networking, and event organizing.

## Inclusive and Gender-Neutral Consumer Health Information at a Hospital Library

Practice Area: Health Equity & Global Health

Eleni Philippopoulos, MISt - Information Specialist, Sinai Health, Toronto, Ontario, Canada

**Background**: This session will highlight the need for gender-neutral consumer health information and provide information specialists with tips and tools to improve health information in their spaces and work with clinicians to neutralize patient materials. Taking steps to neutralize language will ensure that all patients are understood and respected when seeking healthcare.

**Description**: The patient librarian studied patient materials that were being provided in the hospital and highlighted instances of gendered or neutral language. Outside LGBTQ+ resources were consulted in order to make better decisions about writing patient materials. Once writing techniques had been established, the patient librarian started offering healthcare professionals training sessions on developing gender-neutral and inclusive materials for patients. In addition, library staff worked closely with clinicians who had experience with gender-neutral health-related questions to set a standard for future materials.

**Conclusion**: Through this initiative, we hope that we can communicate to clinicians that inclusivity is important in a healthcare setting. We would like to continue working closely with healthcare professionals to make gender-neutral language the standard for all patient materials across the hospital. We will evaluate the success of our project based on the collaborations with those clinical staff members who produce consumer health information. We will keep track of the number of individuals who come to training sessions and contact us for editing purposes.

## The Intersection of Research and Community Health: Using Evidence to Inform Population Health Strategy

Practice Area: Clinical Support

**Elizabeth A. Crabtree Killen, PhD, MPH** - Administrator, Clinical Transformation/Assistant Professor, Medical University of South Carolina/Population Health, Johns Island, South Carolina

**Emily Brennan, MLIS** - Research and Education Informationist, Medical University of South Carolina Library, Charleston, South Carolina

Amanda Davis, MPH, RD, CHES - Value Institute, Medical University of SC, Charleston, South Carolina

**Background:** Social determinants of health (SDoH) are the conditions in which people are born, grow, live, and work, and they significantly impact an individual's health and wellbeing. With robust connections to community partners, access to data, and touch points with patients, healthcare systems are ideally positioned to address SDoH, yet systems struggle to identify how best to capture and manage SDoH needs.

**Description:** The hospital within our academic health system leveraged a partnership with our medical library to create an evidence review program, specifically aimed at informing the health system's population health strategy and implementation tactics using best research evidence. When tasked with developing a comprehensive population health strategy, the hospital within our academic medical center partnered with our medical library to create an evidence synthesis service aimed at infusing best research practices into strategy development and implementation. The hospital's executive leadership team identified clinical and policy questions, and members of the hospital's population health department worked closely with a medical librarian to complete literature searches, appraise evidence and summarize findings for leaders. These findings were used to inform strategy and implementation decisions. Examples of topics searched included the following: the most effective way to screen for SDoH needs, the best clinical data to use for predictive risk assessments, approaches to outreaching high risk patients, and the effectiveness of integrating behavioral health resources into clinics for patients with complex medical conditions.

**Conclusion:** This program led to the successful implementation of population health strategies for our healthcare system and has benefited our community. The evidence synthesis service helped secure grant funding for two behavioral health resources for our adult and pediatric sickle cell disease clinics. This program also informed our enterprise-wide roll-out of SDoH screening and referral management. These are a few demonstrable ways the program has resulted in improvements in care delivery. Our population health strategy tactics each have metrics of success, which are monitored on our health system's scorecard. Achievement of these measures will also serve as a way to monitor our program's effectiveness going forward.

## Introduction to Citizen Science/How to Bring Citizen Science to Your Library Education Program

Practice Area: Education

**Margie Sheppard** - Community Engagement Coordinator, Network of the National Library of Medicine/Region 3, Kansas City, Kansas

**Darlene Cavalier, MLA** - Professor of Practice, SciStarter and Arizona State University, Philadelphia, Pennsylvania

**John C. Bramble, MS, MLIS** - Executive Director, University of Utah Eccles Health Sciences Library, Salt Lake City, Utah

**Background**: A growing number of educators are using Crowdsourcing and Citizen Science (CCS) resources to engage their communities in addressing societal needs and accelerating biomedical science, technology, and innovation using CCS techniques. Collaborations between communities and researchers is critical to building capacity to address problems and meet research goals. This presentation will share the results and takeaways from a partnership between the Network of the National Library of Medicine, MidContinental Region and SciStarter.org that produced an online training program designed to introduce librarians and community-based organization leaders to Citizen Science and Crowdsourcing concepts and strategies on how they can support their libraries/communities as hubs for robust citizen science activities.

**Description**: Two, one-hour self-guided online English and Spanish tutorials were developed by instructional designers with input from public and academic librarians, citizen science experts, and community-based organization (CBO) staff. The first tutorial teaches librarians/CBO leaders about the importance of involving the public in health and biomedical science related research that can address real-world problems. The second tutorial provides step-by-step guidance on how librarians/CBO leaders can introduce engaging CCS activities to their communities in ongoing and sustainable ways through their sites. The tutorials are freely available online, under a creative commons license, which includes links to several supplemental consumer health information related resources. A mixed-method evaluative approach was used to determine the results of the project's overall objectives and outcomes as well as gauging the quality and impact of the project's activities.

**Conclusion**: Data indicates the project is successful in introducing librarians and community-based organizations to Citizen Science. Since May 2021, 756 people have completed the first tutorial. 120 people have gone on to complete the second tutorial with 53 claiming MLA CE. 87% of survey respondents stated they learned about a new health information resource or tool. 96% stated they learned a new skill they plan to use in the future and 100% plan to start using at least one resource or tool that learned about in this training. When asked If they would recommend this training to others 100% reported they would.

## **Knowledge is Power: Empowering Patients by Teaching Online Health Literacy**

Practice Area: Education

Stella R. Sigal - Medical Librarian, Medical Library, White Plains, New York

**Jennifer Cooper, MSN, BSN, BA, PMH-BC, PMHNP-BC** - Staff Nurse, Nursing Excellence/Magnet Recognition, NewYork-Presbyterian Westchester Behavioral Health Center

**Background**: Over half of U.S. adults identify the internet as their primary source of health information. However, while patients call health information "empowering" and "critical" to being "active participants in their own care and informed partners in the decision-making process", they also report challenges distinguishing between high- and low-quality health information on the Internet. Online misinformation has led to injury or death, thereby "disempowering" patients. In recognition of the significance of this, the U.S. Department of Health and Human Services recommends adult basic education lessons on health content from the Internet.

**Description**: A pilot class on critical evaluation of online health information was developed and delivered by the medical librarian and nursing to psychiatric inpatients on NYP-WBHC's Self-Injurious Behavior Unit beginning in mid-April 2021. Patients were encouraged to use the accurate health information they find online to ask questions of their treatment team and become more active participants in their plan of care.

**Conclusion**: Patient experience ratings on the Press Ganey metric "Staff's efforts to include you in decisions about your care" improved during the intervention period.

#### Learning from Each Other: Peer Reviewed Literature Searching

Practice Area: Information Services

Heather J. Martin, AHIP - Director, System Library Services, Portland, Oregon

Danielle N. Linden, MLIS, AHIP - Program Manager, Providence St. Joseph Hospital, Orange, California

Carrie Grinstead, AHIP - Regional Medical Librarian, Shared Services, Burbank, California

**Background**: Amidst shrinking staffing levels and expanding business, a health system library department developed a peer-learning program in order to build literature search capacity and self-efficacy amongst library support staff.

**Description**: Library staff are partnered and rotate monthly; pairs include those in same and different job roles and experience levels. Staff are encouraged to choose real patron clinical questions that would serve as optimal learning opportunities, reinforcing best practices in search strategy and/or database functionality or ones that are particularly challenging. Partners independently perform the other's search then meet virtually to compare results, strategies, and debrief on lessons learned. After a search for validated tools measuring library staff search self-efficacy turned up no appropriate tools, a brief survey was created based on feedback from senior librarians. REDCap was used to conduct a pre-survey of brief impressions on search self-efficacy and comfort with reaching out to colleagues for support when faced with a difficult search. A post-survey will be done at 6 and 12 months, as well as solicitation of candid feedback.

**Conclusion**: We expect to measure an increase in search self-efficacy and comfort in asking colleagues for assistance at both 6 and 12 months. We hope to use the staff's candid feedback to inform and develop our peer-review program for continued use. Initial response to the program has been positive. While some staff indicated feelings of nervousness or lack of confidence going into the first debrief, most have expressed that they found the exercise useful and noted that it gave them a welcome opportunity to connect with geographically disparate colleagues they might not have otherwise.

# Leveraging Knowledge: Collaborating with the Sponsored Projects Administration to Support National Science Foundation Researchers New to the SciENcv Biographical Sketch Requirement

Practice Area: Information Services

Katherine V. Chew, MLS - Associate Librarian, Health Sciences Library, Minneapolis, Minnesota

**Background**: The National Science Foundation announced in June 2019 it had partnered with NIH to use SciENcv as an NSF-approved format for use in preparation of the biographical sketch section of an NSF grant proposal. The requirement to use SciENcv went into effect with the June 2020 Proposal & Award Policies Produces Guide for new proposals submitted or due on or after October 5, 2020. Though NSF biographical sketch formats have been available in SciENcv as early as January 2015, the use of SciENcv was voluntary, so many NSF researchers and grant administrators are not familiar with My Bibliography or SciENcv.

**Description**: A successful collaboration that began in 2013 between the Sponsored Projects Administration (SPA) and the Health Sciences Library (HSL) featuring workshops on NIH Public Access Policy, My Bibliography and SciENcv prompted a similar collaboration to leverage that experience and knowledge to introduce NSF researchers and grant administrators to My Bibliography and SciENcv. HSL developed and conducted in-person "SciENcv for NSF Biosketches" workshops from August 2019 through January 2020 in anticipation of the new biosketch format requirement. Due to COVID-19, subsequent presentations in spring 2020 moved to Zoom. The SPA education coordinator scheduled and booked the classroom spaces, posted the workshops on the SPA training page, announced them to grant staff via email listservs and participated in the presentation of the workshops. Participants are highly encouraged to contact the Health Sciences Library post-workshop for follow-up questions or issues with using SciENcv.

**Conclusion**: Collaboration with the Sponsored Projects Administration provides an excellent avenue to develop and promote workshops aimed at the campus grant community. To date five NSF SciENcv workshops have reached over 85 participants, including grant administrators and researchers from coordinate campuses. Workshop participants are encouraged to contact the Health Sciences Library to schedule additional group or individual training for junior or senior researchers and graduate students. Positive reception of the workshops resulted in invitations to present to a coordinate campus research institute and to the 250 plus members of the campus Grant Managers User Network at their 2020 fall meeting. Another NSF SciENcv biosketch training session is scheduled for May 2022, and it has hit an already raised registration cap.

## Librarians Teaching During the Unknown: Improving Student Outcomes with Responsive Instructional Methods for Online Learning During COVID-19

Practice Area: Education

**Caitlin Maloy, AHIP** - School of Nursing & Research Services Librarian, University of Washington Health Sciences Library, Everett, Washington

**Background**: My academic research institution prioritizes in-person instructional programming for health sciences students and did not have instructor training for long-term remote learning prior to COVID-19. I

initially attempted to recreate the traditional classroom experience for an online environment, but this approach failed to meet student needs. My objective was to rapidly develop new remote teaching methods and materials to evolve with student and instructor feedback, with the goals of improving student outcomes and satisfaction with library resources and services, while also reducing the duplication of work by creating interdisciplinary learning materials for use by other health sciences librarians.

**Description**: In spring 2020 our classes moved online due to COVID-19. My instructional sessions with the School of Nursing that first quarter had low student engagement, and instructors confirmed that my online teaching methods negatively impacted student learning and outcomes. I then requested feedback by email from instructors and students for each instructional session. Using feedback and my observations, my practices evolved from a static once a quarter lecture to a series of shorter live and recorded presentations given multiple times a quarter. I designed the instructional materials to be adaptable to each health sciences school and shared them with our other librarians for their use. Follow-up discussions with instructors confirmed that by fall 2020 this program improved students' confidence in their research skills and the quality of their work, and I found students better prepared during our individual research meetings.

**Conclusion**: The outcomes of these changes to my instructional methods are an increase in students' abilities to conduct literature searching and more student engagement during our sessions. I now receive more live questions and demo requests during online instruction than prior to adopting this new approach. Students appear more prepared for their one-on-one research consultations with me, and I spend less time during our meetings on the basics of navigating resources and more time with them developing their search strategies and on advanced searching skills. Additionally, these shorter presentations have been shared with my librarian colleagues and adapted to their health sciences schools, which helps to reduce our workloads involved in producing instructional materials for our service areas.

#### Library Integration into Evidence-Based Medicine Instruction for Physician Assistant Students

Practice Area: Education

**Matthew C. Bridgeman, MLIS** - Information and Education Librarian, Robert Wood Johnson Library of the Health Sciences, New Brunswick, New Jersey

**Background**: Physician assistant accreditation requires an evidence based medicine component. The librarian was approached by the faculty to lead three sessions: two in their didactic years and one during their clinical year. The objectives of the library component are to teach students how to ask, acquire, and assess research to answer clinical questions. Students prepare a mock systematic review they convert into a post as their capstone project.

**Description**: The librarian leads 3 sessions throughout the physician assistant curriculum. They structure the 3 sessions to match the stages of evidence based medicine: ask, acquire, and appraise. The individual sessions are then designed with a combination of the constructivist education theory, developed by Jean Piaget, and humanist theory based on Abraham Maslow's hierarchy of needs. This means creating a friendly environment to encourage participation through jokes, analogies, and cultural discussion. Scaffolding is done through active-learning activities such as pre and post assessment polls involving clinical scenarios, and keyword development.

**Conclusion**: The students must prepare a poster for their mock systematic review. The methods include the search strategy, database searched, inclusion and exclusion criteria, and example case. They must make a clinical decision based on their findings.

#### Listening, Learning, and Participating in Disability Visibility

Practice Area: Health Equity & Global Health

**Lisa A. Connor** - Assistant Professor, Research & Instruction Health Sciences, Sam Houston State University, Huntsville, Texas

**Background**: The goal of this program is to increase the visibility of people with disabilities and engage communities that are historically underrepresented in biomedical research. The program highlights awareness of the All of Us Research program for a rural, minority-majority institution. This program was created through interdisciplinary collaboration with a humanities and social sciences librarian, and inspired by an NNLM presentation on the StoryCorps and All of Us Mini Programming Award opportunity. I hope this talk will inspire other health sciences librarians to create interdisciplinary programs, to not fear applying for grants, or hesitate reaching out to NNLM.

**Description**: A presentation about StoryCorps and All of Us Research by NNLM led to a discussion with my librarian colleague supporting humanities and social sciences. I learned our diversity reader is about disability visibility. We were both inspired and in about 48 hours created and submitted an NNLM mini-grant application in December, 2021; funded January, 2022! Our program will host three meetings in our library to focus on listening, learning, and participating in disability visibility. In Listening we will hear the lived experiences of people with disability, we will learn how to judge health claim, and hope to make StoryCorps recordings through participation. We expect our impact will raise awareness of the All of Us program, educate on judging health claims, and raise awareness of trusted health information from MedlinePlus. The outcome will increase health literacy in our diverse community.

**Conclusion**: This program was awarded mini-grant funding from NNLM. The planned activities will take place on March 30th, April 6th, and April 13th. I will provide conclusions and a summary of our events at this presentation.

#### Managing E-Resources: Correcting Mismatched Records in Alma

Practice Area: Information Management

Wumi Akinade - Resource Management Specialist, Distributed eLibrary - Weill Cornell Medicine - Qatar

**Background**: This presentation explores some of the challenges encountered while managing records in Alma to make library resources more accessible. The Distributed eLibrary of Weill Cornell Medicine - Qatar (WCM-Q) recently migrated to Alma and Primo VE to manage its library resources. Primo is the centralized search engine that provides easy access to library resources for the WCM-Q community. Alma is the interface used by librarians to manage library resources. Managing electronic resources requires constant updating of library collections to grant patrons seamless access to library collections.

**Description**: Since the implementation of Alma, a common challenge has been that older Sierra electronic records display as physical items due to some records having multiple locations and item materials. This causes mismatched resource types in Alma. Correcting these mismatched records has been problematic as the use of batch processing to make the corrections has proved abortive. The only option is to correct over 11,000 mismatched records one by one. There are 641 pages of 20 records per page that need the right material types for the corresponding records to be under the correct resource type. One of the methods being used is creating sets of queries to minimize the number of pages to flip at a time. The process involved changing the form of item in field 008 to online to make these titles show correctly as electronic.

**Conclusion**: Alma has improved the way we manage library resources and enhanced the library's collections. Library resources have become more easily accessible to users because they have more

options to choose from and Primo has more enhanced functionality for patrons. There has been a substantial increase in the collection counts of the library resources with Alma compared to Sierra, the previous library management system. Making sure that the material types and resource types of all resources fall into the correct category is the core of this project. The goal of this project is to bring these mismatched records down by forty percent by the end of the year. Thus far, more than sixty percent of the mismatched titles have been corrected and are now under the right resource type.

## More than Manuscripts: Redesigning a Scholarly Communication Guide to Include Multiple Research Outputs

Practice Area: Information Services

**Stephen W. Gabrielson** - Scholarly Communication Librarian, Health Sciences Library System | University of Pittsburgh, Pennsylvania

**Carrie L. Iwema, PhD, MLS, AHIP** - Coordinator of Basic Science Research Support, Health Sciences Library System, Pittsburgh, Pennsylvania

**Melissa Ratajeski, MLIS, AHIP, RLAT** - Assistant Director for Data and Publishing Services, Health Sciences Library System | University of Pittsburgh, Pittsburgh, Pennsylvania

**Helenmary Sheridan, MLIS** - Data Services Librarian, Health Sciences Library System | University of Pittsburgh, Pennsylvania

**Francesca Yates, MLIS** - Research and Instruction Librarian, University of Pittsburgh Health Sciences Library System, Pittsburgh, Pennsylvania

**Background**: The purpose of this project was to revise and streamline information on a Scholarly Communication LibGuide, which had initially focused on article publication. Redesigning the LibGuide provided an opportunity to include additional research outputs to help inform and promote open science to researchers at an academic health sciences institution.

**Description**: Improvements to the LibGuide include a "Where Should I Publish?" section that prompts users to select a research output: articles, datasets, preprints, protocols, and software. Content was also condensed and reorganized to provide better context and highlight why certain publishing topics are beneficial to researchers. For example, a page on ORCID was moved to the section for "Promoting Your Work". Librarians across departments participated in the redesign process. Environmental scans of LibGuides and library websites were conducted to inform decisions on new content and navigation. While the LibGuide improves upon the original, plans for further adjustments are underway. The usability of the guide is still being considered, specifically the organization of topics and web accessibility. We will continue to evaluate and update the guide to reflect researcher interests, developments in scholarly communication, and future library services.

**Conclusion**: Outcomes that we expect to measure include an increased awareness among researchers of other research outputs related to article publication, in addition to an increased awareness of library scholarly communication services. This will be measured by tracking the number of questions and librarian consultation requests, as well as click-through rates on the LibGuide and its specific pages.

## A New Data Retention Tool to Support A New Data Retention Policy

Practice Area: Information Management

Sarah Ben Maamar - Assistant Librarian, Samuel J Wood Library, New York, New York

Terrie R. Wheeler - Director and Chair, Samuel J Wood Library, New York, New York

Peter R. Oxley - Associate Director of Research Services, Weill Cornell Medicine, New York, New York

**Background**: In January 2023, the NIH will implement new policy guidance regarding research data retention. These guidelines will require data management plans in accordance with the FAIR principles for all newly funded work. In response, the Samuel J. Wood library at Weill Cornell Medicine is developing its Data Management as a Service (DMaaS) which is comprised of three components: 1) a data management plan consultation service, 2) a Data Catalog of research datasets created or used within the institution, and 3) a Data Retention web tool to archive research datasets. This lightening talk focuses on how the Data Catalog and Data Retention Tool facilitate compliance with NIH policy.

**Description**: The Data Catalog (2683 users, 31 projects) aims to improve the discoverability and reusability of research datasets collected at our institution. One can search for dataset based on title, description, data elements, keywords, or data governance. In addition, a Data Retention Tool is being developed for researchers to archive datasets following funder requirements. The Data Retention tool hosted on the Data Catalog website is a wizard walking users through the steps to archive their dataset. Events triggering an automatic archive request are: the publication of a paper, the expiration of a grant, or the investigator departure from our institution. Through the wizard, users create projects and associate locations of datasets to archive with detailed information. The organization archives the datasets according to funder requirements. We will evaluate for ease of use and ability to comply with funder data sharing requirements.

**Conclusion**: The Data Catalog is an example of service allowing documentation, visibility of existing datasets and fostering dataset reusability within our institution. The Data Retention tool associated with the Data Catalog shows how a tool can facilitate scientific data retention of future and current datasets and engage faculty members in a proactive data archiving behavior.

## Overcoming Barriers to Information Retrieval Through Electronic Contact Cards: Experiences from a Health Sciences Library During the COVID-19 Pandemic

Practice Area: Clinical Support

**Jessica Petrey, MSLS** - Associate Director-Clinical Services, University of Louisville Kornhauser Health Sciences Library, Louisville, Kentucky

Alex Glynn, MA - Medical Writing Lead, Division of Infectious Diseases, University of Louisville

**Background**: With the arrival of the COVID-19 pandemic in our state, all in-person instruction, elective procedures, and non-essential research at the university were suspended. Essential research staff at the Division of Infectious Diseases (ID) were spread across various buildings and shift schedules to maximize social distancing. This dramatic reorganization brought various communication difficulties, including inconsistent interactions with librarian and an uncertainty of contact methods, which compounded an existing hesitancy to request research assistance

**Description**: We observed that hesitancy to request librarian assistance was characterized by a pattern of constructed formality and a self-reported wish not to "bother" librarians. ID staff had repeatedly contacted their librarian through a highly interpersonal medium (typically a hallway conversation) to request permission to make contact through a less intimate medium, such as telephone or email. To rectify the problem of redundant layers of formal introduction, we designed flyers to be posted in all workspaces including QR codes to standardize and simply researcher—librarian communication. Instead of providing contact details

corresponding to multiple methods of communication, ID staff were directed to simply scan the code with their personal mobile device. An automated email would immediately be generated, addressed to the clinical librarian. The librarian would then proceed to initiate contact with the researcher and identify their information retrieval needs.

**Conclusion**: With the implementation of the QR code interface, information retrieval requests substantially increased among ID research associates. By standardizing requests for assistance to a single user input, the task of initiating contact was successfully transferred to the librarian, enabling them to proactively offer specific information retrieval services without depending on the initiative of the researcher. The accessibility of library resources was thereby improved, reducing library anxiety among the researchers and increasing the efficiency and output of the Division's COVID-19 research and evidence-based patient care

### Partnering to Coordinate Grant Writing Professional Development for Health Sciences Researchers

Practice Area: Innovation & Research Practice

**Stacey E. Wahl, PHD, AHIP** - Research and Education Librarian- Basic Sciences, Health Sciences Library/Research and Education, Richmond, Virginia

**John W. Cyrus, MA, MLIS** - Research and Education Librarian, VCU Health Sciences Library, Richmond, Virginia

**Background**: At research intensive universities, various offices have a stake in developing grantsmanship and supporting researchers competing for funding. There can be considerable diversity of scope and mission among these units, resulting in siloed development and delivery of grant writing professional development. Librarians led a group of non-library colleagues to coordinate offerings to ensure broad access to programming, avoid duplication of effort, evaluate current offerings, and develop a plan to address the needs of researchers at varied skill levels.

**Description**: Librarians brought together individuals from three units within the university with vested interests in grant writing professional development programming for health sciences researchers. The group met monthly to review and develop a coordinated strategy. The group first mapped existing programming to a timeline that took into account semester calendars and internal and external funding deadlines. The group then developed a shared mental model of skill levels, applied that model to existing offerings, and used this information to identify gaps and opportunities in programming. Capitalizing on existing knowledge of managing video content, the librarians developed a shared video repository and workflow for tagging and sharing content. Finally, the group worked with a team science expert to plan to evaluate the coordination efforts.

**Conclusion**: The group's work has led to a consistent sharing of information across university units focused around the area of grantsmanship professional development. The library, as a discipline neutral and health science focused entity, proved to be the ideal unit to orchestrate these efforts. Common evaluation components will be implemented across grants programming regardless of the unit where it originated, allowing for consistent optimization practices. Evaluation data will be collected on the relationship between attendance at grant professional development events and funding success rates.

### Promoting Antibiotic Stewardship Through a Hospital Collaboration

Practice Area: Clinical Support

**Sonam Soni, PharmD, MLIS** - Resource Management Librarian, Lane Medical Library, Stanford, California **Amanda Woodward, MLIS** - Web Services Librarian, Lane Medical Library, Stanford, California **Kaitlynn Ryan Stinson** - Access Services Specialist, Lane Medical Library, Stanford, California

**Background**: In April 2021, Lane Medical Library upgraded its Sanford Guide subscription to include Stewardship Assist, a module enabling quick access to institution-specific antibiotic guidelines. The upgrade was in response to a purchase suggestion from two clinician members of Stanford Hospital's antibiotic stewardship program. The collection development librarian met with the clinicians to discuss the purchase and connected them to the library's marketing and communications team (MCT). The MCT and clinicians collaborated to create a promotion plan for Stewardship Assist within the hospital. The goal was to create awareness for the Sanford Guide Stewardship Assist module and promote antibiotic stewardship.

**Description**: The MCT and clinicians communicated regularly to discuss the deployment status and promotion plan. MCT members received early access to the beta version of the product to understand how the resource could be utilized and to identify features to highlight. Tools such as Canva, Mailchimp, WordPress, Powerpoint, and Screencast-O-Matic were used to create infographics, emails, blog posts, slides, and short videos. Clinician feedback was incorporated to create the final marketing products. The content was provided to the clinicians and liaison librarians to share with their hospital communities and to use in presentations/classes. The goal of the marketing campaign was to raise awareness of the resource, provide instructions for accessing the resource, and provide use cases to demonstrate the resource's value. Usage data in the form of active users was reviewed approximately one month after starting the marketing campaign.

**Conclusion**: The novel approach of connecting the MCT with the clinicians who suggested purchasing Stewardship Assist led to a successful collaboration. Promotion efforts resulted in a four-fold increase in usage of the Sanford Guide from the time the subscription was upgraded to a month following Stewardship Assist's launch. Future plans for marketing the Sanford Guide include highlighting the resource during new resident orientations for medical and pharmacy residents and creating business cards with graphics and QR codes for outreach events in the hospital. Future interactions between collection development librarians and hospital staff regarding new resources will continue to mention the library's MCT in order to provide additional opportunities for collaboration.

## The Proximity Project: Using Spatial Thinking and Social Psychology to Develop Collaborations and Partnerships

Practice Area: Innovation & Research Practice

**Dana Abbey, MLS, AHIP** - Engagement Specialist/Associate Professor, Strauss Health Sciences Library, Aurora, Colorado

Susan Hiner - MLS Student, Emporia State University, Salt Lake City, Utah

**George G. Strawley** - Library Engagement Specialist, Network of the National Library of Medicine, Salt Lake City, Utah

David M. Brown, Ed.D, MLIS - Engagement Specialist, Coe Library, Laramie, Wyoming

Katie L. Larsen, MLIS - Student, Emporia State University

**Background**: The reconfiguration of a regional program service area from six states to nine states presented an opportunity to utilize spatial thinking and the social psychology principle of proximity to understand the geographical relationship among entities interested in health information and engage them in community-level partnerships and programming. Spatial thinking helps us describe and analyze patterns and organizations of people, places, and environments. The principle of proximity suggests that people in closer physical environments are more likely to form a relationship than those farther away. This project sought to identify clusters of entities in close proximity for developing potential collaborations.

**Description**: The project initially focused on identifying libraries, public health departments, and communitybased health organizations (CBHO) in a nine-state region that served at risk or underserved communities, and that had an interest in health information or health programming for community members. These entities are often present in communities lacking medical facilities like clinics or hospitals, they can address unmet needs for vulnerable and disadvantaged community members, and they are often viewed as trusted organizations among community members. These entities are key stakeholders in improving the publics' access to health information to enable them to make informed decisions about their health. Libraries offer internet access, reliable health information, and health related training and programming to improve health literacy. Some libraries are also facilitating telehealth appointments and routine screenings. Public health departments provide a safety net for many communities by providing essential primary care, work to prevent disease outbreaks, and respond to emergencies and disasters. Community-based health organizations (CBHO) identify and address risk factors, offer education, and provide home health visits. CBHOs often specialize in providing services for a particular condition, like mental health, addiction, or HIV/AIDS, and staff frequently reside in the communities they serve. Two MLIS practicum students learned how to use the selected cloud-based mapping and analysis program through online tutorials and uploaded the entity location information to create the regional state maps. Region 4 engagement specialists used the mapping data to identify clusters where there were two or more entities within a reasonable travel distance of one another. We are reaching out to these entities to gauge their interest in participating. We will work with participants to measure how effective proximity is in developing partnerships and collaborations at the community level and solicit feedback on the usefulness of the mapping for the entities.

## Reconnecting with Students: Navigating Library Outreach in the Midst of COVID Burnout

Practice Area: Information Services

**Claressa Slaughter** - Instruction and Outreach Librarian, Rosalind Franklin University of Medicine and Science, Illinois

**Charlotte Beyer, MSIS** - Associate Vice President, Boxer Library and Information Collaboration, Boxer Library, North Chicago, Illinois

**KatieRose McEneely** - Electronic Resources Librarian, Rosalind Franklin University of Medicine and Science, North Chicago, Illinois

**Chelsea Eidbo** - Access Services Librarian, Rosalind Franklin University of Medicine and Science, Waukegan, Illinois

**Background**: In Spring of 2021, our Library Outreach and Marketing Committee began to reassess our library outreach plan based on feedback and trends we had noticed from students. The two main trends we were able to identify were that our students were not as engaged in extracurricular activities as they had been in years past and many were experiencing email fatigue. Using this information, we created a plan to streamline our communication with students. Our new outreach plan was thus created in order to strengthen our library's message and meet students where they were at.

**Description**: Our outreach strategy can be broken down into three main components: Communication: After receiving feedback from our students that they were receiving too many emails, we focused the bulk of our communication into a quarterly newsletter, called "Boxer Library Updates," that included all library highlights, events, and important updates for the quarter. Feedback: Because we were experiencing lower engagement with our students a year into COVID, we decided to focus our student feedback efforts to our Student Library Advisory Committee. This committee is elected annually and is composed of students from every college on campus who act as ambassadors for the library. Partnerships: In order to receive more exposure and strengthen our relationships on campus, we partnered with student focused departments to offer library events when these departments larger engagement initiatives.

**Conclusion**: This outreach plan is still active and is continuing to be developed as we enter into new phases of the pandemic. Our Outreach and Marketing Committee continues to meet weekly to assess the outcomes of our library outreach plan. In these meetings we discuss verbal and written feedback we have received from students, attendance numbers at events, newsletter blog post views, and new campus partnership opportunities. We hope our attendance numbers continue to grow and we continue to receive positive feedback, however if there is one thing we have learned over last unprecedented year, it is to have the flexibility to adapt.

## Reflecting on Library Spaces, Resources, and Services: A Learners' Perspective During a Pandemic

Practice Area: Education

Cynthia J. Beeler, AHIP - Academic Medical Librarian, Mayo Clinic Libraries, Rochester, Minnesota Tara Brigham, AHIP - Librarian & Supervisor, Mayo Clinic in Jacksonville, FL, Jacksonville, Florida Lisa A. Marks, MLS, AHIP - Director, Library Services, Mayo Clinic Libraries, Arizona, Scottsdale, Arizona

**Background**: A multi-site academic library system has had fluctuations of open hours of physical libraries during the COVID-19 pandemic. Library services have continued, if modified, and learners have continued to use the libraries both in-person (when available) and virtually. A satisfaction survey of learners had been in discussion, as the last one had been completed in late 2018 before LCME accreditation review. We used this opportunity to not only repeat the learner satisfaction survey, but also to gather data about the perspective of learners on library spaces, resources, and services during the pandemic.

**Description**: The questions and results from the 2018 survey were reviewed by a librarian on each campus. The questions were evaluated for clarity as well as arranged in a logical order. In addition, the librarians chose to add questions about current library spaces, resources, and services that were specific to the time of the pandemic, starting in March 2020. We considered a question comparing their satisfaction prepandemic to now. However, we acknowledged that many current learners were not here at the start of the pandemic and would have no knowledge about how things used to be. We asked them about their comfort in the library spaces (masking rules, social distancing, cleaning of surfaces, etc.), as well as about any barriers they experienced to resources and services due to the pandemic.

**Conclusion**: We sent the survey to 1,602 people and received feedback from a variety of learners with a 16% response rate (260 responses). Most were comfortable with the safety rules in the library (masking, social distancing, etc.) and most did not experience a disruption in service. Some commenters noted that for awhile the libraries were not available to anyone, which was true mostly in the earliest days of the pandemic before badge access was reinstated. We also received feedback about the overall comfort of the spaces, which will help us with future space planning projects.

## Reflecting on Student Engagement and Renewing Efforts to Diversify LIS Student Pipeline

Practice Area: Professionalism & Leadership

**Daina Dickman, AHIP** - Assistant Director, Network of the National Library of Medicine, Region 5, University of Washington Health Sciences Library, Sacramento, California

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**Background**: A government-funded organization commissioned a study resulting in a dataset identifying U.S. Library and Information Science (LIS) graduate programs focusing on health and science courses, faculty expertise, and diversity of students in individual programs. Building on this information, a collaboration of researchers from across the U.S. developed a method designed to build student engagement programs, increase diversity in medical librarianship, and improve the medical librarian training pipeline. The research team was established through a common interest to address the deficit of well-trained and qualified medical librarians, especially amongst early career librarians, and the lack of diversity among medical librarians.

**Description**: The research team shared student engagement activities they participate in to better understand the collective knowledge of the team. From this, two student engagement priorities areas were identified: provide quality student experiences and increase interest in health information access related training. Area one focused on developing a guide designed to support professionals interested in hosting students including tips on how to effectively recruit students and mentor them during their practicum or internship. The guide includes reliable messaging tips with an emphasis on improving diversity in the LIS pipeline and an evaluation tool designed to assess student's internship/practicum experience. Area two focused on recruiting and guiding LIS instructors teaching health information courses to get them approved to meet the core competencies of the various Medical Library Association's specializations so their students can apply for additional credentials and improve their portfolio.

**Conclusion**: The primary measurable outcome expected is to increase engagement of LIS students from underrepresented populations by participation in meaningful internship/practicum programs, and participation in the MLA specialization programs. It is also expected that offering informed and responsive student engagement opportunities will strengthen working relationships with LIS programs and health sciences libraries as well as library professional organizations and MLA.

## Review and Refresh: Taking Inventory and Enhancing Library Collections to Support New Curriculum in Medical Schools

Practice Area: Education

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**Background**: Data reports from the Association of American Medical Colleges and Liaison Committee on Medical Education show that many Medical Schools are in the process of either planning or implementing

curriculum changes. As Medical Education curriculum evolves, libraries must respond to these changes through strategic evaluation of pre-existing library collections as well as the consideration and evaluation of new resources. By taking an instruction-focused view of collections and vice-versa, this project examines how Medical School Libraries can collaborate both internally and with external departments to assess curriculum needs, review existing resources and address gaps to bolster student success in Medical Education.

**Description**: In anticipation of an Undergraduate Medical Education curriculum revision emphasizing clinical experience and condensing basic sciences instruction, Librarians specializing in Education and Collections Management worked together to identify all existing library-licensed resources in support of the existing curriculum. Meetings with stakeholders representing Pre-Clerkship and Clerkship education to review this content and determine alignment with the revised curriculum identified a need for expanded resources to support content memorization and exam preparation, as well as resources to support clinical experiences and address emerging topics. Using criteria developed from these conversations, pertinent resources were identified and informed recommendations for the purchase of new materials were made. This talk will briefly describe our process for taking inventory, gathering feedback, evaluating potential resources, and promoting changes made to support new curricula.

**Conclusion**: The needs articulated by students and faculty informed purchasing decisions for curriculumaligned electronic resources, with a strong focus on resources that support self-assessment and exam preparation. This project also resulted in enhanced communication; both between different units within the library as well as promotion of library resources supporting Undergraduate Medical Education to faculty and students.

## Skeleton Crew: Equitable In-Person Staffing During a Deadly Pandemic

Practice Area: Professionalism & Leadership

**Donna Baluchi** - Interim Associate Director for Equity, Diversity, & Inclusion, Eccles Health Sciences Library, Salt Lake City, Utah

**Elizabeth Frakes, AHIP** - Assistant Librarian for Clinical Services, University of Utah, Salt Lake City, Utah **Brandon Patterson, MSI, MA** - Technology Engagement Librarian, Eccles Health Sciences Library, Salt Lake City, Utah

**Shawn Steidinger, AHIP** - Assistant Librarian for Clinical Services, Spencer S. Eccles Health Sciences Library, Salt Lake City, Utah

Carmin Smoot - Digital Publishing Coordinator, Spencer S. Eccles Health Sciences Library

**Background**: In March 2020, our health sciences library's Public Services department was suddenly elevated to the one essential in-person department within the library. A national conversation emerged about the unfairness faced by the lowest paid workers forced to be at most risk of contracting COVID-19 by denying them the ability to stay home. Our library needed to provide in-person services after university administrators, and legislation, required it. Our library opted to implement equitable, voluntary service desk staff scheduling. This would ensure the safety of all employees through minimal exposure, and involve all faculty and staff, regardless of pay or stature.

**Description**: Like many libraries, we shut down March 2020. Afterwards, the library's executive committee was responsible for in-person activities (daily building checks, statistics, alarms, etc). Following pressure to offer in-person service to patrons, we implemented our "Skeleton Crew" in August 2020. We excluded all staff who were considered high-risk, and those who lived with someone high-risk, while respecting employee

privacy and confidentiality. We then distributed a survey to all faculty and staff about their willingness to work on-site. The final on-site staffing group included members from every department, and every administrative level. Staff were given training and materials, while the Public Services department head was on-call for any questions. Library service hours were limited to 9-3pm, Monday-Friday. Staff worked in pairs, to keep staff exposures at a minimum. Each staffing pair were assigned to between one and four shifts per month.

**Conclusion**: After more than a year, Skeleton Crew was eventually retired at the start of 2021 fall semester, and the library returned to normal operations. The library received overwhelming support from library staff, and university administration, for our unique equitable staffing model. Staff continuously reported feeling safe about their work environment during the pandemic, as well as having a new appreciation for Public Services, and better insight into student and faculty needs. In January 2022, COVID-19 cases resulted in a return to a modified Skeleton Crew model which was easy to implement on short notice, with same level of support from 2020-2021.

## Tea Meditation: A Library's Collaborative Approach to Address Well-Being in the Veterinary Profession

Practice Area: Clinical Support

**Erik D. Fausak, MSLIS, MA, RVT, RLAT** - Student Services Librarian, UC Davis Library, Woodland, California

**Background**: Professional burnout is a common result of occupational stress in the veterinary field. This presentation describes an approach to address burnout by incorporating a mindful meditation with tea. This approach may be ideal for the busy veterinary practitioner because it can be done in as little as five minutes. Regular practice of this mindfulness exercise may help mitigate the effects of burnout. Tea was a logical beverage choice for this approach as it is already associated with quiet reflection and has a substantial phytochemical profile that reduces stress and acts as an anxiolytic

**Description**: This presentation addresses the role of mindfulness in reducing the risks of occupational stress and how the authors from diverse background of veterinary clinical experience, librarianship, therapy, mindfulness training and being raised in a Buddhist mindful environment developed a mindful tea meditation using the best current evidence around mindfulness and tea. Additionally, this presentation addresses the important social role of tea in reducing depression and engendering thoughtful conversation. The culmination of this project results in a brief mindful tea meditation that incorporates Dialectical Behavioral Therapy that engages the five senses to bring the subject into the present moment in a removed physical space.

**Conclusion**: While formal research to measure impact of this project with a control population has not started, qualitative feedback has been collected and has garnered positive feedback. Attendance varies from the beginning of school year and as the school year progresses, but regular attendance of mindfulness meditations by a core group has been noted. Mindful tea meditations have been conducted live virtually since March, 2021. Mindful tea conversations were started in Fall 2021 and regularly attended with maximum participants always registering (max per session were four individuals). Content is freely available at https://www.library.ucdavis.edu/quide/mindfulness-tea-meditation/

## Telling Stories: Health Information Literacy Through Media Coverage

Practice Area: Education

Karen Heskett, MSI - Instruction Librarian, UC San Diego Library, La Jolla, California Korey Brunetti, MLIS - Library Services Manager, Kresge Library, Scripps Research Institute, La Jolla, California

**Background**: The objective of this program is to share an innovative approach with librarians teaching health information literacy concepts. Using the example of COVID-19 misinformation, specifically the promotion of the antiparasitic drug ivermectin as a treatment for COVID, we designed an interactive class session tracking the origin of ivermectin's alleged potential. We use this lens to compare and contrast information sources including pre-print servers and various study formats, and the strengths and perils of evaluating information in a social media driven news environment. These sessions were targeted toward medical students and public health students, but it is adaptable to other contexts.

**Description**: This class was inspired by a Washington Post article that described the experiences of physicians who were seeing patients presenting with symptoms of ivermectin overdose. This phenomenon was quickly tied to prominent social media voices that actively promoted ivermectin as a viable treatment. We traced the origin of this story and found that much of ivermectin's promise as a treatment is tied to a now-retracted pre-print. This class was developed to teach information evaluation, and we applied ACRL's "authority is constructed and contextual" frame to a timely—and still evolving—story. Implementing this class hinged on researching and developing a narrative presentation that followed the breadcrumb trail of the story, highlighting various types of publications along the way. We also chose to incorporate discussion questions and an activity to both highlighted vetted sources (Micromedex, Clinical Pharmacology).

**Conclusion**: The instructors observed that students exhibited a high level of engagement with following the breadcrumb trails to see how science gets distorted in social media, particularly via social media influencers and producers with expansive platforms. They also expressed interest in pre-prints vs. pre-pub ahead of print and outlining the distinctions. Future iterations of this session will include a brief assessment.

## **Unmediated Reprints Desk Access to Unsubscribed Journal Articles: Access and Cost Savings**

Practice Area: Information Services

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Marta A. Ambroziak - Head of Access Services, Health Sciences Library / Access Services, Valhalla, New York

**Danielle Aloia, MLS** - Assistant Director, Information Management, Health Sciences Library, Valhalla, New York

**Background**: Standalone journals comprise 66% of the collections budget at the [retracted] Health Sciences Library (HSL). For years journal collections had been subjected to a cost-per-use (CPU) threshold of \$50 per use triggering a potential cut. In the face of further collection budget restrictions, in 2019 that threshold was lowered to \$35. Simultaneously, with emerging options, the HSL started piloting unmediated on-demand access using Reprints Desk. The objectives of the current project were to maintain access to cut titles, move to a real-time pay-per-use model for high-CPU titles, save money, and maintain satisfaction.

**Description**: In July 2019, HSL cut \$150,000 worth of journal titles which exceeded the \$35 CPU threshold. In August 2019 Reprints Desk approached the HSL about using their product for user-driven unmediated access. HSL had already been using Reprints Desk for mediated interlibrary loan services but had not yet embarked on unmediated access. Instead, the HSL began this implementation for those cut titles by incorporating Reprints Desk into EBSCO Discovery Service. In July 2020 the HSL started offering unmediated access with Reprints Desk for select titles and announced it with a blog post. Patrons also had the option to order via ILL for non-rush articles as recommended. Evaluation is conducted by looking at total cost, CPU, and monitoring of unsolicited patron comments.

**Conclusion**: Average cost per article via Reprints Desk was \$45 per article. Costs for ILL for these titles (28 requests) during 2020-21 was \$0. Savings had been predicted to be about \$70,000. In actuality, usage for the titles via Reprints Desk has been very low (29 requests) and actual savings for 2020-2021 was over \$150,000. Only \$1,020 was spent on unmediated Reprints Desk requests. Additionally, not a single complaint or even comment has been received to date. It is unclear why usage has been so much lower than previous, but one might infer that Reprints Desk/ILL represents a "speed bump" and library users are finding other articles to use rather than clicking through to these.

## Weill Cornell Medicine Samuel J. Wood Library's Response to The Biomedical Research Reproducibility Crisis

Practice Area: Innovation & Research Practice

Sarah Ben Maamar - Assistant Librarian, Samuel J Wood Library, New York, New York
 Terrie R. Wheeler - Director and Chair, Samuel J Wood Library, New York, New York
 Peter R. Oxley - Associate Director of Research Services, Weill Cornell Medicine, New York, New York

**Background**: The biomedical research field is more and more frequently reporting a reproducibility crisis. A 2016 Nature survey showed 70% of researchers in biology were unable to reproduce other scientists' findings and that 60% were unable to reproduce their own findings (Baker, https://doi.org/10.1038/533452a). Common factors contributing to the lack of reproducibility that can readily be acted upon include lack of access to methods details and raw data, poor reporting methods, poor data management, and inability to manage complex datasets. The Weill Cornell Medicine Samuel J. Wood library is mounting a new service named "Research Reproducibility Support Service" (RRSS) to foster best practices in biomedical research reproducibility and improve compliance with funder policies.

**Description**: The RRSS started in 2021 when the organization's Research Integrity Office asked the library to develop a methodology for identifying image manipulation. It now includes consultations for bioinformatic pipeline automation and large datasets analysis; development of an Image Forensics web tool allowing patrons to check for duplicated or falsified scientific images; and development of instructional materials on best practices in biomedical research reproducibility (direct computational and analytic replication). A closed, operational, beta version of the Image Forensics web tool already exists. However, this version needs further improvement in terms of detection accuracy. In addition, a diversification of the type of scientific materials that can be analyzed will also be implemented. Consultations for bioinformatic pipeline automation and teaching material for research reproducibility best practices are current and operational.

**Conclusion**: Our program evaluation will encompass the accuracy of detecting manipulated images, effectiveness of direct computational and analytic replication techniques on big data sets, and patron confidence in the robustness of their methodology.