

**Presentation delivered at the Congress of Academic Library Directors (CALD) of Maryland on April 26, 2019**

Track: Meeting User Needs

Loyola Graduate Center, Columbia Campus 8890 McGaw Rd., Columbia, MD 21045

### **Abstract**

Scholarly communities are producing more articles every year due to the implementation of speedy review processes and innovative technologies for research dissemination. To quickly inform best practices and policies, systematic reviews started flourishing beyond the health and medical sciences. Researchers from other subject disciplines including education, engineering, agricultural, library, humanities and social sciences, explore ways to compile, analyze and evaluate in a systematic way the best evidence to inform future practices. To address this growing need, University of Maryland Libraries launched a pilot program in two phases under the Research Commons Unit to introduce researchers to the process of conducting systematic and scoping reviews. The primary focus of this presentation will include the development of workshop series designed based on the registrants' feedback. Future plans for assessment and evaluation will be shared as well.

## What is a systematic review?

“A properly conducted systematic review faithfully **summarizes the evidence** from all relevant studies on the topic of interest, and it does so **concisely and transparently.**”

(Cook et. al, 1997)

“The application of strategies that **limit bias** in the assembly, critical appraisal, and synthesis of all relevant studies on a specific topic.”

(Porta, 2008)



Image: Pixabay.com



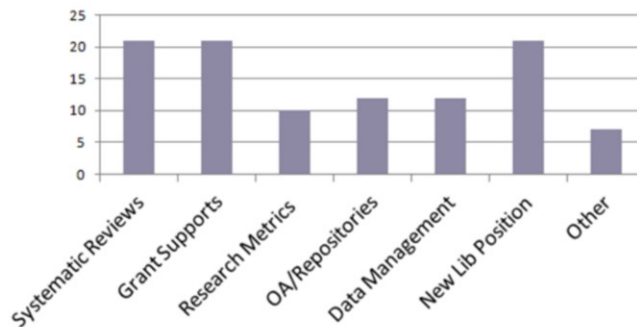
(Nedelina)

So, let's start with a simple definition of what is a systematic review. (Read the definitions from the slides).

Systematic reviews originally started within the health and medical sciences. The goal is **to summarize high quality studies** on a particular topic and to provide a high level of the evidence on **the effectiveness of healthcare interventions**. The focus is on **primary literature** and it uses a protocol and everything in that seeks to mitigate bias. For example, systematic reviews are undertaken by **a group of researchers** who independently review the collected studies and discuss any conflicts in the decision-making process. Contrary to literature reviews, systematic reviews take from **6 to 18 months to complete** depending on the complexity of the research topic.

## Why focusing on this type of review ?

### Results: Service Types



(Visintini et al., 2017)



(Nedelina)

As you can see from this study, new services have emerged in the libraries and systematic reviews along with grant support are leading the list. Demand for literature searches has sky rocked today even beyond the health sciences disciplines and we need to be prepared to meet this trend.

## The beginning of the SR journey


In June 2016, Nedelina was invited to participate in research related to refugee health.



(Nedelina)

I am experiencing myself a high demand of request for literature search assistance.

**In 2016**, I was invited to assist with a literature review with a tight deadline. I assisted the team with the literature searches, finding full text of articles and managing the manuscript. I contributed to the writing of the methods section, created graphs and tables, and managed the references. Working in different time zones with researchers from Netherlands, Canada, as well from the US states from the west coast, was a challenge to address issues in a timely manner. After this successful effort, the research study has been published and it has been already cited 4 times according to Google Scholar.



Then came the flood!

Image: [Adota.com](https://www.adota.com)


**February 2017**

*I am a new faculty member and Center Director in the School of Public Health. Can you tell me what **type of support** the library offers **for literature searches** in both the peer-reviewed and grey literatures?*

**January 2018**

*[...] I also have a question for you about **a systematic review** I am planning to do.*

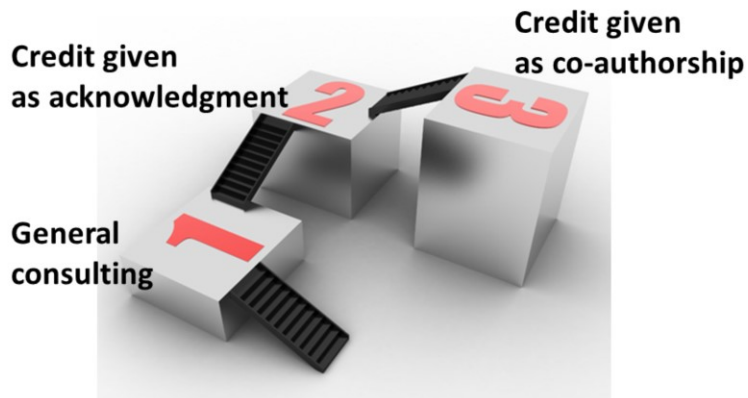
...and requests kept flooding my email!



(Nedelina)

After this enlightening collaboration, I started receiving more and more requests for literature searches, and systematic reviews. Then, I learned from colleagues who are co-presenting with me today, and from Stephanie who was not able to join us but is a great member of our team, that they have experienced an increased number of requests for literature searches not only from faculty but from graduate students as well. We all have submerged in the database searches and spent **an enormous amount of time** on faculty's projects. We faced some challenges with some faculty who have procrastinated in doing their own share and thus some projects remained unfinished. In order **to reinforce accountability** in the process and to make sure that everyone in the team is doing their share of the work, we had to come up with a strategy to set up the boundaries of our time commitment.

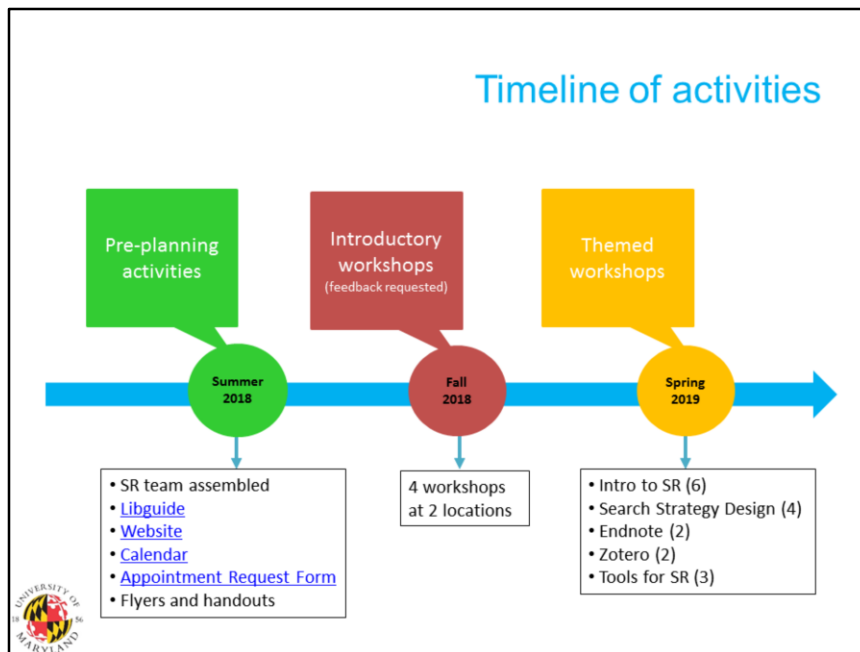
## Tiered systematic review services



(Sarah)

To avoid having any work time wasted and not acknowledged, we developed three levels of systematic review service:

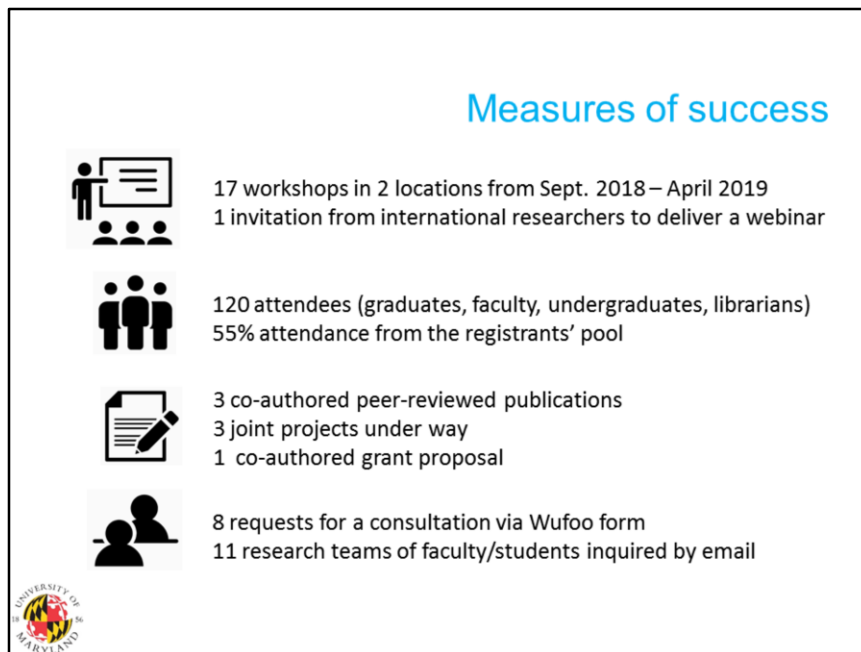
- **Tier 1: General consulting** - we offer assistance to researchers interested in how to do a regular literature review. In a one hour in-person consultation, we will provide a basic overview of the systematic review process such as developing a protocol, designing a search strategy, selecting relevant databases, collecting and organizing studies, screening the results and writing the manuscript.
- **Tier 2: Credit given as acknowledgement** - at this level, we offer assistance in generating key terms, creating search strings for specific databases, and/or reviewing search strings created by the researcher. The researcher should acknowledge the librarian in the final publication.
- **Tier 3: Credit given as co-authorship** - at this level, we develop the search strategy, execute the searching in various databases, manage the studies and prepare them for screening by the researcher and write any portion of the search methodology. The researcher should agree to include the librarian as a middle author.



(Sarah)

**In the summer of 2018**, a systematic review team has been assembled consisting of librarians with various subject expertise and different levels of systematic review knowledge. The less experienced of us learned the ropes of this type of research from the others who have already underwent a training. We set the stage by preparing the online presence of the workshop series. We developed a Libguide outlining the systematic review process and the tools needed at every step. We created a website under the Research Commons as this unit had already in place a suite of workshops including Geographical Information Systems (GIS), Statistical consulting, and Programming languages workshops. The Head of the Research Commons along with her staff were instrumental in scheduling workshops and managing the registration. To filter the regular research consultations requests from the systematic review ones, we developed a separate form which included additional information pertinent to the systematic review (e.g. research question developed, benchmark articles, deadline for completing the review, collaborators, etc.).

**In the fall 2018**, we ran only 4 introductory workshops in two locations to solicit feedback from participants to inform our future programming. So, they asked for the topics outlined in the box under **spring 2019** and we delivered these topics a la carte in several locations on and off-campus!



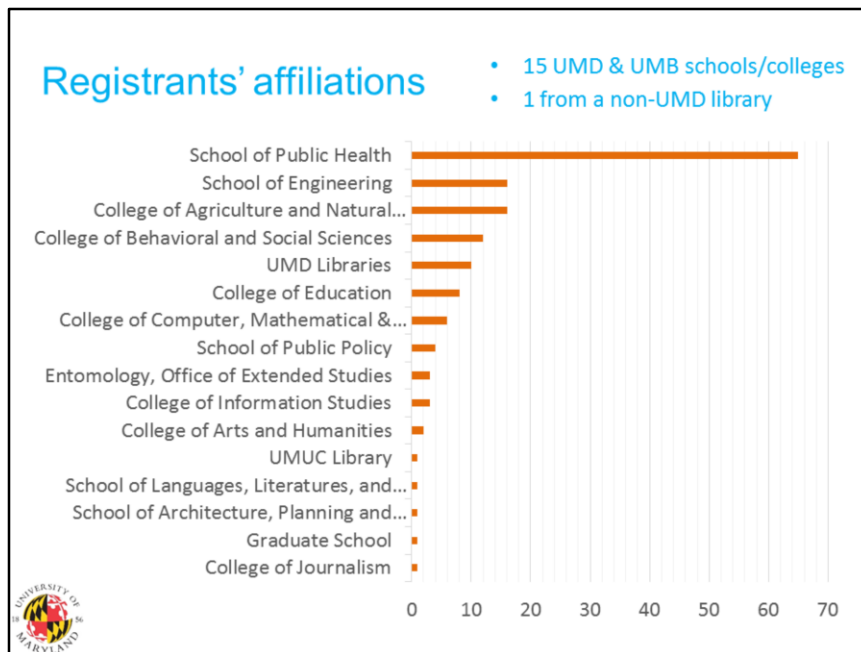
(Eileen)

On this slide you can see a few facts that describe the success of our suite of workshops on systematic review. **Attendance and use of the service** has been higher on UMD main campus than at the Universities at Shady Grove, but in general, our workshop attendance does tend to be lower for all workshops since we have a non-residential student body and a smaller number overall of students and faculty. Also, we are not as research-intensive of a campus, but this will be changing over the next few years so that is why I wanted to start offering this service. We also found that several UMD graduate students not in programs at USG, actually live closer to USG than UMD so having workshops there made it more convenient for them. In this way, the Libraries are also expanding their reach since the USG library is technically a branch of UMD Libraries.

Images:

- Classroom by David from the Noun Project
- Work Group by Oksana Latysheva from the Noun Project
- Writing by Vectors Market from the Noun Project
- Consultation by romzicon from the Noun Project





(Eileen)

Looking at the registration lists, interest came in from many colleges and schools on campus. It is not surprising that the School of Public Health in College Park is leading the list. Systematic reviews originated from this subject discipline and due to the close relationships of our systematic review team with respective departments, our schools are also in the first top of this list – School of Engineering, and College of Agriculture and Natural Sciences.

At USG, also had two attendees from UMB's School of Pharmacy, one attendee from Montgomery College who is part of the Terp Transfer Program and will be attending UMD's Accounting Program at USG, and one attendee from UMBC's Industrial and Organizational Psychology Program (3). Other registrants were from UMB Social Work program (2) at USG, UMD Information Science program and UB Simulation and Game Design Program.

## Demand for additional services

- Discipline-focused workshops
- Database searching and differences between them
- Dissertation writing
- Video tutorials, streaming presentations
- And...



(Eileen)

At the end of each workshop, we handed out evaluation forms asking attendees to write down 3 things they have learned, 2 things they still don't understand and 1 suggestion for future workshops. They suggested:

1. Delivering more **discipline focused workshops** because we drew the guidelines and practices from the health disciplines which can be applied to other disciplines. A professor from the Hearing and Speech Sciences Department requested a separate instruction session specifically designed for her class (HESP 601).
2. **Database searching** – they were familiar with Google Scholar but not of the functionality of the databases' search features.
3. **Dissertation writing** – some attendees found SR framework applicable to their dissertation writing in terms of designing literature searches, managing the findings and using tools for conducting the entire research process.
4. **Streaming presentations** for those who can not attend in person, as well for those who found our SR Libguide online and asked for delivering a webinar, as it was the case with researchers from Nigeria.
5. And...

## Coffee please!

One suggestion I now have for future workshops

Coffee (probably not realistic)  
Bw thanks! This really  
helped & I will pass along to  
my students.



Image: [Sea Circus](#)



(Eileen)

.... several attendees asked for **coffee** despite the fact that we have provided chocolate during the workshops.

## Looking to the future

- Deliver a webinar in May
- Debrief and reflect on past experience
- Develop a course for credit?
- Publish an article in open access journal?

The sky is the limit because...



(Eileen)

... we have the support of our administration  
and colleagues!

THANK YOU



(Eileen)

## References

- Cook, D. J., Mulrow, C. D., & Haynes, R. B. (1997). Systematic reviews: Synthesis of best evidence for clinical decisions. *Annals of Internal Medicine*, 126(5), 376–380.
- Porta, M. S. (Ed.). (2008). *A dictionary of epidemiology*. (5th ed.). Oxford ; Oxford University Press.
- Visintini, S., Boutet, M., Helwig, M., & Manley, A. (2017, May 15). Research Support in Health Sciences Libraries: A Scoping Review. Retrieved from <https://doi.org/10.7939/R3901ZT55>



# Questions?

We would love to hear from you!

**Nedelina Tchangalova**

Public Health Librarian

[nedelina@umd.edu](mailto:nedelina@umd.edu)

**Eileen Harrington**

Assistant Director and Health & Life Sciences Librarian

[eharring@umd.edu](mailto:eharring@umd.edu)

**Sarah Over**

Engineering Librarian

[sover@umd.edu](mailto:sover@umd.edu)

**Stephanie Ritchie**

Agriculture and Natural Resources Librarian

[sritchie@umd.edu](mailto:sritchie@umd.edu)

