

# The MidContinental Messenger

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## NNLM MCR Welcomes Chris Pryor

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The NNLM MCR has named Christina Pryor, MLIS as the new Library Engagement and Missouri Coordinator in the MidContinental Region following the retirement of Barb Jones.

Chris joins us from the University of Washington Health Sciences Library in Seattle where she served as the Assistant Director and Community Health Education Coordinator overseeing the HEALWA program. Her role was focused on the areas of marketing, outreach, and advocacy. She was an active member of the Washington Library Association serving as the Chair of the Academic Libraries Division as well as serving as a member of the Legislative Committee.

Prior to joining the UW in January 2017, Chris had lived in Missouri since 2001 working in the fields of marketing, sales, and biomedical publishing before entering the field of librarianship upon completing her MLIS at the University

of Missouri in 2008. Chris has since served as the Consulting and Education Services Manager for Amigos Library Services, the Reference Manager for the St. Louis County Library System, and as a Medical Research Librarian for Covidien/Mallinckrodt.

She is an active member of ALA and SLA, who named her a Rising Star in 2011. Chris is currently serving as the Conference Chair for the Library Marketing and Communications Conference which will be held in St. Louis, Missouri this fall.

Chris and her family are thrilled to be back in Missouri and she is excited to be supporting libraries across the MidContinental Region. Please feel free to contact Chris at 573-884-5042 or [pryorc@missouri.edu](mailto:pryorc@missouri.edu).

## On the Road for Precision Medicine

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On a Saturday afternoon at a Salt Lake City Public Library branch in the multi-ethnic Glendale neighborhood, a blue bus sits in the parking lot with a slogan on the side: “Driving toward the future of health.”

Accompanying the bus is a trailer and a staff of friendly ambassadors who take visitors on a tour of the concepts behind precision medicine and its relationship to a research program that is methodically looking for a million or more volunteers.

The *All of Us* Journey is open for business.



*Francisco Huizar manages the Journey crew that visited Salt Lake City.*

“What we are doing is traveling around the country trying to educate people on the importance of participation in research and why participating in precision medicine is key,” said Francisco Huizar, tour manager for the Journey, a traveling exhibit visiting libraries and other venues that serves as an informational and recruiting tool for the *All of Us* Research Program overseen by the National Institutes of Health.

The trailer part of the set-up features short activities that explain the concept of precision medicine, an approach to research, diagnosis and treatment that relies on advances in technology to focus more closely on individual differences among patients. The bus portion serves as a recruiting station for the program, which asks volunteers to share their health data in the interest of diversifying the pool of people whose data are available to biomedical researchers.

Volunteers for the program agree to have their health data – including biomedical samples, access to health records and survey answers about their health habits – placed into a privacy-protected database that future researchers can use for a full range of inquiries. Plans call for willing participants to be tracked for at least 10 years.

“Right now when you visit the doctor there tends to be this one-size-fits-all mentality,” Huizar said. “You and I both know one size does not fit all. The only reason that it’s done that way thus far is that there’s not enough research to do it any other way. That’s where the *All of Us* Research program comes in.”

The miniature health fair held at the Glendale Branch is typical of how the Journey goes about its mission, whether at a library, YWCA or other location. The Journey sets up shop, preferably with the support of other activities like the health screenings offered by the University of Utah Wellness Bus at this event.



*The two-part Journey unit includes a trailer for exhibits and a bus used for recruitment.*

The two-part Journey unit includes a trailer for exhibits and a bus used for recruitment.

Journey staff are on hand at the exhibit trailer to explain how the activities relate to precision medicine and the *All of Us* mission. The additional activities bolster the Journey’s impact, and vice-versa.

Visitors usually start with an exhibit that points out one of the most basic examples of individualized medicine, prescription eyeglasses. It includes a virtual reality activity in which participants get to experience life with certain medical conditions. After the exhibit, participants over the age of 18 are given an opportunity to sign up for the program if they would like.



*Mel Lopez, assistant tour manager, helps a visitor with virtual reality equipment used in the exhibit.*

“People understand the importance of it,” Huizar said.

The Journey’s two units have visited communities as big and urban as Houston, Texas, and as small and rural as Cody, Wyoming. Their primary focus is on populations underrepresented in biomedical research, which can include racial and ethnic minorities, women, rural and urban populations, those with low income, LGBTQ communities, and several other categories of people.

For libraries, the Journey makes an interesting visitor to the parking lot or addition to an outreach event, and it pairs well with other health-related activities. The Journey’s support staff can provide information on the logistical requirements necessary for hosting the exhibit.

Library staff interested in hosting or volunteering for the Journey can go to <https://www.joinallofus.org/en/journey> for more information or call (833)-ALL-OF-US. Or they can contact the National Network of Libraries of Medicine *All of Us* community engagement coordinator through the NNLM regional medical library

for their area for information on both the Journey and library funding opportunities.

Those interested in signing up to be a participant in the research program can learn more at [JoinAllOfUs.org](https://www.joinallofus.org).

-George Stawley, All of Us Community Engagement Coordinator

## 2018-2019 Technology Improvement Awards

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Understanding that technology can play a vital role in health equity, the NNLM MCR now offers a Technology Improvement Program. This program is available for network members and offers competitive awards of up to \$1,500 for the purchase or development of technology that is used to improve access to health information. These awards were first offered during the 2017-2018 fiscal year and funded a health information display system and a virtual reality lab. This fiscal year, we were able to fund three projects scheduled to be completed January 31, 2019:

**Tablet Lending for Cancer Patients and Caregivers** from the University of Nebraska Medical Center McGoogan Library: This project aims to develop a tablet lending program for cancer patients and their caregivers. The tablets will be made available to provide health information and mindfulness tools that can be used during long stays in a waiting room.

**Interactive Online Learning Modules** from the University of Kansas Medical Center Dykes Library: This project will be creating interactive online learning modules for a medical campus. We're funding training and the software used in production of these modules that will be shared openly.

**Virtual Reality Tour of the Human Eye and Brain** from the University of Utah Moran Eye Institute in collaboration with the Spencer S. Eccles Health Sciences Library: This project is working to develop an open source virtual reality model of the human eye and brain that can be used for health education.

Technology Improvement funding will again be offered for the 2019-2020 fiscal year. You should expect to see the call for applicants in early 2019. If you have a project idea, we'd love to fund it! Feel free to reach out to the [Technology Coordinator](#) with any questions.

-Alicia Lillich, Technology/Kansas Coordinator

## NNLM MCR Funded Outreach Projects 2018-2019

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The NNLM MCR has selected some exciting health information outreach projects for 2018-2019. This year we were able to fund three public library programming awards and two K-12 school partnership awards. We are early into the projects, but are eager to see how each develops and grows throughout the funding period.

New funding opportunities for 2019-2020 will be posted soon!

### Public Library Programming Awards

The purpose of this award is to fund public library programming to increase the awareness of and education on health topics incorporating health information resources relevant to their service community, with a particular focus on the public health priorities of their community and programs for underserved populations.

#### Blue Hill Public Library: Healthy Cooking with Kids

**Target Audience:** Children and parents/caregivers

**Project:** The focus of this project will be to provide instruction on healthy eating and developing healthy lifestyle choices. Cooking classes will be offered, focusing on easy-to-prepare healthy recipes, and will be accompanied by an area nurse practitioner to talk about nutrition.

**Project Budget:** \$1,500

**Independence Public Library: Family Matters Physical, Mental and Financial Health**

**Target Audience:** Area families with children living in poverty

**Project:** Will provide a three-focus area approach, providing programming on physical, mental and financial health. Budget items will include a variety of small exercise equipment and cooperative tabletop games to encourage family time and connecting. The library will collaborate with area organizations and health professionals to provide presentations.

**Project Budget:** \$1,500

**Summit County Library**

**Target Audience:** Area residents, all ages

**Project:** Summit County (UT) has the highest incidence of skin cancers in the United States. The goal of this project is to raise awareness of the risks associated with skin exposure due to sun or indoor tanning, and to promote easy-to-implement prevention strategies. The library will collaborate with several area organizations to host public information events.

**Project Budget:** \$1,500

**K-12 School Partnership Awards**

The purpose of the K-12 School Partnership Award is to support new or existing collaborative projects between a library (public, community college, academic, or health sciences) and a K-12 school entity (school library, school nurse, health/science teacher) to promote and/or introduce National Library of Medicine health information resources.

**Maltman Memorial Library: After School Program**

**Target Audience:** Middle school students

**Project:** Physical activity in and out of school has declined for the area's children. This project will provide physical activity sessions to get kids moving, and programs with area health professionals to learn about nutrition and healthy lifestyles.

**Project Budget:** \$2,500

**Red Feather Lakes Community Library: Partnerships Making Our Community Stronger**

**Target Audience:** Preschool to 5<sup>th</sup> graders and their families.

**Project:** The small mountain town of Red Feather Lakes is in a food desert, with the closest grocery store 45 miles away. Up to 50% of students at the local elementary school qualify for free or reduced lunch, but the school does not have an adequate kitchen to offer the program. The project would bring together the public library and the elementary school to offer cooking classes and presentations for students and family members on healthy eating on a budget, and utilize NLM health information resources to help students understand nutrition as it relates to body function.

**Project Budget:** \$2,500

To learn about past funded MCR projects, visit our [Funding](#) page.

-Dana Abbey, Colorado/Community Engagement Coordinator



## Biomedical and Health Research Data Management for Librarians

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The National Network of Libraries of Medicine Training Office (NTO) is delighted to announce this year's participants in the Biomedical and Health Research Data Management for Librarians course!

This program offers a 7-week online training course, providing the basic knowledge and skills for information professionals interested in advancing research data management services at their institutions. Participants gain a better understanding of the research data life cycle, current data issues and policies, and practical skills to support the development research data management training and services at their institution.

The following participants were chosen from a large group of competitive applicants:

- Abbey Griffith, Kansas City University of Medicine and Bioscience
- Adrienne McPhaul, University of South Alabama Biomedical Library
- Amanda K Sprochi, University of Missouri
- Brenda Pfannenstiel, Children's Mercy Hospital
- Caroline McKinley, New York Medical College
- Carolyn Jackson, Texas A&M University, Medical Sciences Library
- Emily Kilcer, University at Albany
- Erin Reardon, Health Sciences Library at LSU Health Shreveport
- Gina Cahoon Firnhaber, Laupus Health Sciences Library, East Carolina University
- Hannah Craven, Indiana University School of Medicine
- Iulia Kristanciuk, National Library of Medicine
- Jackie Werner, Philadelphia College of Osteopathic Medicine
- Janice Hermer, Arizona State University Library
- Jean Jenkins, Lourdes Hospital
- John P. Bourgeois, Louisiana State University Health Sciences Center – New Orleans
- Kelly O'Brien, American Dental Association
- Kristina Wagner, Loyola Notre Dame Library
- Kristy Padron, Florida Atlantic University Libraries
- Lee Ann Fullington, Brooklyn College, The City University of New York
- Mason Baldwin, Louis VA Medical Center
- Michael Davidson, National Library of Medicine
- Nha Huynh, Texas Medical Center Library
- Nicole Dinatale, Formerly Purdue Pharma LP
- Pamela Buzzard, Northern Arizona University

- Pamela Asquith, Intermountain Healthcare
- Rebecca Renirie, Central Michigan University Libraries
- Renee Walsh, UConn Library
- Robin Bowles, Villanova University- Falvey Library
- Rosaline Odom, Atlanta University Center (AUC) Robert W. Woodruff Library
- Rose Fredrick, Creighton University
- Sarah Clarke, National Library of Medicine
- Sarah Helson, National Library of Medicine
- Shawn Steidinger, Eccles Health Sciences Library, Univ of Utah
- Sudha Ramakrishnan, Baylor Health Sciences Library
- Susan Thomas, Indiana University South Bend
- Traci Tosh, Albany Medical College
- William Dean, Temple University
- Wynn Tranfield, UCLA Biomedical Library

Congratulations to our new participants!

## **K-12 Cross-Curricular Teaching in Health and Science, Yes You Can!**

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Collaborations aren't always easy – they require clear communication, negotiation, shared vision, resources, and time. But the investment can pay off big, especially in the classroom. Over the years educators have learned that cross-curricular collaboration can lead to deeper learning providing the student with understanding, as well as knowledge and skills.

K-12 cross-curricular collaboration in the health and science content areas might seem daunting, if not impossible, but the National Library of Medicine (NLM) has created a wealth of resources to help teachers and school librarians accomplish this. NLM learned from focus groups, discussions with teachers at conferences, and those who have collaborated with NLM that time is a premium and that any resources should meet the needs of students.

Teachers articulated a need for reliable and safe places to go for content, plain language text to meet the varying student reading levels, and lesson plans that relate to concepts within their curriculum. In order to address these needs, NLM identified subject matter experts to create lesson plans, curricula, and activities rich with the right types of materials, in the right format, and at the right readability level.

### **NLM K-12 Resources**

Educators from the disciplines of health education, history, literature, science, social studies, and technology collaborate with NLM to develop content and standards-aligned content. The free resources created from these collaborations address learning outcomes, as well as help students expand knowledge, cross-curricular literacy, and higher ordering thinking skills outlined in the K-12 Common Core Standards.

Lesson plans promote critical thinking and problem solving skills. Teachers can adapt all or parts of the lesson plans. Online activities engage students in problem solving and discovery-oriented tasks. Other resources assist in expanding a student’s understanding of the content. Many of the resources and databases can be used by students to further research in health and science topics. All come together to create an authentic learning opportunity in a project-based learning environment.

During a presentation of NLM exhibit resources at the 2017 Colorado Science Teacher’s Conference I asked participants to indicate which content areas they felt would align for collaboration based on the learning about the following five exhibits. Overwhelmingly, they saw potential to connect with exhibit with a majority of the content areas.

	<a href="#">Every Necessary Care and Attention: George Washington and Medicine</a>	<a href="#">For All the People: A Century of Action in Health Care Reform</a>	<a href="#">Frankenstein: Penetrating the Secrets of Nature</a>	<a href="#">From DNA to Beer: Harnessing Nature in Medicine and Industry</a>	<a href="#">Life and Limb: The Toll of the American Civil War</a>
Arts	x	x		x	x
Comprehensive Health	x	x		x	x
Mathematics			x	x	
Physical Education	x	x			
Reading, Writing, and Communicating	x	x	x	x	x
Science	x	x	x	x	x
Social Studies	x	x	x	x	x
World Languages					
Personal Finance Literacy					
STEM					

### Cross-Curricular Teaching in Action

In 2015, the MCR covered a [story](#) about high school librarian Peggy Cummings, and her successful cross-collaboration with nearly every content area teacher at the school using the NLM “Every Necessary Care and Attention: George Washington and Medicine” exhibit. The exhibit explores the health and safety issues Washington faced in his personal, political, and military life.



Teachers embraced Cummings' enthusiasm and many took on the challenge to integrate the rich history of the exhibit into their curriculum, and together developed "Essential Questions" for various academic areas. Students were also enthusiastic about the collaboration finding ways to creatively recreate a colonial experience through food, music, literature, and art.

Cummings pulled together resources for teachers to tie the exhibit into their class curriculum, for example comparing the modern day Ebola epidemic to Smallpox. Reflecting on elements that helped her program's success, Cummings came up with a few tips:

- Have the backing of who's in charge
- Have authority, there are a lot of nitty-gritty decisions you need to make
- Plan ahead
- Publicize ahead
- Learn as you go
- Ask for help and cooperation
- Pace yourself, it will take extra time
- Smile and enjoy



*"Every Necessary Care and Attention"  
Exhibit Panels on display in the  
library.*



*Art students researched colonial  
towns and created signage to hang in  
the library to mimic the streets  
Washington might have walked.*



*Culinary students researched colonial  
cooking and prepared refreshments  
for the exhibit open house.*

The NLM online exhibit program has a wealth of resources for cross-curricular collaboration. In addition, there are many other resources NLM has developed specifically for the health and science classroom that include great videos, games, activities and experiments for all ages.

## Resources:

Environmental Health Student Portal (<https://kidsenvirohealth.nlm.nih.gov/>). Safe and useful resource for students and teachers in grades 6-8 to learn how the environment can impact our health. Explore topics such as water pollution, climate change, air pollution, and chemicals. VIDEOS, GAMES, EXPERIMENTS

K-12 Science and Health Education Resources (<https://sis.nlm.nih.gov/outreach/k12.html>). Free reliable resources to help introduce, reinforce, and supplement education programs.

K-12 Web Resources for Your Science Classroom PDF (<https://sis.nlm.nih.gov/outreach/teachersflyer.pdf>). Handy flier with resources for biology, chemistry, forensic science and medical technology, genetics, environmental health science, health careers, and how to evaluate health information tutorials.

NLM Exhibition Program Online Resources (<https://www.nlm.nih.gov/hmd/about/exhibition/education-resources-all.html>). Find a variety of resources appropriate for elementary, middle and high school. Lesson plans and online activities make it easy to supplement and enhance the classroom experience as well as explore cross-curricular collaboration.

NLM K12 Science Education Twitter Feed ([https://twitter.com/nlm\\_k12?lang=en](https://twitter.com/nlm_k12?lang=en)). Follow @NLM\_K12 for the latest news and information on authoritative, free resources to use in the classroom.

NLM's Online Playground: K-12 Science and Health Education Resources Webinar (<https://www.youtube.com/watch?v=sMFXqp8y1tU>). This one-hour instructional webinar will introduce free K-12 resources from the National Library of Medicine (NLM). Resources span a variety of subjects including biology, health professions careers, environmental health, general health, and genetics. NLM's new interdisciplinary online exhibitions will also be featured.

## Further Reading:

"Deeper Learning: Why Cross-Curricular Teaching is Essential" – <https://www.edutopia.org/blog/cross-curricular-teaching-deeper-learning-ben-johnson>

"Making Time for Cross-Curricular Collaboration" – <http://blog.thinkcerca.com/making-time-for-cross-curricular-collaboration>

"What are the benefits for teaching and learning of cross-curricular work using thinking skills, techniques and language?" – <http://www.ntrp.org.uk/sites/all/documents/A.%20Price%20FINAL.pdf>

-Dana Abbey, Colorado/Community Engagement Coordinator

## Mountain West Data Library Symposium

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Data management is a vital part of any research project, and a well-thought out data management plan is becoming an essential requirement for any successful research grant proposal. I recently assisted with the organization and attended the two-day Mountain West Data Library Symposium, hosted by the University of Colorado in beautiful Boulder, with funding for professional development from the NNLM MidContinental Region. It provided an opportunity for librarians

from the Mountain West region and environs to network, engage in unconference sessions, and participate in workshops dedicated to research data management, curation, sharing and re-use, preservation, and literacy, and at a low cost (\$35 for registration!).



The inaugural Mountain West symposium was modeled on the Midwest Data Librarian Symposium, which is now in its fourth year. The emphasis for these symposia is hands-on training sessions that focus on active attendee participation coupled with an unconference format to encourage in-depth discussion of topics and issues surrounding data in research. Lightning talks on various subjects rounded out the conference, and we also found time to visit the Laboratory for Atmospheric and Space Physics (LASP), which engages in space exploration and develops instrumentation for satellites and space programs.

Three workshops anchored the symposium. The first, presented by Russ White, librarian at Cal Poly State University's Robert E.

Kennedy Library, showed how data librarians can use Tableau and data visualization to teach data literacy concepts to undergraduate students. Also discussed was choosing the appropriate visualization for data, how to avoid distorting data, and how to find tools to make your own data visualizations. The second workshop by Meg Eastwood, Science & Engineering Librarian at the University of Denver Libraries, covered pseudoreplication and irreproducible results. Using a series of demonstrations using M&Ms, she demonstrated how our understanding of statistical results is sometimes faulty and how to recognize errors in statistical analysis. Her workshop was both informative and tasty! The third workshop, by Elena Azadbakht, Teresa Shultz, and Rayla Tokarz from the University of Nevada-Reno, discussed how to teach data information literacy and management to disparate groups of users. Participants encountered scenarios in which patrons were seeking data literacy and management help, and, working in groups, tried to identify their needs and the information literacy concepts connected to those needs. Brainstorming sessions on how to effectively teach information literacy competencies followed, using examples of teaching scenarios.



Workshops alternated with unconference sessions, in which topics in data management were discussed by small groups. Data visualization, curation, citation, and ethics were the major points of discussion. A lightning talk round covered everything from the ethical use of data to case studies of librarians dealing with data management issues. I gave a short talk on file naming conventions for the access and sharing of data.

Between all of our working sessions, there was time to eat, network, and learn from each other. A fascinating tour of the LASP allowed attendees to see the kind of research-in-action that is

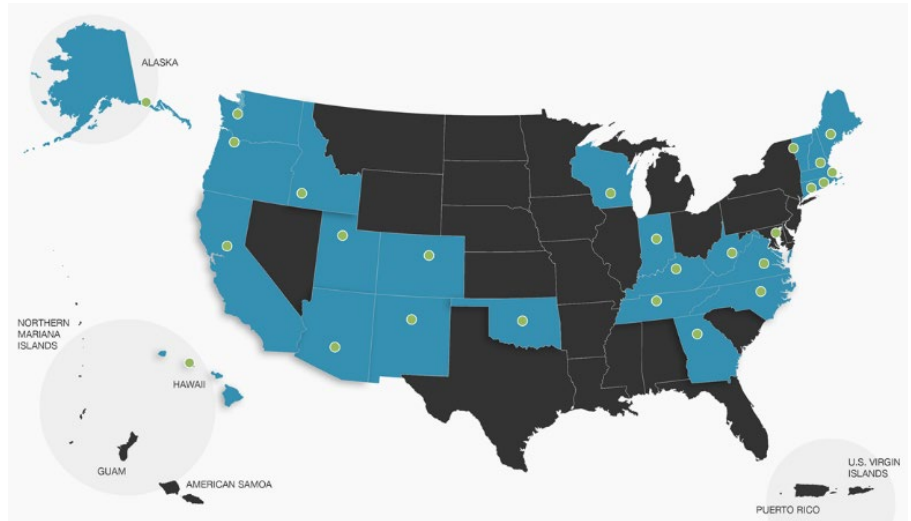
generating the mass quantities of data requiring storage and management, and it was cool to see a real mission control where satellites in space are being tracked and interacted with by space scientists on earth.

Not only did I learn a great deal and get some wonderful advice and counsel on data management practices, I got to meet a whole new cohort of peers with whom I can now collaborate. I would say that the symposium was a huge success and that it is a great way to learn and collaborate on a small budget. Many thanks to our hosts in Boulder and to the NNLM MidContinental Region for funding my trip.

## Expanding Access to the Public Health Workforce in the MidContinental Region

Many of our readers know that the National Network of Libraries of Medicine (NNLM) has a two-part mission, the first part being “to advance the progress of medicine and improve the public health by providing all U.S. health professionals with equal access to biomedical information.” The MidContinental Region staff along with the Eccles Health Sciences Library and partner libraries in our six state region are supporting unaffiliated health professionals, via the Loansome Doc program, and other services for accessing information. The public health work force in state health departments have the need to access for evidence based public health practice as well.

Javier Crespo, Manager of the NNLM’s [National Public Health Coordination Office](#) and staff, creatively provide resources that public health workers around the country can use for their research. Javier recently promoted his program and services by presenting at the MidContinental Region’s monthly webinar series *Breezing Along with the RML*. Here are some key points shared about the program:



*Geographical Distribution of Public Health Digital Library Members*

- The program, initiated in 2011, is currently using the [Public Health Digital Library](#) (PHDL) of evidence based resources. The user base has grown to include 26 public health sites around the country during the current fiscal year.
- Each subscribing member has a partner library who works with them to assist with getting full text articles when not available from the PHDL collection. The library partner may also provide reference and support services for the member. Current members in the MidContinental Region are the Colorado Department of Public Health and Environment along with the Utah Department of Health. Partner libraries for them are UC Poudre Valley Health Library in Colorado and the Spencer S. Eccles Health Sciences Library at the University of Utah.
- The program is not free and requires commitment by a [potential member](#) in several areas. The NPHCO negotiates the price for the public health department the based on its FTEs. The program is to be sustainable at each member site.
- Feedback from the users is very positive. One of them stated: “It’s huge! [the collection] You can get needed articles in minutes, rather than having to beg, borrow or steal them.” Another user said “A lot of people were using resources they could get for free which was not really full evidence. Now we have a fuller picture of whatever topic we were researching.”
- The program is growing incrementally, adding a small number public health departments every year.

### Essentials in Program Implementation: Teamwork



The NPHCO staff play a vital role in implementing the PHDL model. They supply the in-house support to users and also provide online training and instruction for the resources along with managing the resources in the PHDL. This is not the kind of service that you buy and then find out later that the



support is lackluster or non-existent if something goes wrong. The NPHCO staff is accessible and helps users to troubleshoot problems. The NPHCO staff frequently assesses the PHDL for the right mix of resources so that the collection is sustainable. They routinely ask for feedback from members to meet their needs.

A public health department also has to agree to several responsibilities before initiation of membership in the program. The department must provide:

- A designated IT person. (The PHDL collection is housed in an employee intranet environment)
- An arrangement with a partner library who will assist with document delivery when an article cannot be accessed via the PHDL. (Library partners are predominantly academic health sciences libraries.)
- An education contact who will collaborate with NPHCO and the partner library to ensure that health department personnel understand how to search in and use the collection to their greatest advantage.
- Member health departments are obligated to promote the PHDL throughout their organizations so that everyone is aware of and can access PHDL resources.

The NPHCO is a strong example of a NNLM office with a complex system of many moving parts, but yet has exemplary teamwork. The idea is to recruit and expand membership every year and make sure that the program is sustainable. We hope that the NPHCO will be recruiting and accepting more members from the MidContinental Region. That can be done with your help. Encourage your state public health work force to review the services of the NPHCO and contact their [office](#) with questions, if they are seeking quality resources for their research evidence-based practice. To recap- public health departments in two states (Colorado & Utah) in the MCR are currently subscribers to the PHDL. The state public health departments of Kansas, Nebraska, Missouri and Wyoming are not yet members. We hope that fact will change with further expansion of the program in the region!

[-Jim Honour](#), Wyoming/Member Services Coordinator

## Designing Search Strategies for Systematic Reviews

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In April we attended Designing Search Strategies for Systematic Reviews presented by the Bernard Becker Medical Library at the Washington University School of Medicine in St. Louis, Missouri. This training was made possible by generous professional development awards provided by the MidContinental Region of the National Network of Libraries of Medicine.

The award application asked us to consider what we expected to learn from this event and how we could implement the knowledge gained at our respective institutions. Christi, who works at the University of Colorado Anschutz Health Sciences Library, was responding to an increased demand for librarians to be involved in the systematic review process and needed additional training before jumping into the complex searches. Liz, who works at National Jewish Health in Denver, was beginning her involvement on several practice guideline teams and also thought she would benefit from learning how to design and organize advanced searches.

The workshop was two full days of training that consisted of presentations and hands-on exercises at the Farrell Learning and Teaching Center. The training was centered on working through a case study exercise starting with a request for a systematic review search all the way through to delivering the search results and the methods section for publication. Topics included systematic review guidelines, working with patrons, designing the search (including term harvesting, designing concept hedges, combining hedges, and translating the search for multiple databases), searching grey literature resources, delivering results, and writing the methods section for publication. The instructors provided best practices, tips, and strategies for each stage of the systematic review process. The hands-on portions of the course were very beneficial for learning in real time and getting immediate feedback from the instructors and peers.

The workshop is intended for medical and health sciences librarians, but some participants were social sciences librarians, specifically for psychology. The search strategies and techniques taught were applicable for any librarian who works on comprehensive searches and wants to improve their skills. While the workshop does not provide specific database instruction, they did provide some tips and tricks for searching several medical databases and grey literature sources, and for translating searches between major biomedical databases. The instructors, Michelle Doering, Angela Hardi, Laura Simon, and Lauren Yaeger, were very knowledgeable and provided expert feedback about all aspects of collaborating on a systematic review.

Liz appreciated the scope of the class and how it specifically walked participants through the searching stages of the systematic review process. She plans on integrating many of the tips into her work with practice guidelines, specifically the template for writing the methods section. With the growing interest in systematic review software that guides researchers through a full review, she can see the advantage of librarians being familiar with the entire process and would welcome a course that focused on learning about the later stages of a systematic review.

Christi valued that the training provided a clear structure to what the systematic review process could be. The only drawback of the course design was that the group tasks sometimes were not given enough time and it was difficult to work with the entire assigned group due to the room layout. Some of the most valuable pieces of information that she returned with were ideas for how to standardize the systematic review process in a team by creating templates and process guidelines within an organization. With the demand for professional search services quickly growing at CU Anschutz and other institutions, she thinks that a course on managing professional search services would be beneficial.

For someone who is new to systematic review searching or looking to begin offering a systematic review service in their library, this training gives a thorough overview of the collaboration process by walking participants through each stage of a search. Enrollment is limited and filled up quickly for this session, but you can join the waitlist and receive early notification for the next time the course is offered. You can find more information about the training and how to join the waitlist on this LibGuide:

<http://beckerguides.wustl.edu/c.php?g=604551&p=4190019>.