

2024 Evidence Synthesis Institute Conference Abstracts



Tuesday, April 16, 2024

9:00-10:30 am Opening

Opening Remarks [\[View Slides\]](#)

Opening Keynote - Jaron Porciello [\[View Slides\]](#)

[\[Recording\]](#)

10:30-11:00 am Break

11:00 am-12:30 pm Presentations: Service Development

A. *Starting Soft: Launching our Systematic Review Service*

[\[View Slides\]](#)

Katie Hut, American University

Clarissa Ihssen, American University

After attending the Evidence Synthesis Institute in March 2023, the Business & Econ and Science librarians at American University began preparing to offer an evidence synthesis consultation service. In coordination with library administration, we sketched out our vision and started offering our services as part of what we termed a “soft launch”.

In this presentation, we will detail our internal preparations and the initial groundwork we engaged in before our official launch, including envisioning our long-term plan, training colleagues, reaching out to faculty and marketing the service. This foundational work has allowed our small team to effectively support researchers throughout our entire mid-sized campus in their evidence synthesis work.

Presentation attendees will walk away with ideas for their own soft launch, including ways to reach out to potential researchers without being overwhelmed, how to effectively market their services, and how to establish important connections across campus.

B. *Marketing the Impact of Librarian Participation in Evidence Synthesis*

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Shannon Plummer, Arizona State University

As social science librarians, we continuously have conversations about effective ways to market the impact of the library and how our support and expertise are an integral part of the larger research community. I want to draw connections in harnessing the power of evidence synthesis - unbiased, inclusive, evidence-based, and affecting change - and the impact and value that library support provides.

Here at Arizona State University, our charter reads: ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed, advancing research and discovery of public value; and assuming fundamental responsibility for the economic, cultural and overall health of the community it serves.

This pledge is also the foundation of evidence synthesis, and producing reviews to the highest standard is vital to creating meaningful change in the communities we serve.

C. *Identifying Institutional ES Output to Guide Service Formation at R1 University*

[\[View Slides\]](#)

Elle Covington, University of Nebraska–Lincoln
Janet Burka, The University of Texas at Arlington
John Bayhi, The University of Texas at Arlington
Morgan Rowe-Morris, The University of Texas at Arlington

Researcher requests for systematic and scoping review support have grown exponentially in recent years for many academic libraries, especially at institutions with high research activity. As librarians at the University of Texas at Arlington (UTA) considered the best way to plan a more formalized service, we decided to conduct a Mapping Review of our own to look at the full ES output of the institution. In addition to giving librarians on the team hands-on experience in every step of the process, we wanted to examine trends, academic subject areas most involved in ES work, levels of rigor, and librarian involvement with the intention of tailoring our service to the unique needs of our institution. We hope to create a roadmap that librarians at other institutions can follow in order to ascertain the needs of their populations.

D. Transforming Teamwork into Dreamwork: How Two Institutions Approached Building Evidence Synthesis Service Teams

[View Slides](#)

Aimee Jenkins, University of Pittsburgh
Joyce Garczynski, Towson University

When starting something new, it can be challenging to go it alone. By sharing the workload and building off of each other's expertise, a team approach can make the unfamiliar seem less daunting. In this team presentation, librarians from two institutions will share the team approaches they've taken for building new evidence synthesis services. They'll discuss how they each built their teams, distributed workload, the challenges they faced, and where they will go from here. Attendees will be able to identify approaches for developing evidence synthesis support teams, determine the steps they would need to take to develop a team approach at their own academic libraries, and predict some of the challenges they will encounter when establishing their own evidence synthesis support teams.

E. Ripple Effect: The Evidence Synthesis Institute Inspires Programmatic Outreach to Library Administrators, Pre-Professional Librarians, Faculty, and Students Across Disciplines

[View Slides](#)

Anita Kuiken, Syracuse University
Brenna Helmstutler, Syracuse University

The Evidence Synthesis Institute (ESI) has had a far-reaching ripple effect across Syracuse University (SU). Prior to the ESI, evidence synthesis research support

happened in an ad hoc manner by liaison librarians who also happened to be members of the Research Impact Team (RIT) at SU Libraries. The RIT is comprised of four science and social science liaison librarians offering advanced research services such as bibliometrics and other research reputation strategies. ESI inspired a more cohesive, team-based programmatic approach to evidence synthesis support for audiences like library administration, faculty and graduate students across disciplines, and, more uniquely, in the Library and Information Science (LIS) program. Outreach has included presentations to library administration introducing what evidence synthesis is, its growth on campus and advocating for tools and resources; webinars for LIS students about Evidence Synthesis Librarianship; advanced research strategies in course instruction; and the development of a University-wide community of practice.

12:30-1:30 pm Lunch Break

1:30-3:00 pm *Panel: Evidence Synthesis and Bibliometrics: Why not work together?*

[\[View Slides\]](#) [\[Audience prompts\]](#)

Sergio Chaparro, Virginia Commonwealth University
Aimee Jenkins, University of Pittsburgh

Because those involved in the process of evidence-synthesis investigate scholarly research so closely they could be also benefit from additional scholarly research perspectives and tools. This panel attempts to bring together evidence synthesis and bibliometrics to suggest that, in addition to the evidence-synthesis well established methodologies, librarians and researchers involved in evidence-synthesis could also gain from knowledge of bibliometrics especially during the planning and early stages of the evidence-synthesis process. This panel will review the evidence synthesis process and will offer suggestions about stages and steps where bibliometric tools and measures could offer evidence synthesis librarians and researchers complementary and useful perspectives to analyze the scholarly literature. By putting emphasis in the social and behavioral sciences, this panel will offer also relevant examples of the symbiotic relation between evidence synthesis and bibliometrics.

3:00-3:30 pm Break

3:30-4:30 pm Networking session

Wednesday, April 17, 2024

9:00-10:00 am Roundtable/Birds of a Feather

10:30-11:00 am Break

11:00 am-12:30 pm Concurrent sessions.

1. Presentations: Review Project Experiences

A. *Building Productive Relationships in Evidence Synthesis*

[\[View Slides\]](#)

Jade Winn, University of Southern California

Cari Kaurlo, University of Southern California

Both the systematic review librarian and the engineering librarian were contacted by the Institute for Creative Technologies (ICT) to conduct a scoping review on virtual human fidelity. This campus center's virtual human initiatives are funded by the Department of Defence and Army and there has been serious interest in our evidence synthesis in this field. Since 2021, our team has presented our work at numerous conferences, university groups and published articles. The success of this team meant our initial scoping review has spawned multiple projects such as using machine learning in evidence synthesis work. Our group has been nicknamed the Virtual Human Fidelity Coalition (VHFC), which cements this mutually beneficial and productive collaboration between librarians and a campus center. This session will discuss in detail this one case which has evolved in the two librarians becoming part of the ICT team and continues to produce high quality and impactful research.

B. *Finally working on a systematic review – building experience in a review about open access publications*

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Alice Cann, Brunel University London

Following my participation in the August 2023 Evidence Synthesis Institute, and promotion of my increased ability and interest in working on evidence synthesis projects, I was approached by a librarian at another institution putting together a team to work on a systematic review, asking 'Is there a citation advantage difference between Green and Gold open access?'

This presentation will focus on the opportunity for participation, the experience of working – as searching and reporting specialist - with other librarians on a review; the topic of the review; a report on progress made, six months into the project; and the value and challenges of working on a systematic review for the first time.

C. *Gathering evidence to inform practice: A scoping review of library research guide effectiveness studies*

[\[View Slides\]](#)

Erica DeFrain, University of Nebraska–Lincoln

Leslie Sult, University of Arizona

Fresh out of Evidence Synthesis Institute training and emboldened by gentle mentoring courtesy of the ACRL Evidence Synthesis Methods Interest Group, our multi-institutional team sought to test our new skills in addressing a research question that would satisfy our own professional curiosities: with so much time spent building and maintaining library research guides, is there any evidence on their effectiveness for learning? This presentation will focus on our process and findings from our recently completed scoping review (preregistered with OSF Registries on November 3, 2022), which followed PRISMA-ScR reporting guidelines to identify, summarize, and map the existing evidence from the 59 total studies that satisfied our inclusion criteria.

D. *The Prevalence and Reporting Quality of Systematic Reviews in Engineering: Results from a Scoping Review*

[\[View Slides\]](#)

Margaret Phillips, Purdue University

Amy Buhler, University of Florida

Marina Zhang, University of Iowa

Jason Reed, Purdue University

Dave Zwicky, Purdue University

Amy Van Epps, Harvard University

Erin Rowley, University at Buffalo

James Cox, University of Iowa

Wei Zakharov, Purdue University

Systematic reviews are considered one of the highest levels of evidence based decision making, but they are only as good as the methods used. With studies described as “systematic reviews” and “meta analyses” proliferating through engineering disciplines in the last decade, it is necessary to examine how well these studies reflect a methodologically sound understanding of established systematic review processes. Nine librarians from five different institutions conducted a scoping review of published systematic reviews in engineering to discover: 1) To what extent is the systematic review research method being applied in engineering disciplines? and 2) How closely are systematic reviews that are published in engineering disciplines following established guidelines for the methodology? The project is in the write up stage, with 3066 studies across 11 engineering disciplines in the final data set. This presentation provides an overview of the project and shares selected results.

E. *A Systematic Evaluation of Systematic Reviews in Academic Librarianship*

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Erin Owens, Sam Houston State University

This presentation will report on a current project examining systematic reviews in the Library and Information Science (LIS) discipline. The researchers are systematically gathering all 2018-2023 studies about academic libraries which their authors identify as systematic reviews and then evaluating them using the Risk of Bias (ROBIS) assessment tool. Systematic reviews have been rapidly gaining popularity in LIS. While a 2008 study identified only seven published systematic reviews in LIS from 1996-2006, focused exclusively on medical contexts, hundreds of papers broadly spanning LIS can now be found citing this method. Unfortunately, many are not as systematic as they claim to be. This project aims to highlight strengths and weaknesses in the employment of systematic review methods in LIS, thus paving the way for more rigorous and unbiased efforts.

2. Panel: Evidence Synthesis: Fostering a Local Community of Practice for Academic Librarians

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Laura Kuo, Ithaca College
Matthew Kibbee, Cornell University
Elizabeth DiGiovine, Cornell University
Natasha Bishop, Cornell University
Kristina Shanton, Ithaca College

This panel, composed of academic librarians who are experienced with evidence synthesis and those who are brand new to it, will discuss the creation of a local Community of Practice (CoP), uniting academic librarians from two schools within a college town. Inspired by the sense of community offered at the Evidence Synthesis Institute, this project bridges knowledge gaps by creating a supportive environment for librarians, particularly those new to the ES methodology. The CoP started in Fall 2023 and meets in-person alternately at Cornell University and Ithaca College twice a semester. In these meetings, librarians can discuss their experiences with ES, share tips and resources, and discuss relevant literature. The CoP shares a Zotero library and uses Google Groups for communication. Panelists will discuss the steps in creating the CoP, the benefits of fostering a local ES community, and how the CoP might grow in the future.

12:30-1:30 pm Lunch Break

1:30-3:00 pm Lightning Talks

A. *Creating a Community of PRESS Reviewers*

[\[View Slides\]](#)

Julia Maxwell, Rutgers University

Librarian involvement in the evidence synthesis (ES) process is linked to less risk of bias (Aamodt et al., 2019), greater adherence to systematic review standards (Ramirez et al., 2022), higher quality search strategies (Rethlefsen et al., 2015), and more comprehensive literature searches (Meert et al., 2016). The Peer Review of Electronic Search Strategies guidelines (McGowan et al., 2016) facilitates librarian peer review of search strategies in order to ensure information search best practices as librarians engage in ES research. However, the process of finding a PRESS peer reviewer can be difficult, especially for librarian searchers who may be outside of the health sciences or offering solo service models at their institutions. This presentation will discuss strategies and potential paths forward for establishing a group of PRESS reviewers, with the intention that this PRESS group could offer a community of support for librarians engaging in complex search tasks.

B. *Growth with Stress: Take it Slowly, One Step at a Time*

[No slides]

Yali Feng, University of Illinois

Starting out in evidence synthesis (ES) services can be a terrifying journey. With so much to learn, each new knowledge point seems to lead down an endless rabbit hole of details—each more perplexing than the last. In this lightning talk, I intend to share the raw experiences of growing under such pressure, and how one can learn to control the stress born from uncertainties and the intricacies of ES.

I spent my initial several months getting familiar with the multitude of tools, selectively reviewing templates based on which I designed a template that works for me. During this process, I faced time-consuming decisions and a series of questions—Do I need to learn this? Should I be doing this? Who benefits from this knowledge? And just how long will it take to master?

However, as time progressed, acceptance of stress and doubt as natural elements of the learning process became crucial. Adopting the philosophy of 'one step at a time,' I ensured that, despite the pace, progress was always at the forefront. Each consultation contributed another pearl to my professional strand, enriching my ability to build meaningful relationships with faculty and students.

This slow yet steadfast approach has significantly reduced my stress levels and integrated well into my pedagogy and outreach efforts, which is about being candid with what I know and don't know, devising a plan for unknowns, and delivering on my expertise.

C. *Search Strategy Review Service*

[\[View Slides\]](#)

Anna Ferri, Colorado State University

With only one Evidence Synthesis Librarian at Colorado State University, an R1 Research institution, the focus is on education via workshops, resource curation, and one-on-one or small group consultations. However, search strategy development is a core aspect of evidence synthesis where librarian expertise can make a fundamental contribution and which is challenging to replicate through educational workshops and support alone. A Search Strategy Review service was launched in August 2023 in order to meet needs for enhancing search strategy quality with less impact on the capacity of the Evidence Synthesis Librarian. In this lightning talk, I will discuss the goals of the service, the organizational structure, and the outcomes thus far, including the time and labor investment.

D. *Let's Go Exploring! Navigating the Peaks and Valleys of a Novice Research Team*

[\[View Slides\]](#)

Shelby Carroll, Clemson University

Karen Burton, Clemson University

Sally Smith (PI), Clemson University

Lindsey Baird, University of Alabama at Birmingham

Annabelle Holt, University of Tennessee

Amanda McLeod, Clemson University

This lightning talk will discuss the successes and challenges of a group of six early-career librarians working together to complete a scoping review about support services available to (you guessed it!) early-career librarians. This scoping review intersects with each librarian's personal research agenda, but also acts as practical experience in developing and executing a complex review type. The hope for the review is to further research into early-career librarian development and gain knowledge of evidence synthesis that will benefit patrons.

E. *Mentoring colleagues in evidence synthesis (as a relative novice) [presentation pre-recorded]*

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Carrie Cullen, University of California, Irvine

As our libraries in a public R1 research university began to expand and formalize our evidence synthesis service to include projects based in the social sciences, I found myself in an unexpected position --as a mentor to librarians who are new to evidence

synthesis, despite having no published reviews under my belt. In this lightning talk, I will share the highs and lows of this experience, as well as why I encourage all librarians to mentor their colleagues no matter where they are in their career.

F. *(A)sync and Swim: Helping Researchers Navigate the Seas of Systematic Searching*

[View Slides](#)

Hilary Kraus, Brown University

Sailing the ever-shifting tides of systematic searching is a challenge even for experts. Unfortunately, as the sole librarian consistently supporting evidence synthesis at a large R1 institution, it's impossible for me to design all desired searches. Instead I serve as a consultant and coach for faculty and students, most of whom need to significantly improve their search skills. To make this possible, I've created extensive asynchronous instructional resources, hosted on a LibGuide, to help researchers who are novice or intermediate searchers avoid getting caught in riptides as they enter the challenging waters of systematic searching. By engaging with text, images, presentations, and videos, they gain the competence and confidence to strike out on their own, with the opportunity to request a life preserver—synchronous support and asynchronous assistance by email—when they need it. This presentation will introduce the goals, strategies, and tools used to develop these resources.

G. *Right Librarian, Wrong Review [presentation pre-recorded]*

[View Slides](#)

Lauren Stieglitz, University of Alberta

In recent years, evidence synthesis has become more popular in the Biological Sciences, leading to more requests from Biological Sciences graduate students for assistance with “systematic reviews.” However, most of the time, students are advised to do a systematic review, when their research plan actually requires a scoping review. To address this problem, I devised a new strategy to support evidence synthesis for Fall 2023. This strategy involved updating my promotion of systematic and scoping review services through various channels, and enhancing the materials and methods I use to teach evidence synthesis. This presentation will share my experience of guiding researchers to the “right” review, and offer insights and suggestions for librarians who encounter the same issue.

H. *Strategic Collaboration: Balancing Opportunities and Expertise*

[No slides]

Yali Feng, University of Illinois

After the completion of ESI in 2022, I provided ES related research consultations at least 15 times and collaborated as co-author 3 times, with topics ranging from social work, psychology, and applied health to related interdisciplinary areas. In this lightning talk, I will share my reflections about how to pick my role with ES in such cases so that I can effectively choose between general ES consultation services or co-author collaboration depending on my expertise and assessment of collaborators strengths. The key takeaway is the necessity to identify collaborators who are both able and willing to see a project through to its conclusion before committing to collaborating. It has also been essential to maintain consistent a clear implementation strategy that includes regular follow-up and monitoring of ongoing work. As a tenure-track librarian, I have learned the importance of maintaining a clear focus in my area of expertise, and to 'resist the temptation of opportunistic collaborations that do not align closely with my goals. This contrasts with my beginning in the learning stage, when due to pressure and uncertain expectations, I grabbed any opportunity that came along. With increasing expertise and clarity around my research agenda, I have gained more flexibility and freedom to be discerning. I will also share the challenges I ran into and invite contributions from the other attendees.

I. *Creating a series of Campbell Collaboration blog posts about the Evidence Synthesis Institute*

[\[View Slides\]](#)

Alice Cann, Brunel University London

In addition to evidence synthesis, reflecting on activities through writing about them is a current and developing interest for me. I often write on my own blog, including a post about the Evidence Synthesis Institute I attended, but expanded this when The Campbell Collaboration was asking for contributors for their blog.

In this lightning talk I would share the experience of deciding what to cover in a series of four blog posts, of writing and of promotion when they were published. The posts look at the value librarians can bring to evidence synthesis projects and describe opportunities for learning and development, going in to more detail about the Evidence Synthesis Institute.

J. *The Evolution of CMU Libraries' Evidence Synthesis Service: An Overview*

[\[View Slides\]](#)

Ryan Splenda, Carnegie Mellon University

CMU Librarians trained in evidence synthesis methods began offering formalized support to CMU students, researchers, and staff over the past few years through the newly created Evidence Synthesis Service. Since its inception, the Service has seen growth in the number of service and training offerings as well as participation in several,

in-depth ES-related projects on campus. This lightning talk will highlight the CMU ES Service, discuss its growth over the last few years, and shine light on several collaborative, interdisciplinary projects that have enhanced overall CMU Libraries collaboration and support efforts with the CMU research community.

3:00-3:30 pm Break

3:30-5:00 pm Concurrent sessions.

1. Presentations: Methodologies and review types, Supporting Evidence Synthesis.

A. *Librarians as Co-Pilots: Guiding Education Faculty through Their First Evidence Synthesis Project*

[View Slides](#)

Amy James, Baylor University

In an era where evidence-based practice is paramount, a growing number of education faculty and other social scientists are turning to evidence synthesis to inform their research and teaching. However, for those new to evidence synthesis, the process can be daunting. This presentation seeks to address the specific needs of education researchers who are new to the evidence synthesis process and focuses on the support that librarians can provide when working with this population. Highlights include helping to demystify evidence synthesis and the importance of building a foundation that emphasizes the value of integrity and maintaining the rigorous standards of this research methodology.

B. *On the Road to Non-RCT Evidence Synthesis Protocols*

[View Slides](#)

Jade Winn, University of Southern California

Since non- RCT evidence synthesis work has been growing steadily over the past decade many researchers struggle with what to do in Covidence once you get to the data-extraction step (as it is not set up for non RCTs). As good researchers we have been following and citing Moher, et.al. and Page et. al. but these PRISMA protocols and the software developed to facilitate them are not producing standardized and reproducible outputs for non- RCT evidence synthesis publications. In Social Work JBI has a newer set of protocols but it doesn't fit with many disciplines. Multi-disciplinary evidence synthesis is growing and it is important to have protocols that can be used regardless of discipline. While the front end of PRISMA protocols work well (question formulation and inclusion and exclusion variables) in order to increase the quality of non RCTs evidence synthesis publications, it is time we explore protocols that increase validity and reproducibility. This session is to introduce some constructs that may

help us on the road to having non RCT evidence synthesis protocols that improve, specifically, the team construction, the systematic search, data extraction, quality control, and standardized reporting. While this session is not the end game- it is the starting point of identifying the issues and creating some solutions on the road to more practical protocols that can increase reproducibility, streamline our search processes, and guide researchers to more valid and robust publishable deliverables.

C. *Leveling Up: Assessing Online Resources for Meta-Analyses Post Evidence Synthesis Institute*

[\[View Slides\]](#)

Monica Maher, University of Nebraska Omaha

Continuous assessment and editing of lesson plans and learning resources is crucial in order to assure students are benefiting from library instruction and the library's resources. In Fall 2022, with collaboration from faculty in the Biomechanics department, an online module focused on a mini meta-analysis project was created and integrated into a Biomechanics graduate course for the first time. This module focused on databases, research tips, and citation management techniques specific to the project. After attending the Evidence Synthesis Institute in August 2023, and gathering feedback from Biomechanics students and faculty, changes were made to enhance the online module to better support students in meeting learning outcomes and completing a successful mini project. This session will provide one librarian's reflections on the changes made, lessons learned, and future plans for the project and coordinating online resources module.

D. *Five Times It Wasn't An Evidence Synthesis, and One Time It Was*

[\[View Slides\]](#)

Amanda McLeod, Clemson University

Evidence synthesis is gaining in popularity in the social sciences, but researchers don't always fully understand the nature and complexity of these reviews. This presentation will address how one social sciences subject librarian navigates evidence synthesis requests in the absence of a formal service with examples of helping researchers identify appropriate research methodologies. It will conclude with an overview of an ongoing review where the presenter is a full member of the research team.

E. *Training for Evidence Synthesis: Designing, Facilitating, and Assessing a Three-Day Immersion Model*

[\[View Slides\]](#)

Hannah Chapman Tripp, University of Texas at Austin

Meryl Brodsky, University of Texas at Austin

Grant Hardaway, University of Texas at Austin

We piloted a cross-disciplinary boot camp model in January 2024 designed to train and support selected evidence synthesis teams. Over the course of three days, librarians primarily from the STEM and Social Sciences engagement team taught evidence synthesis methodologies and best practices with the objective outcome of creating a sound protocol. The boot camp consisted of multiple session types including large group presentation, small group round-robin, and one-on-one subject librarian support. We assessed the event and training model using before and after surveys, qualitative feedback, and plan to track the progress of the reviews to identify whether they were published. At an R1 university with over 50,000 FTE and a small team of subject liaisons who support evidence synthesis as a modest percentage of their duties, this Boot Camp model appealed to us as a well structured support method for evidence synthesis.

2. Presentations: Teaching and outreach

A. *Constructing Success: Building a Systematic Review Tutorial in a Diverse Research Landscape*

[\[View Slides\]](#)

Karen Burton, Clemson University

Shelby Carroll, Clemson University

Sally Smith, Clemson University

Clemson University Science Librarians serve a variety of researchers at a large R1 land-grant institution aiming to significantly increase research output. Systematic and other complex reviews are an increasingly common project that librarians are asked to consult or collaborate on, and there has been an increase in systematic review requests across disciplines. To address education of the research team and liaison librarians on systematic review methodology, the team decided to create an asynchronous self-paced online tutorial. This presentation will discuss challenges to implementing this project including: Organizing a tutorial for researchers in diverse areas of study, scope of material to include, integrating library services, and creation of new services and guidelines. A compounding factor to these challenges is the varying levels of systematic review knowledge and experience shared by the Science Librarian team. We will also

discuss next steps and future areas of research after implementation of the final tutorial.

B. Future Scholars? Introducing undergraduates to evidence synthesis

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Ellen Cline, Elon University

How do we talk about evidence synthesis with undergraduates? This brief presentation summarizes a 2023 workshop delivered to undergraduate students enrolled in a summer research experience. Students were introduced to the broad topic of evidence synthesis through a mixture of step-by-step explanation and examples borrowed from existing secondary research literature. Attendees were numerous yet takeaways were mixed. What went over well, what went wrong, and what ended up somewhere in between? This presentation will cover outreach strategies, topics discussed, questions asked, student takeaways, and lessons learned.

C. Training on systematic review? Will you be doing that for staff too? I'd find it really useful

[\[View Slides\]](#)

Alice Cann, Brunel University London

An account of training on Systematic Reviews designed and delivered for Doctoral Researchers and Masters students, in live training and a series of recorded videos. Including building opportunity for training, identifying elements to focus on, experience of delivery and overcoming imposter experiences, and reflection on feedback from attendees. Plus plans for using this experience to create training for academic staff.

D. Empowering Future Practitioners: Integrating Evidence-Based Medicine Through a Critically Appraised Topic Assignment in Physician Assistant Education

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Laura Kuo, Ithaca College

This project describes a semester-long Critically Appraised Topic (CAT) assignment in the third Evidence-Based Medicine (EBM) course, in a series of three, for a Physician Assistant (PA) program. Inspired by insights and confidence gained from attending the Evidence Synthesis Institute, the course instructor designed a CAT assignment that encourages second year PA students to critically appraise and synthesize current medical evidence in groups of four to five. The assignment's structure aligns with real-world medical scenarios, preparing students for evidence-based decision-making in clinical practice. Using

PICO students create an answerable clinical question; conduct and document a comprehensive literature search in two databases; visually graph the research process via the PRISMA flowchart; critically appraise articles using an appropriate standardized tool; analyze and synthesize the results to make evidence-based recommendations; and present their findings during the last class of the semester. Using CATs in the classroom helps bridge the evidence and clinical application.

E. Examining Undergraduate Research Opportunities Using Evidence Synthesis Methodology: A CMU Libraries Case Study

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Ryan Splenda, Carnegie Mellon University

Librarians trained in evidence synthesis (ES) methodology partnered with researchers at the CMU Office of Undergraduate Research and Scholar Development to participate in a scoping review on the impact of reflection exercises and strategies on student learning. A unique element in this collaboration was the involvement of several undergraduate students who participated in several steps of the scoping review as a part of the Summer Undergraduate Research Apprenticeship program offered by the Office. Librarians and researchers trained the students on several steps including defining inclusion and exclusion criteria, the search process, title and abstract screening, and full text retrieval. Students were also trained on the Sysrev platform, which is being used for this scoping review. This presentation will discuss this unique partnership, the training and steps that have been completed in the scoping review to date, and several professional development opportunities that have resulted from this work.

Thursday, April 18, 2024

9:00-10:30 am Tech Talks

A. dedupr: an R package and shiny app that removes duplicated citations from multi-database searches

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Chao Cai, Purdue University

Chaitanya Patange, Purdue University

Removing duplicated citations from multiple database searches is an essential step in evidence synthesis projects. We developed an R package and shiny app, named dedupr, to automate and streamline, the Bramer's deduplication method, which is a reliable and widely adapted deduplication procedure. The dedupr package contains functions to import citation files from user, remove duplicated

citations, export deduplication results into an RIS file, and generate a summary table that list the number of citations remaining in the deduplicated list in each database, which in compliance with the PRISMA2020 requirement. We developed a web-based app based on the algorithm of the dedupr package, to provide people with access to the functional benefit of dedupr without any R coding requirement. The interface of the dedupr app is simple with an upload button (Browse), progression tracker, and download buttons for deduplicated RIS file and the summary table.

B. Tracking evidence synthesis projects using Springshare's LibAnswers queue [presentation pre-recorded]

[\[View Slides\]](#)

Carrie Cullen, University of California, Irvine

As our libraries in a public R1 research university began to expand and formalize our evidence synthesis service, we needed a low-cost, low-maintenance solution for determining which librarian would take on a given project and tracking the progress of each project over time. In consultation with our web developer, we created a custom intake survey using Drupal and coded it to direct responses to a dedicated LibAnswers queue. From here we use internal notes to discuss who is available to take on a project and apply customized tags to communicate where we are in the process of each review. Librarians and their supervisors can now see how many projects each is currently juggling, and we can easily run reports for review purposes. In this tech talk, I will demonstrate the workflow and provide a top level overview to assist other institutions in following this model.

C. Evidence Synthesis and AI tools

[\[View Slides\]](#)

Olga Koz, Kennesaw State University

Recent advances in AI systems, particularly generative AI, allow automating evidence synthesis tasks to reduce time and human burden. The author collaborates with experts in evidence synthesis and AI development but welcomes any new expert to ensure that AI tools are compatible and easy to integrate. Currently, not all generative AI apps are transparent about the source of data that has been trained and harvested and searching algorithms.

In this presentation, the presenter will:

- Describe and evaluate the latest AI tools using established and new evaluation metrics to ensure their effectiveness and reliability. This involves comparing the AI's performance to that of human experts or non-AI platforms. It's critical to define clear evaluation metrics.

- Define which specific stages of evidence synthesis can be automated using AI. Conceptualizing, research question development, searching, screening, and analysis are all potential areas for AI assistance.

D. Introducing Cognetto: Customizable Data Extraction and Quality Control for non-RCT evidence synthesis

[\[View Slides\]](#)

Jade Winn, University of Southern California

Cognetto is a new software in user experience trials developed to automate data extraction and quality control for non RCT evidence synthesis projects. This tool is efficient and effective for both meta-analysis and systematic reviews. Built with AI it is a solution to using Covidence for data-extraction now. Once completed it will be able to replace Covidence for the entire ES process of non-RCT evidence synthesis. With an easy user interface and customizable extraction forms it currently expedites the data-extraction phase making it faster to complete evidence synthesis projects. Once completed the AI shows potential to automate the screening processes as well. This revolutionary new tool has the potential to change the protocols for evidence synthesis through thoughtful AI designed for non- RCT evidence synthesis projects.

E. Sponsor Talk: Covidence: Systematic Review Technology

[\[View Slides\]](#)

Stephanie Hawkins, Covidence Community Manager

10:30-11:00 am Break

11:00 am-12:00 pm Closing Keynote - Whitney A. Townsend

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12:00-12:30 pm Closing remarks

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