

National Network of Libraries of Medicine® (NN/LM®)

RFP NLM-10-055-AN

University of Utah
Spencer S. Eccles Health Sciences Library
10 North 1900 East, Bldg. 589
Salt Lake City, UT 84112

Jean P. Shipman, Director
Spencer S Eccles Health Sciences Library
(801) 581-8771
Fax: (801) 581-3632
jean.shipman@utah.edu

Technical Proposal

Final Proposal Revision

April 5, 2011

**Version 1: Technical Approach in response to award for
Base RML Services and NTC**

Offeror’s Name: University of Utah
Region Number Proposed: 4
Type of Proposal: Technical
Statement of Work Area: NN/LM Services

Table of Contents

Technical Proposal Cost Information/Summary of Labor and Direct Costs	3
Part I: Mission, Goals and Regional Services Plan.....	4
Regional Services Plan.....	5
Section A: Network Infrastructure	21
A1 – Basic Services	22
A2 – Needs of Health Sciences Libraries	26
A3 – Manage the NN/LM MCR Network Membership	32
A4 – NN/LM MCR Regional Service Plan.....	40
A5 – Resource Libraries.....	47
A6 – Emergency Preparedness & Buddy System	51
A7 – Effective Communication.....	55
A8 – Regional Advisory Board	76
A9 – Monitor and evaluate the Region's programs to assess their effectiveness.....	81
A10 – Participate in Tests, Usability Studies, and User Needs Assessments	87
A11 – E-Licensing Support	91
A12 – Consultation on NLM and NN/LM Funding	94
A13 – Promote Applications for NLM Grants	96
A14 – Changing Role of Information Professionals	99
A15 – Historical and Unique Materials	105
A16 – Training Facility	108
Section B: Outreach Programs	110
B1 – Outreach Programs Health Professionals and Public Health Workers	111
B2 – Consumers	138
B3 – Exhibits and Presentations at Meetings	158
B4 – Information Technology and Policy Awareness.....	162
B5 – Technology Improvement.....	172
B6 – Project Funding and Administration	179
B7 – Enhancements	183
Section C: Logic Models.....	186
Part II: Personnel.....	205
Part III: Facilities, Resources and Institutional Commitment.....	315
Part IV: Appendices.....	342
Appendix A – Resource Library Descriptions.....	343
Appendix B – Memoranda of Understanding.....	359
Appendix C – MCR Educational Offerings	374

**TECHNICAL PROPOSAL COST INFORMATION/SUMMARY OF LABOR
AND DIRECT COSTS**

<u>DIRECT LABOR:</u>	Year 1	Year 2	Year 3	Year 4	Year 5	
<u>Labor Category</u> <u>(Hours)</u>	<u>(Hours)</u>	<u>(Hours)</u>	<u>(Hours)</u>	<u>(Hours)</u>	<u>(Hours)</u>	<u>Total</u>
(Title and Name-- use additional pages as necessary)						
Jean Shipman, Director	208	208	208	208	208	1040
Claire Hamasu, Associate Director	2080	2080	2080	2080	2080	10400
John Bramble, Utah Membership Liaison	2080	2080	2080	2080	2080	10400
Sharon Dennis TBA, Technology Coordinator	2080	2080	2080	2080	2080	10400
Suzanne Sawyer, Project Coordinator	2080	2080	2080	2080	2080	10400
Sandy Drollinger, Financial Analyst	1040	1040	1040	1040	1040	5200
Camille Salmond, DOCLINE Liaison	208	208	208	208	208	1040
Susan Roberts , Technology Associate	832	832	832	832	832	4160
Total Hours	10609 9776	10609 9776	10609 9776	10609 9776	10609 9776	53045 48880
DIRECT LABOR COST:						
	425,045	448,111	461,555	475,401	489,665	2,299,778
MATERIAL COST:						
	-	-	-	-	-	-
TRAVEL COST:						
	24,204	84,934	87,482	90,106	92,809	379,535
SUPPLIES:						
	13,460	24,152	24,876	25,624	26,391	114,503
COMMUNICATION:						
	10,030	15,480	15,943	16,423	16,914	74,790
REPRODUCTION:						
	720	750	773	795	818	3,856
CONSULTANTS:						
	-	-	-	-	-	-
SUBCONTRACTS:						
	698,115	1,103,809	1,136,923	1,171,031	1,206,162	5,316,040
OTHER (Misc Expenses)						
	4,150	21,150	21,786	22,438	23,112	92,636
TOTAL DIRECT COST:						
	1,175,724	1,698,386	1,749,338	1,801,818	1,855,871	8,281,137

Specific Instructions:

1. Do not include any individual salary information
2. Do not include any indirect cost or fee.
3. Do not submit the total amount of proposal.
4. Submit this information as a portion of the Technical Proposal.

Part I: Mission, Goals and Regional Services Plan

Regional Services Plan

Mission

The mission of the National Network of Libraries of Medicine (NN/LM) is to advance the progress of medicine and improve the public health by:

- 1) providing all U.S. health professionals with equal access to biomedical information and,
- 2) improving the public's access to information to enable them to make informed decisions about their health.

The program is coordinated by the National Library of Medicine[®] and carried out through a nationwide Network of health science libraries and information centers.¹

For the National Network of Libraries of Medicine, MidContinental Region (NN/LM MCR), the mission and organization of the NN/LM constitutes the best strategy to assure that there is no information disparity for health professionals and the public. The quality of health care delivered and of health care decisions made is absolutely dependent on access to quality health information resources and services. It is through the National Network that this access is assured.

NN/LM Goals

The three goals established by the National Library of Medicine will provide the action plan for the region. In addition, the NN/LM MidContinental Region (MCR) has added a fourth goal to support the assessment and evaluation activities that identify the effectiveness of the NN/LM MCR. The goals for our regional services plan are:

- Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation;
- Promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to Healthy People 2020 (<http://www.healthypeople.gov/HP2020/>);
- Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public; and
- Understand how the products and services of the NN/LM and NLM[®] contribute to improved access to health information by health professionals, and the public.

¹ Department of Health and Human Services, National Library of Medicine. RFP NN/LM 2011-2016 Attachment 1: Statement of Work. [Internet] 2010 Mar 5. Available from: https://www.fbo.gov/index?s=opportunity&mode=form&id=101d833702f40eb703f7d7432066f171&tab=core&_cvi=1

Who We Are

The Spencer S. Eccles Health Sciences Library at the University of Utah will serve as the Regional Medical Library for the MidContinental Region. Spencer S. Eccles Health Sciences Library has been the Regional Medical Library serving the states of Colorado, Kansas, Missouri, Nebraska, Utah and Wyoming since 2001.

Geography

The geographic scale of the region offers both challenges and opportunities. From its western border to the Mississippi River in the east, the region extends over 1,000 miles and across two time zones. Geographically, the region is extremely diverse, including the western desert, Rocky Mountains, Great Plains and Mississippi Valley. Population distribution is among the most extreme in the continental United States with areas that at best are described as remote. A few metropolitan areas -- St. Louis, Kansas City, Omaha, Denver and Salt Lake City -- break up the open landscape. The large metropolitan areas, like St. Louis, exemplify the traditional inner-city environment, while rapidly growing metropolitan areas, like Salt Lake City and Denver, exemplify inner-cities where these challenges are only recently appearing. All of the metropolitan areas of the region have academic health sciences centers and Resource Libraries. The numbers of Resource Libraries are not so overwhelming that the focus is simply on coordination, nor so few that a range of possible programs is constrained. The RML has established strong relationships with these institutions that have demonstrable records of innovation, and partners with them to address the challenges of the region.

Demographics

The population in the NN/LM MCR is primarily White. It may appear that this is a homogenous population but there are small, but significant, minority populations in the MidContinental Region that face health disparities. Although the minority populations that we work with may be smaller than in other regions, the NN/LM MCR faces the same issues and challenges that are faced in all regions to improve health information literacy among groups of different cultures who may speak languages other than English. Through our efforts to improve health information literacy we hope to improve the identification of and access to health information resources; the ability to evaluate, analyze and understand the content; and the ability to use the health information to make informed decisions. We continue to work with health care providers, who care for patients of other backgrounds, to increase their awareness of appropriate materials designed to convey diagnoses, treatment methods and other health information in a way that their patients can understand. Although we still lag behind other regions, the racial and ethnic percentages of our population are increasing. Health care providers are more frequently encountering refugees from different cultures, people who resettled in our states due to hurricane Katrina, and a minority workforce of Spanish language speakers.

	Total Population	White	Black	Hispanic	Other
Colorado	4,875,100	3,578,200 73.40%	184,800 3.79%	901,700 18.50%	210,400 4.32%
Kansas	2,708,000	2,175,600 80.34%	155,200 5.73%	230,200 8.50%	147,000 5.43%
Missouri	5,823,300	4,762,30 81.78%	654,900 11.25%	181,700 3.12%	224,400 3.85%
Nebraska	1,758,800	1,477,000 83.98%	76,800 4.37%	143,400 8.15%	61,500 3.50%
Utah	2,703,200	2,250,600 83.26%	28,600 1.06%	313,000 11.58%	110,900 4.10%
Wyoming	520,500	457,100 87.82%	No Significant Data	41,300 7.93%	16,900 3.24%
United States	300,544,200	196,505,600 65.00%	36,466,900 12.13%	47,395,400 15.77%	20,176,200 6.71%

Table 1. Population Distribution by Race/Ethnicity²

There are numerous federal and state recognized native tribes in the MCR,³ as well as Native North American languages spoken:⁴

1. Colorado: Southern Ute Indian Tribe, Ute Mountain Ute Tribe.

Languages spoken include Navajo, Blackfoot, Cheyenne, Fox, French Cree, Athapaskan, Apache, Dakota, Choctaw, Muskogee, Kere, Iroquois, Cherokee, Ute, Shoshoni, Hopi, Tiwa, and Zuni.

2. Kansas: Iowa Tribe of Kansas and Nebraska, Kickapoo Tribe of the Indians in Kansas, Prairie Band of Potawatomi Nation, Sac and Fox Nation of Missouri in Kansas and Nebraska.

Languages spoken include Navajo, Cheyenne, Kickapoo, Ojibwa, Potawatomi, Apache, Kiowa, Dakota, Kansa, Omaha, Choctaw, Muskogee, Cherokee, and Hopi.

² Kaiser State Health Facts "Population Distribution by Race/Ethnicity, states (2007-2008)", U.S. (2008) <http://www.statehealthfacts.org/comparetable.jsp?typ=2&ind=6&cat=1&sub=1> Accessed March 30, 2010.

³ National Conference of State Legislators. (July 2010). Federally and State Recognized Tribes. Retrieved October 6, 2010, from <http://www.ncsl.org/default.aspx?tabid=13278>.

⁴ U.S. Census Bureau. (April 2010). Language Use in the United States: 2007. In American Community Surveys. Retrieved October 6, 2010, from http://www.census.gov/population/www/socdemo/lang_use.html.

3. Missouri: Northern Cherokee Nation, Chickamauga Cherokee.

Languages spoken include Navajo, Inupik, Ojibwa, Potawatomi, Apache, Kiowa, Tlingit, Diegueno, Dakota, Chiwere, Winnebago, Osage, Choctaw, Muskogee, Cherokee, Comanche, and Zuni.

4. Nebraska: Iowa Tribe of Kansas and Nebraska, Omaha Tribe of Nebraska, Ponca Tribe of Nebraska, Santee Sioux Nation, Winnebago Tribe of Nebraska.

Languages spoken include Navajo, Ojibwa, Dakota, Winnebago, Omaha, Ponca, Mikasuki, Muskogee, Cherokee, Shoshoni, and Chinook Jargon.

5. Utah: Confederated Tribes of Goshute Reservation, Navaho Nation, Northwestern Band of Shoshoni Nation of Utah, Paiute Indian Tribe of Utah, Skull Valley Band of Goshute Indians, Ute Indian Tribe of the Uintah and Ouray Reservations, Ute Mountain Ute Tribe.

Languages spoken include Navajo, Blackfoot, Kickapoo, Dakota, Omaha, Choctaw, Keres, Mohawk, Cherokee, Paiute, Ute, Shoshoni, Hopi, Tewa, Zuni, and Chinook Jargon.

6. Wyoming: Arapaho Tribe of the Wind River Reservation, Eastern Shoshone Tribe of the Wind River Reservation, Fort Peck Assiniboine and Sioux Tribes.

Languages spoken include Navajo, Arapho, Cheyenne, Ojibwa, Apache, Crow, Dakota, and Shoshoni.

Missouri is the only state in the MCR with two Historically Black College and Universities (HBCUs):⁵ Harris Stow State University in St. Louis and Lincoln University in Jefferson City. Colorado and Kansas are the only states in the MCR with Hispanic-Serving Institutions (HSIs).⁶ Colorado has six: Adams State College, Colorado State University (Pueblo), Community College of Denver, Otero Junior College, Pueblo Community College, and Trinidad State Junior College. Kansas has one: Donnelly College in Kansas City.

Although the MCR is primarily English and Spanish speaking, it is growing in diversity with an increasing number of refugees resettled in the region. Other top languages spoken in the MCR include Arabic, Cambodian, Chinese, Cushite, French, Hindi, Italian, Korean, Laotian, Persian, Polish, Portuguese, Russian, Serbo-Croatian, Swahili, Tagalog, Thai, Urdu, and Vietnamese.⁷

⁵ Hispanic Association of Colleges and Universities. (2010). HACU Member Hispanic-Serving Institutions. Retrieved October 6, 2010, from http://www.hacu.net/assnfe/CompanyDirectory.asp?STYLE=2&COMPANY_TYPE=1,5.

⁶ U.S. Department of Education. (January 4, 2010). List of Historically Black Colleges and Universities. In *White House Initiative on Historically Black Colleges and Universities*. Retrieved October 6, 2010, from <http://www2.ed.gov/about/inits/list/whhbcu/edlite-list.html>.

⁷ U.S. Census Bureau. The 2010 Statistical Abstract. Population: Language Spoken at Home by State: 2008 [cited 2010 October 11]. Available from http://www.census.gov/compendia/statab/cats/population/ancestry_language_spoken_at_home.html

Common Health Conditions and Risk Factors in the MCR

Every racial, ethnic, age, gender or geographic group has specific health concerns. Differences in the health conditions and risk factors of various groups can result from genetics, environmental factors, access to care, and cultural factors. The leading causes of death in the states comprising the MidContinental Region (MCR) include diseases of the heart, malignant cancers, chronic lower respiratory diseases, Alzheimer’s disease, diabetes, influenza and pneumonia, chronic liver disease and cirrhosis, sepsis, and acute or chronic inflammation of the kidney.⁸ The Centers for Disease Control and Prevention (CDC) has coined the term “Winnable Battles” to describe domestic public health priorities with large-scale impact on health and with known, effective strategies to intervene. CDC Director Dr. Thomas R. Frieden and CDC leaders have identified the following winnable battles based on the magnitude of the health problems and CDC’s ability to make significant progress in improving outcomes: healthcare associated infections, HIV infection reduction, motor vehicle injuries, obesity, nutrition, physical activity, food safety, teen pregnancies, and tobacco use and exposure to secondhand smoke.⁹

Internet and Telephone Connectivity

The Federal Communications Commission (FCC) map (Figure 1) shows the percentage of housing units with 4 Mbps broadband availability within the six states of the MidContinental Region. This map is based on data from a variety of public and commercial sources and represents the FCC’s current best estimate on the availability of broadband service.¹⁰ As the map shows, most areas in our six-state region have more than 50% connectivity. The darker and black areas of the map show pockets of underconnected areas in the region. For information on connectivity of MCR members, see our response to SOW section B5.

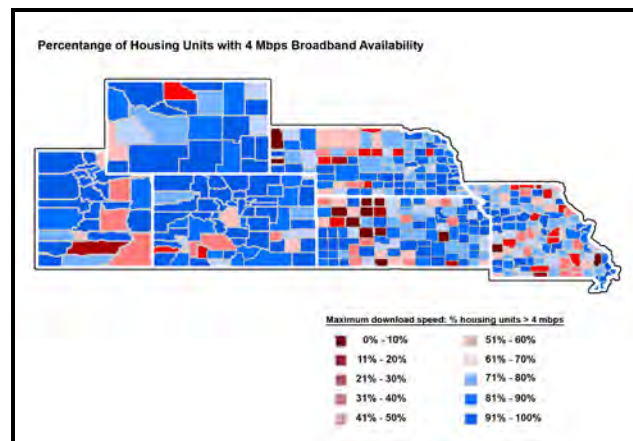


Figure 1

⁸ Centers for Disease Control and Prevention. (May 20, 2009). *Deaths, percent of total deaths, and death rates for the 15 leading causes of death: United States and each State, 2006*. In National Vital Statistics System: Mortality Data. Retrieved October 6, 2010, from http://www.cdc.gov/nchs/data/dvs/LCWK9_2006.pdf.

⁹ Centers for Disease Control and Prevention. (September 29, 2010). *CDC’s Winnable Battles*. In *About the CDC*. Retrieved October 6, 2010, from <http://www.cdc.gov/about/winnablebattles.htm#six>.

¹⁰ Federal Communications Commission National Broadband Plan. <http://www.broadband.gov/maps/availability.htm>. Accessed October 7, 2010.

Figure 2 presents comprehensive data on telephone penetration statistics collected by the Bureau of the Census under contract with the FCC for 2009.¹¹ “Available” indicates the percentage of households which have telephone service available for incoming and outgoing calls, either in the housing unit or elsewhere.

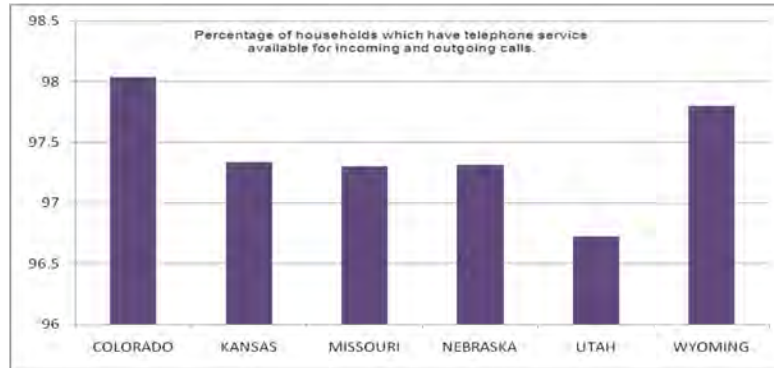


Figure 2

Health Care Providers

Our vast geography and population distribution impacts health care availability in the region. Health care providers tend to congregate in our more populated areas. Since much of the region is frontier (less than 7 people/square mile) or rural (any non-urban or non-metropolitan area), patients often need to travel long distances to receive health care, especially from medical specialists. Much of the region has been designated medically underserved either by the state’s governor or by the U.S. Health Resources and Services Administration.

Medically underserved areas are designated based on four variables:

- The ratio of primary medical care physicians per 1,000 population
- Infant mortality rate
- Percentage of the population with incomes below the poverty level
- Percentage of the population age 65 or over.

The value of each of these variables is converted to a weighted value and then added together to produce a score. Medically underserved areas (MUAs) have received a score of 62 or less.

Medically underserved populations are based on the same variables used for MUAs except they are calculated for populations instead of for a geographic area. All governor designated medically underserved populations reflect local conditions and barriers that affect personal health services.

¹¹ Federal Communications Commission. Telephone Subscribership in the United States. <http://www.data.gov/raw/2120>. Accessed October 7, 2010.

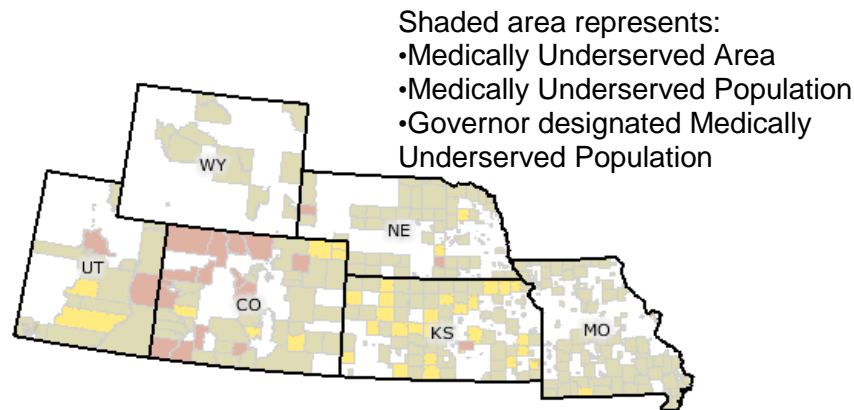


Figure 3¹²

The challenges providers face now due to racial and ethnic diversity will continue as the population in the region becomes more diverse. These challenges fall in two areas. First, providers will increasingly find themselves required by laws and standards, such as Title VI, The Joint Commission, and CLAS standards to develop cultural and ethnically appropriate materials for patients. In addition, they will continue to interact with new population groups. For example, Omaha now has a growing Mayan population, and finding interpreters, assessing the population's health needs and finding information resources to meet those needs is a new challenge for health care providers in Omaha.

Community Based Organizations

There are numerous community and faith based organizations in the MCR that work in diverse service capacities. Those groups include public health organizations, community groups such as Boys and Girls Clubs of America; health related groups, such as the Red Cross; faith based groups such as parish nurses. A survey of the local United Way organizations in the region provides an overview of the richness and diversity of community and faith based organizations in the MidContinental Region. There are a total of 107 local United Way organizations spread across the MCR that work with more than 2300 partner agencies. Each local organization funds the work of partner agencies in their geographic boundaries to carry out the mission and goals of the International United Way.

- **Colorado: 14 local organizations work with more than 451 partner agencies**
- **Kansas: 29 local organizations work with more than 508 partner agencies**
- **Missouri: 29 local organizations work with over 725 partner agencies**
- **Nebraska: 19 local organizations work with over 310 partner agencies**

¹² RAC: Information for Rural America [Internet]. Rural Assistance Center c2002-2009. Maps; Health Resources and Services Administration, Bureau of Health Professionals. 2010 Apr16 [cited 2010 May 18]; Available from <http://www.raconline.org/maps/#hpsa>

- **Utah: 9 local organizations work with over 230 partner agencies**
- **Wyoming: 7 local organizations work with over 99 partner agencies**

Network Members

From the Institutional records in DOCLINE[®], we know that the NN/LM MCR has 325 Network members. Half (165) are Full Network members; they meet all the criteria (staffing, collection, and services including DOCLINE) for membership. Half (160) are Affiliate members; they are a library or an information resource center but do not meet all the criteria for Full membership.

Hospital libraries still make up the majority (64%) of our Full members with most of them staffed by solo degreed librarians. Academic libraries compose the next largest group (28%) of our Full members. Among our Affiliate members, public libraries make up the largest (44%) category of libraries, with hospital libraries coming in second (17%).

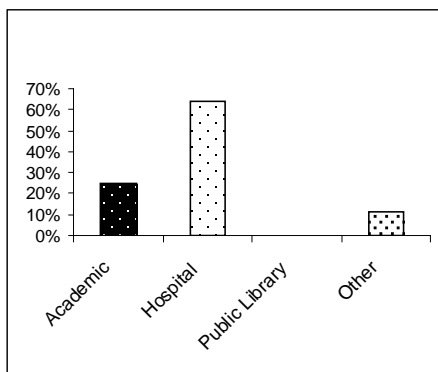


Figure 4: Full Members by Category

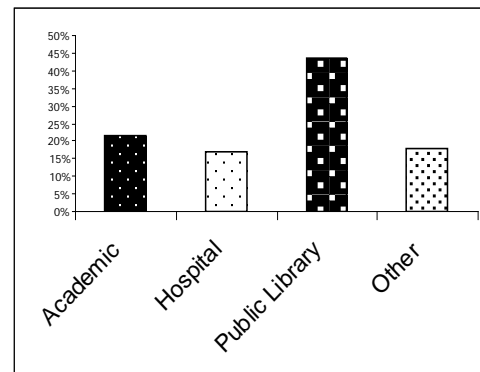


Figure 5: Affiliate Members by Category

Our membership demographics are changing. At the beginning of the current contract Full members outnumbered Affiliate members. The percentage has changed due to active recruitment of public libraries into the Network. Seventy one public libraries are now members of the Network. Unfortunately, the shift has also occurred because of cutbacks in hospitals that affected libraries. Some hospital libraries were no longer able to meet the requirements of Full membership and moved from Full to Affiliate status. This has importance for the Network when a health care provider may no longer have full services available from their hospital, causing the health care provider to seek other Network members willing to provide information services or decide to practice without the information. This may be offset by the increase in public library members. More public libraries belonging to the Network allows unaffiliated health care providers to use them as portal to the health information resources, especially if there are no local health sciences libraries in their community providing health information services. **Public libraries that are NN/LM MCR Network members will be knowledgeable about ordering articles from medical and scholarly biomedical related journals from health sciences libraries through Loansome Doc. In the current contract, the NN/LM MCR has conducted training sessions for public library staff and will provide Loansome Doc training in the next contract. Public libraries with this expertise can become Loansome Doc “portals” for health**

professionals or could provide Loansome Doc information so health professionals could set up their own Loansome Doc accounts. There are no public libraries in the NN/LM MCR that participate in DOCLINE as a borrower or lender.

Organization of the NN/LM MCR

Central to the regional services plan are the RML coordinators located in each state in the MidContinental Region. This distributed model brings the services of the RML closer to the communities the RML serves and enhances the development, assessment and coordination services to members and of outreach to the state. This distributed model also helps to address the geographic challenges posed by the region. The coordinators are located at each of the seven Resource Libraries and lead regional projects. In each state, a coordinator serves as a state outreach coordinator and implements the special projects in their state. The table below outlines the responsibilities each Resource Library contributes to the regional services plan. The RML coordinators also contribute to activities such as the communications program, reports, evaluation and exhibits/presentations.

Library	State Outreach	Special Project Area
Health Sciences Library University of Colorado Denver	Colorado	Health Information Literacy
A.R. Dykes Library of the Health Sciences, University of Kansas Medical Center	Kansas	Technology
Bernard Becker Medical Library, Washington University	None	Assessment and Evaluation
J. Otto Lottes Health Sciences Library, University of Missouri, Columbia	Missouri	Library Advocacy
Creighton University Health Sciences Library/Learning Resources Center	None	Health Information Literacy
McGoogan Library of Medicine, University of Nebraska Medical Center	Nebraska	Education
University of Wyoming Libraries	Wyoming	Funding Resources
Eccles Health Sciences Library, University of Utah (RML)	Utah	Technology Member Services

Table 2. Resource Library Responsibilities

The members of our region strongly endorse this distributed model. We learned from the focus groups we held in 2010 that

“...participants identified the specialty roles of the liaisons in different states, and they felt confident referring colleagues to the RML staff member who could best

help with the question at hand. For one-person libraries, networking opportunities were viewed as ‘extremely important because I have no colleagues here who know what I do...nice to know there are other(s)...I can talk to about problems I’m encountering....’ The role of the RML in motivating member library service advances and improvements was recognized—‘I...feel fortunate...they seem to push us...professionally.... I faithfully read those bulletins...somebody is seeing things that I haven’t seen....’¹³

Our Pillars

Three pillars build the foundation to our regional services plan: application of technology, collaboration, and assessment and evaluation.

Collaboration

The first pillar of our plan is collaboration. The distributed model of this RML is founded on collaboration. We collaborate with each of the Resource Libraries in the region to successfully fulfill the Statement of Work of the NN/LM contract. The RML seeks additional ways to strengthen our programming through collaboration.

In 2007, our Technology Coordinator began service as the shared Technology Coordinator for both the MidContinental Region and the Pacific Southwest Region (PSR). To further the nature of inter-regional collaboration, the MCR/PSR Technology Coordinator assumed responsibility for developing and carrying out a technology program for both regions. Both regions benefited from sharing a position.

In 2007, we collaborated with the National Training Center and Clearinghouse (NTCC) to create a web-based class registration and scheduling system for the RMLs. The Associate Directors of all the RMLs and the NTCC staff identified requirements for an NN/LM system. The system identifies both regional classes and the NTCC classes held in each region, manages online registration for both, and compiles a class participant spreadsheet. Three RMLs are using the National Training and Registration Page with a fourth to come up by the end of this contract.

Our collaboration ranges from national to local. On the national level we have held leadership positions in organizations such as REFORMA to move forward our initiatives in health information access to minority populations. On the very local level, staff has been integrated in community organizations to learn their information needs and influence the organization to incorporate health information access into their operations.

¹³ Graham, Elaine; Kelly, Betsy. 2010 Network Member Focus Groups Report. 2010. National Network of Libraries of Medicine, MidContinental Region; MS.

Technology

The second pillar of our plan is technology. The advancement of computing and networking technologies has had an extraordinary impact on library resources and services. Resources and services once confined to academic health sciences centers and large, tertiary hospitals are, through the Internet, now accessible in hospitals, clinics and homes throughout the nation. The National Library of Medicine, through its leadership in the development of powerful resources like PubMed[®], MedlinePlus[®] and PubMed Central[®], is transforming healthcare and the public's access to health information. NLM resources are truly available anywhere, anytime since products such as PubMed, MedlinePlus and Wiser[®] have been formatted for mobile devices as well as on the web. We believe that keeping up with technology is one way that members can become leaders within their institution.

The MCR staff monitors and experiments with technology and uses it to facilitate our collaborative operations. We track advances in technology and identify those that can best be used to improve access to health information and the services of our Network members. To help members become technology leaders in their institutions, the technology coordinators offer consultations, classes and technology updates, throughout the current contract period.

The NN/LM MCR has gained years of experience with distance education technologies. Our synchronous classes are taught using Adobe Connect. Class members can see and hear the instructor through the use of audio and video; and the class can be recorded so that it can be viewed at a later date. In this and other ways we have introduced our members to Twitter, podcasting, screencasting, blogs, wikis, RSS, social bookmarking, and other web 2.0 technologies in the hopes that they will adopt these technologies and employ them within their own institutions. In Year 3 of the current contract, the NN/LM MCR released a questionnaire to members asking if they adopted new technologies in their work due to our programming. Fifty two percent of the respondents said they had adopted a new technology. We continue to support the integration of technology into the operations of our Network members and our partners to facilitate operations throughout the region.

Assessment and Evaluation

The third pillar of our plan is assessment and evaluation. NN/LM MCR strongly encourages members to use evaluation methods to produce evidence to show the value of the library to their administration. We practice what we preach. Assessment and evaluation is integrated into the MidContinental RML from the first brainstorming session until we write our annual report. Behind all of our plans is our logic model. The logic model offers direction through the goals, objectives and outcomes we have identified. The Activity Reporting System (ARS) is based on the logic model and captures all the work of staff. Coordinators add their activities into the ARS and select the goals and outcomes that the activities address. The status reports that are produced from this data provide the staff with an update of where we are in approaching our outcomes. The logic model is also a topic in many of our activities. It is taught in our proposal writing class, in our library advocacy workshop, and is incorporated when we work with groups in project planning. We use evaluation and assessment tools such as the Network Member Questionnaire and focus groups to assess needs, to provide us with baseline data on our

members, and to help us determine the impact of our program. Just as we encourage our Network members to show their value to their institutions, our assessment and evaluation program produces data that shows to the National Library of Medicine and to our region our effectiveness, our impact and our value. (See our response to the SOW Section C for our logic model)

Challenges and Strategies

Outreach Success is Dependent

The RML's outreach efforts focus on public librarians, health care providers, and staff of community organizations. The success of our health information literacy efforts are dependent on the receptivity of the group we focus on. Being open to hear our message is dependent on many variables including:

- Do they have time to hear our message?
- Do they recognize how health information can assist them and the patients or clients they serve?
- Do they have the resources to easily access the resources we promote?

In the current contract we have become members of community organizations, minority health organizations, and public health organizations. Through this experience we are learning to understand the variables in their terms. We are learning what the group's health information needs are and how we can better frame our message and our activities to address their needs.

In the new contract, we will enlist the assistance of our Network members. The increased number of personnel and the additional sites where outreach can be localized should increase the number of outreach activities. Network members will be invited to exhibit and present at health professional meetings and to offer training sessions on NLM resources to our outreach populations. Increasing the number of our outreach field force will increase the health information literacy of the populations on which we focus.

Technology Changes

Significant changes in technology facilitate communication and interactions that diminish geographic distances (videoconferencing), make news instantly available (Twitter), allow individuals with common interests to find each other (Facebook), and offer professional development without leaving the office (webinars). Mobile devices provide continuous and everywhere connectivity. The NN/LM MCR has a well established history of investigating new communication technologies for practical applications and implementing them for the benefit of the region. Current and emerging technologies open up new ways for us to interact with and convey information to our constituencies in the region.

Regrettably, not all Network member environments permit the use of these new technologies. Hospital librarians find it especially difficult, due to restrictive security policies and concerns

about using too much bandwidth, to employ these technologies. Some participants of our “13 Things” workshop series have had to do their homework activities at home because their institutions block social networking tools. One of our members remarked on the irony that access to Facebook was blocked within the hospital, even though the marketing department established a Facebook page to promote the hospital. Eventually, as more organizations find the value in social networking tools, policies will change. Network librarians are promoting the usefulness of the tools and advocating for a change in policy. The RML is teaching members how to use the new technologies so that they will be prepared to take advantage of the accessibility to these tools the moment they become available in their institutions. As one of our members told us, “[There are] so many young residents at the hospital...we’re going to need to know how to put together wikis, and blogs, and podcasts....”

New technologies allow collaboration among organizations who, because of distance, would have found it difficult to work together in the past. Collaboration spaces such as wikis and Google Docs make it “... just as easy for an organization to learn from and collaborate with an individual located across the globe as with the nonprofit across town.”¹⁴ This expands the potential partners that the RML can collaborate with and should strengthen our efforts to reach the goals of our regional services plan. Because of our distributed model, staff has years of experience working in a team that depends on these collaborative technologies. Our expertise assists those who collaborate with us so that they can use their knowledge of these technologies to partner with others.

Broadening Role of the Librarian

New opportunities abound for librarians in hospital and academic settings to support the mission and goals of their institution. Patient safety, the electronic health record, CTSA community engagement, e-science, emergency preparedness, knowledge management, and personal health records are the ones that have been identified in the NN/LM RFP. For many of our Network members taking on any of these activities would be new responsibilities. Members may require resources to apply existing skills in new ways and more knowledge in medical disciplines and the research process. Fortunately there are those in the region and the country who have already adopted these roles, the early adopters. It is important for the RML to pinpoint the early adopters and have them identify the skills and knowledge that they used to carry out these new responsibilities. The RML can then provide the training and support to enable others to adopt these new roles in their institutions.

Resources

The recession affecting the nation has not bypassed the MidContinental Region. Tight budgets mean that administrators are looking for services that can be reduced, services that can be combined, or services that be cut. Hospital libraries experience this cost cutting hunt whenever the healthcare economy is in a down slump. The recession has been severe enough that

¹⁴ Gowdy, H, Hildebrand A, La Piana D, Mendes Campos M. Convergence How Five Trends Will Reshape the Social Sector. Focus 2009 Nov; 12.

academic health sciences libraries find themselves justifying maintaining status quo to university administration. Some academic libraries are reporting up to double digit budget cuts in the last two years.

Since 2002, we have collected data on the staffing in member facilities. In hospitals, the average librarian staffing went from 1.34 FTE in 2002 to 1.24 FTE in 2008. The trend for professional staffing in hospitals is going downward. Staffing at academic health sciences libraries remained flat over this period. Many health sciences librarians are on the verge of retirement. The recession may have delayed this decision for a couple of years but soon the baby boomers will no longer be part of this workforce. Will institutions replace their librarian? Preliminary data from our 2010 focus groups indicate that Network members are also concerned about succession planning.

The tightening of resources (budgets, staff and time) in our member institutions affects how the RML delivers its services and our expectations of members. We can no longer expect members to travel out of state, across the state, or sometimes even across town to participate in training or meetings. Their involvement in RML infrastructure/outreach activities may be constrained due to policy restrictions. The use of technology to provide services to their workplace and to incorporate them into our infrastructure becomes essential. We need to engage our members where they are, in their offices.

The Future is Unknown

We don't know what the big outside influences will be over the next 5 years. In 2001, at the start of the current contract, who could have predicted the passage of the health care reform bill? We do not know the affect health care reform will have on the health care system. With health insurance available to more people, the individuals navigating the health system will include many who are unfamiliar with how the health system functions. What assistance will they need to navigate the system? What role does health information literacy play for the provider, patients and family members in making the system work more effectively? In the future, what will influence access to health information and the resources that support health information access? Will our member libraries, such as our hospital libraries, benefit from these changes?

The RML has never had a crystal ball. The NN/LM site visit team in their review, complimented the RML coordinators as being "very innovative." The creativity and knowledge of the region that is incorporated in the RML staff will enable us to address the challenges facing health information access in the future.

Member Involvement

Implementing the regional services plan involves Network members. It begins with the partnerships established between the Resource Libraries and the Regional Medical Library. Resource Libraries that are at state institutions have a dual responsibility of coordinating a

project area for the entire region in addition to state outreach responsibilities. Involving Network members extends to the workgroups created by each of the project coordinators to involve Network members and key individuals in the region to assist in the implementation of the projects. These work groups help the coordinator produce a product or carry out an activity identified in our logic model for the year, thereby influencing the output. The involvement continues in with the participation of our Regional Advisory Board members who are selected because they have exhibited leadership among their constituency and an interest in health information. The Regional Advisory Board advises the RML in all areas of its program and is especially helpful in our annual planning process. Members also contribute to the strength of the RML in smaller ways:

- Write articles for our newsletter, *Plains to Peaks Post*
- Co-sponsor training of Network members, public librarians, health professionals or the public
- Promote NN/LM goals to their own constituencies
- Participate in an ongoing dialogue on how we accomplish our goals
- Apply for funding and carry out funded projects that extend our outreach efforts
- Share their expertise with the region in RML sponsored events

New Programming

Funding Opportunities

The NN/LM MCR is increasing its funding opportunities for our Network members. We will offer four awards that range from a maximum of \$1,000 - \$60,000:

- Teaching Health Professionals Award - \$1000
- Health Information Literacy Connectivity Award - \$2,025
- Continuity of Health Information Award - \$15,000
- New Collaborations for Health Sciences Librarians Award - \$60,000

New Roles for Health Sciences Librarians

The NN/LM MCR will promote new roles for health sciences librarians through awareness raising presentations, training sessions, conferences, and funding opportunities for research and pilot projects.

Outreach to Health Care Providers

The NN/LM MCR will increase the level of outreach activities in the region. We will do this by training and funding Network members to train health care providers and exhibit and present at their meetings.

Innovative Approaches to Providing Services

Sharing Technology Coordinator Position

In July 2007, the MidContinental and Pacific Southwest Regions began an experiment where a single technology coordinator led and managed technology programs for the two regions. This position sharing was the outcome of a 2006 meeting of the Regional Medical Library Directors where they brainstormed ideas to optimize the use and talents of NN/LM personnel. The two regions decided to pilot the idea in hopes that it would optimize the use and talents of staff and result in salary savings that could be directed to other needs. The Technology Coordinator, primarily works from the University of Utah where she serves the members of the MidContinental Region but spends an equal amount of time developing programming and offering training for the Pacific Southwest Region as well as. We are starting the third successful year of this shared technology position. We are continuing the arrangement because of the following benefits to each of the RMLs:

- Leveraged experienced staff, existing relationships, and technology activities
- Promoted interregional cooperation and synergy
- Integrated distance solutions
- Tapped a broader pool of ideas and solutions
- Used FTE funds for other program needs

Regional Services Plan

Section A: Network Infrastructure

A1 – Basic Services

Statement of Work

Develop and implement a program designed to provide health professionals in all parts of the Region with a basic level of information services which includes:

- a. Access to books, journal articles, and audiovisuals;
- b. Access to online databases in the health sciences; and
- c. Access to reference and web services.

The RML shall establish agreements with Network member libraries to provide these services to unaffiliated health professionals. For any areas where the RML is unable to establish such agreements, the RML will provide the service on a cost recovery basis;

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective & Rationale:

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

This objective is directly tied to the mission of the NN/LM which is to provide “all U.S. health professionals equal access to biomedical information.” Through its Network members the Regional Medical Library will provide basic services to all health professionals including those who are unaffiliated with a library.

Approach & Methodology:

Outcome: -Network members and other organizations are better able to support access to health information resources

Develop and implement a program designed to provide health professionals in all parts of the Region with a basic level of information services

Primary Access Libraries and Resource Libraries in the region are actively providing basic information services to health professionals. The NN/LM MCR has 165 full Network members and 160 Affiliate members providing information services to their affiliated users. A majority (75%) of Resource Libraries and Primary Access Libraries in the MCR offer Internet training,

mediated searching, onsite collection access, online search training, and reference services. One third of these members (108) offer services to unaffiliated health care professionals in the region. Primary access to the collection is gained through Loansome Doc[®], the National Library of Medicine's document delivery service for individuals. Loansome Doc is currently used by 377 unaffiliated health professionals in the MCR. The Resource Libraries serve the 64% of unaffiliated health professionals (240), while Primary Access Libraries serve 137.

The NN/LM maintains a searchable web directory that describes services provided by Network members. The Members Directory web site (<http://nmlm.gov/members/>) lists libraries in the region, the services they provide (e.g., reference, access to resources, document delivery service) and whether they provide these services to unaffiliated health professionals. RML coordinators will promote the Members Directory web site to health professionals in exhibit halls and at meetings, as well as through our presentations and training. Messages will be sent via association discussion lists and newsletters. Regional Advisory Board members will be encouraged to inform health professionals they work with about the library and information services that are available to them.

Figure 6.

Subsidized Document Delivery

A common concern of unaffiliated health care providers is how to get articles affordably or free. As stated above, they can use Loansome Doc by making an arrangement with a Network member. In Colorado, Kansas, Nebraska, and Utah, subsidized programs allow for health care providers to order articles through a state agency Network member at little or no cost. State libraries or the state Area Health Education Centers (AHEC) in these four states subsidize document delivery of articles to health care providers in their state. Requests that the state agency is unable to fill from its own collection are forwarded to a Resource Library. The NN/LM MCR will promote the subsidized services to unaffiliated health care providers. This promotional effort will include establishing a web page on the NN/LM MCR web site where contact information and information on the subsidized ordering process will be maintained. These subsidized programs provide unaffiliated health care professionals with access to affordable health information needed for quality patient care.

The NN/LM MCR will contact the state libraries and other organizations in Missouri and Wyoming libraries and share with them the subsidized document delivery models occurring in four states in the region. We will encourage the organizations in Missouri and Wyoming to adopt or adapt the models of the other NN/LM MCR region states to offer subsidized document delivery in their states.

PubMed Central and the Emergency Access Initiative

Two additional resources will be promoted to unaffiliated health care providers in the region. PubMed Central is the U.S. National Institutes of Health's free digital archive of biomedical and life sciences journal literature and offers immediate access to thousands of full-text articles. The Emergency Access Initiative provides free access to full-text articles from major biomedicine titles to healthcare professionals, librarians, and anyone in the United States affected by disasters.

Evaluation

Although Network members provide all the basic services listed in the statement of work, health care providers primarily rely on the journal literature to keep up with latest developments. Loansome Doc is the key information service that the RML will monitor to assure equal access to health information. In the MidContinental Region there are twenty-seven libraries (16% of Full members) providing Loansome Doc services. This percentage correlates with the average percentage of Loansome Doc providers throughout the different regions in the NN/LM.

The MCR will annually request a report on unaffiliated Loansome Doc participants from NLM. The majority of Loansome Doc users (240) are served by the Resource Libraries (including the Regional Medical Library). This is to be expected because these libraries hold the largest number of journal titles. Primary Access libraries serve 137 Loansome Doc users. We expect to see an increase in the number of Loansome Doc users due to our promotion of this service.

The NN/LM MCR will continue its history of encouraging Primary Access Libraries to provide Loansome Doc services to unaffiliated health professionals by stressing the benefits to be gained by the library and its parent institution. The MCR will do this through its Plains to Peaks Post newsletter, MCR Blog, during the monthly series of four online DOCLINE training classes, and at local health sciences library consortia meetings. We will also add Loansome Doc services to unaffiliated health professionals on a list of "encouraged" services for full Network membership.

As a result of our promotion of subsidized document delivery in Colorado, Kansas, Nebraska, and Utah, we expect that unaffiliated health care providers will also take advantage of these services. The NN/LM MCR will request a report from the Network members providing subsidized document delivery. These usage reports, along with monitoring our Network members who provide access to unaffiliated health care providers, will enable the RML to assess whether equal access to health information is available to health care professionals across the region.

Establish agreements with Network member libraries to provide basic services to unaffiliated health professionals

The core entities that will provide services to unaffiliated health professionals are the region's Resource Libraries. Incorporated into the agreement signed by each Resource Library is the responsibility of serving unaffiliated health professionals by providing the basic level of services mentioned in the statement of work. This service to unaffiliated health professionals will continue to be included in the Resource Library subcontracts with the NN/LM MidContinental Region.

The Resource Libraries for the MidContinental Region are:

Colorado

Health Sciences Library, University of Colorado Denver

Kansas

A.R. Dykes Library of the Health Sciences, University of Kansas Medical Center

Missouri

Bernard Becker Medical Library, Washington University

J. Otto Lottes Health Sciences Library, University of Missouri, Columbia

Nebraska

Creighton University Health Sciences Library/Learning Resources Center

McGoogan Library of Medicine, University of Nebraska Medical Center

Utah

Spencer S. Eccles Health Sciences Library, University of Utah

Wyoming

University of Wyoming Libraries

Where no agreements exist, the RML will provide basic levels of service on a cost recovery basis

The Resource Libraries have agreed to provide a basic level of service for health professionals and the citizens of their states. (For details on Resource Library responsibilities see SOW section A5) Should there be an area not covered by agreements with the Resource Libraries, the Regional Medical Library, Spencer S. Eccles Health Sciences Library, will provide basic services on a cost recovery basis.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Subcontract with Resource Libraries to provide basic services to unaffiliated health care providers in their states	X				
Create a page on the MCR web site to direct unaffiliated health care providers to subsidized document delivery options	X				
Network members and agreements with Resource Libraries cover all parts of the region with basic services	X	X	X	X	X
The RML will provide basic services at cost recovery should there be an area not covered by Network members or Resource Libraries	X	X	X	X	X
Promote the Member Directory web site and access to health information services to unaffiliated health professionals	X	X	X	X	X
Promote document delivery services and free full text resources	X	X	X	X	X

A2 – Needs of Health Sciences Libraries**Statement of Work:**

Assess and respond to the needs of health sciences libraries to support programs that improve the transfer of health care and biomedical information within their institutions and through their participation in the network. This includes promoting the use of relevant NLM services, testing new features of these services; and identifying the need for new or enhanced NLM services.

Applicable NN/LM Goal:

Develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public

Objective & Rationale:**Objective:**

- Libraries and librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

A strong Network of health sciences libraries and librarians provides an effective way to fulfill the mission of the NN/LM to ensure the transfer of health care and biomedical information within member institutions. With an understanding of Network member needs, the MCR can assist health sciences librarians to develop programs and services that support that mission.

Approach & Methodology:

Outcome: - Network members and other organizations are better able to support access to health information resources

Responsibilities for activities of this statement of work are shared by three program areas: Assessment and Evaluation, Members Services, and Library Advocacy. The assessment portion falls under Assessment and Evaluation. The programming portion falls under Member Services and Library Advocacy.

Assess and respond to the needs of health sciences libraries to support programs that improve the transfer of health care and biomedical information within their institutions and through their participation in the network

Assessment

In order to understand how well we are serving the needs of our Network members, NN/LM MCR will conduct one Network Member Questionnaire in Year 2 and of focus group series in Year 3. The Network Member Questionnaire and two series of focus groups were conducted during the current contract to ascertain Network members' perception of the resources and services of the NLM and the RML. Public librarians were invited to participate in focus groups held in 2007 and health sciences Network members in groups held in 2010. Each time a questionnaire or focus group is planned, the question sets are reviewed for ongoing relevancy and new questions are added that address changes in the health information landscape. The focus groups that will be held in Year 3 will ascertain Network members' perception of the impact of health care reform, e-science and new developments in health information access on their work and services.

We evaluate data obtained from each assessment tool for new insights into our Network members' needs. We also compare data to that collected previously to better understand the progress being made in supporting librarians' work to make health information available and accessible throughout the region. We have found our assessment tools to be effective in describing the status of Network members in the region and in identifying areas where the NN/LM MCR can support them. For example, in earlier questionnaires, our Network members indicated that only a handful of health sciences libraries do not have broadband Internet connectivity. However, many of our hospital libraries are restricted in their use of web 2.0 communication and social networking tools due to policy or institutional firewalls. The NN/LM

MCR developed a pilot project to determine whether the availability of a computer connected to the Internet via a modem card increases accessibility to needed information.

A consultant will assist us in analyzing the project data and will write the assessment reports. Reports from our previous Network Member Questionnaires and three series of focus groups are posted on the MCR web site in the Member Input section of Evaluation.

(<http://nnlm.gov/mcr/memberinput/>)

Less formal methods are also used to assess the needs of Network members. At local and regional meetings, NN/LM MCR coordinators raise questions, such as those addressing scholarly communication and electronic resources, in order to get feedback from members on the issues they face in their institutions. Coordinators will continue to gather first-hand information at local and regional meetings.

In the current contract, the MCR developed a checklist (Figure 7) that is used as a reminder of issues to cover when visiting member libraries. We will continue to use the checklist to provide and collect information during visits to full and affiliate Network members.

Checklist of Items to Cover in Library Visits	
Awareness:	
•	DOCLINE
○	FreeShare
○	Link Out Use
○	Link to MedlinePlus
○	EFTS
•	MCR and NN/LM web sites
•	MLA Educational Clearinghouse
•	NTCC trainings
•	NLM Distance Education/Online Resources
•	Blogs
•	MedlinePlus magazine
•	Technology Applications - Skype
•	NetLibrary
•	Breezing Along with the RML
•	Spotlight! On National Library of Medicine Resources
•	Plains to Peaks Post
•	BHIC blog (http://nnlm.gov/mcr/bhic/)
•	NLM Product availability
•	Information Rx program
•	Library Success wiki (http://www.libsuccess.org/index)
Services/Marketing	
•	Institutional outreach/clinical librarian program
○	(Attend department meetings/rounds)
•	Institutional involvement (i.e. committee participation)
•	Library marketing activities (if publishing a newsletter, please send copy to Network Coordinator)
•	Online catalog
•	Community collaborations
•	National Network of Library of Medicine (http://nnlm.gov/)
•	National Library of Medicine (www.nlm.nih.gov/)
Professional Development:	
•	MCMLA member/ attend conference? www.mcmla.org
•	MLA member/ attend conference? http://www.mlanet.org/
•	State library association member/ attend conference?
•	Interested in active involvement with MCR (service on work group, RAB, write articles, etc.)

Figure 7.

This checklist will be reviewed and updated by all state coordinators at least twice during the contract. The needs that are identified and status of the libraries that should be made known to NLM will be entered in the Activity Reporting System so that the information can be included in our quarterly reports.

Response to Needs

The NN/LM MCR will respond to the needs of health sciences library Network members to improve the transfer of health care and biomedical information within their institutions and to

provide benefits to them through their participation in the Network. We will design programs based on needs expressed in the responses from the 2012 Network Member Questionnaire, the 2013 focus group discussions, and data gathered from the visit checklist. After conducting the proposed Network Member Questionnaire in 2012 and the focus groups in 2013, we will adjust planned programs to reflect the changing needs of our members. We will promote programs and identify them as responding to the needs articulated in questionnaires and focus groups. The Library Advocacy Program will continue to develop programming to document the value of health sciences librarians, support members in their institutional advocacy efforts and explore the emerging roles of information professionals.

This includes promoting the use of relevant NLM services, testing new features of these services; and identifying the need for new or enhanced NLM services

Promotion of NLM Services

The NN/LM MCR will promote and offer classes to health sciences librarians on NLM resources and services. In response to the data from the Network Member Questionnaire, coordinators will add themselves as instructors for classes or develop new training curriculum for NLM services. The Education Coordinator will ensure that there is at least one instructor in the NN/LM MCR for each of the workshops developed by other RMLs and shared across regions.

NN/LM MCR will promote the availability of classes on PubMed, MedlinePlus, PHPartners, DOCLINE and other NLM products that Network members can take for MLA CE credit. Resource Libraries have agreed to host at least one visit by the National Training Center (NTC) in the next contract. We will coordinate the NTC training visits and promote the classes so that the minimum number of participants is registered.

In the current contract, NN/LM MCR has solicited and gathered recommendations from Network members on changes or enhancements they would like to see in DOCLINE. The Member Services Coordinator routinely asks members for any suggestions they may have for the DOCLINE system, and also solicits comments from Network members whenever NLM and the DOCLINE team request feedback. Feedback is also solicited from members in evaluation materials for classes on NLM products.

We will continue to promote and facilitate services such as DOCLINE, Loansome Doc, and other relevant NLM services to Network member libraries. We will include information about these services as part of the content of the NN/LM MCR web page and coordinators can add it to their presentations. We will periodically publish information about the services using our communication tools and remind Network members and others that coordinators are available to assist them with NLM services. NLM services are included on our library visit checklist to ensure that we inform Network members about changes in services and ask about their use of them. We will include these services in conversations during visits and at appropriate library meetings and exhibits.

Test New Features of NLM Services

In the current contract NN/LM MCR staff has tested new features of NLM resources. For example, the NLM DOCLINE Team occasionally requests that each of the RMLs test the beta version of new releases. The RMLs primarily look for typographical errors, script errors, etc., and report back findings. Another example is the NN/LM MCR's participation in a load test (a scheduled event where several sites use a web site's features in order to test its capabilities for processing a large number of users at one time) of the NLM Journal Donation Program prior to it being released to the public. We will continue testing new features at the request of NLM and will provide feedback.

Identify the Need for New or Enhanced NLM Services

We will report data gathered from the Network Member Questionnaire, focus groups, and informal visits that identify the need for new or enhanced services. We will share with NLM and other RMLs suggestions and observations resulting from coordinators' experiences.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
The MCR will conduct one Network Member Questionnaire		X			
The MCR will conduct a series of focus groups with Network members			X		
Promote classes on NLM products including PubMed, MedlinePlus, PHPartners, DOCLINE, and others	X	X	X	X	X
Promote NLM services including DOCLINE and LoansomeDoc	X	X	X	X	X
Solicit and gather recommendations from Network members on NLM products and services	X	X	X	X	X
Visit Network member libraries and gather recommendations on NLM products and services	X	X	X	X	X
Test new features of NLM products and services as requested by NLM	X	X	X	X	X
Update member visit checklist	X		X		

A3 – Manage the NN/LM MCR Network Membership

Statement of Work

Manage the NN/LM Network membership program for the Region. Membership in the NN/LM Network is an integral part of the NN/LM program and defines the NN/LM Network member constituency (see Appendix 1).

The Network members are crucial to the operation of the NN/LM Network, providing health professionals and consumers with access to needed information resources. Network membership is a way of recognizing the contributions of members. The contractor shall:

- a. Recruit new Network members from eligible libraries and information centers in the Region. Network membership certificates for the 2011-2016 time period will be provided by NLM and be personalized and distributed by the RML;
- b. Support Network members that participate in DOCLINE;
- c. Work with the NLM DOCLINE Team on DOCLINE system enhancement testing and implementation; and
- d. Actively involve Network members in NN/LM infrastructure and outreach programs, including obtaining feedback on regional and NLM programs on periodic basis.

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective & Rationale:

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

Managing, developing, and building the NN/LM membership program are foundations of the NN/LM MCR program. Members are essential to successfully reaching the objective of equal access to health information for health professionals, including unaffiliated health professionals, and health consumers. The NN/LM MCR recruits and supports two types of members:

Full Network member – any health sciences library or health-related information center, institution, or organization that:

- is regularly staffed
- has an Internet connection
- has its own collection of current and lendable health sciences materials (books, journals, audiovisuals, and electronic databases)

- provides information services to health professionals and/or the general public and fully participates as a reciprocating DOCLINE user

Borrow-Only members – As described in Appendix II of the Statement of Work, Borrow-Only members are a special category under the Full member level. Members that qualify for this category are members that, due to insufficient holdings or staff, have opted out of lending to other Full members.

Affiliate Network member – A library, information/resource center or organization that promotes health information, education, and/or access, but does not meet all of the criteria for Full member participation.

Approach & Methodology:

Outcome: - Network members and other organizations are better able to support access to health information resources

A3a: Recruit new Network members from eligible libraries and information centers in the Region. Network membership certificates for the 2011-2016 time period will be provided by NLM and be personalized and distributed by the RML

In Year 1, all existing members will be informed that renewal of membership is required. Links to an online agreement form will be sent to all members. The membership renewal process will provide us with the opportunity to update contact information. Certificates will be distributed as part of the renewal process.

Each MCR staff member pursues opportunities to increase Network membership. They look for potential members where librarians congregate, such as at state and regional health sciences consortia meetings, during annual and mid-year state library association conferences, and while exhibiting and participating in the annual conference of the Midcontinental Chapter of the Medical Library Association. The training environment will also continue to be used as an opportunity to promote membership.

We designed a brochure during the current contract that describes the mission of the NN/LM and explains the benefits of membership. This and other member recruitment documents will be regularly reviewed and updated. These materials will be maintained on our web site so that the NN/LM MCR web site is also a promotional resource for membership. Procedures and systems, such as the online membership application and online Network member agreement form, have been established to ensure efficient and timely responses to membership applications.

The NN/LM MCR will encourage health professionals and health consumers encountered at conferences, training sessions, and health fairs to assist us in the recruitment process. For example, during the course of the conversation, we will inform health professionals or health consumers that they can access health information and services from Network members located near them. Using the NN/LM Member Directory (<http://nmlm.gov/members/adv.html>), we can locate the nearest Network member (Primary Access Library or Resource Library) to their practice, place of business, or residence. If there are no participating members in their area, staff now has an opportunity to focus recruitment efforts in that area. This also gives us an opportunity to partner with the health professional or health consumer to encourage a health care facility or public library to become a Network member. We anticipate that this recruitment strategy will boost membership.

Primary focus for Network member recruitment falls into five categories:

1. Non-members listed in DOCLINE
2. Academic libraries supporting higher education health programs
3. Academic health sciences libraries that solely support health programs
4. Hospital libraries/information resource centers
5. Public libraries

A substantial list of non-member institutions already exists in DOCLINE and NN/LM MCR coordinators will approach these institutions first. There are 207 institutions listed as non-members.

Location	Total
MidContinental Region	207
Colorado	53
Kansas	33
Missouri	61
Nebraska	24
Utah	23
Wyoming	14

Table 3. Non-Member Institutions in DOCLINE

There are eleven academic libraries in the MCR that solely support health related fields and all are current Network members. NN/LM MCR will monitor this category and recruit if and when new institutions are formed.

There are approximately 266 academic libraries in the MCR. Of these, 118 (44%) support programs offering degrees in a health-related field. Sixty-six of these are current members leaving fifty-two institutions to target for Network membership.

There are approximately 170 hospital libraries/information resource centers in the MCR. Of these, 134 (79%) are current Network members. Thirty-six are potential Network members and will be targeted for recruitment.

There are approximately 984 public library systems across the MCR, of which seventy-three (7%) are current Network members. There are 911 potential public library Network members.

A3b: Support Network members that participate in DOCLINE

An important aspect of the MCR program is supporting health professionals, including unaffiliated health professionals, and health consumers, to gain or improve their access to health information resources. In order for this access to occur, Network members need to efficiently and rapidly provide their clients with access to health sciences information through document delivery services. The NLM DOCLINE system is a significant resource for improving access to health sciences information. A detailed explanation of these activities can be found in our response to SOW section A4. The NN/LM MCR will continue to provide resources and services to improve the knowledge and skills of Network members using DOCLINE as a way of providing health professionals and consumers with access to health information.

The NN/LM MCR will continue to use all forms of communication (listserv messages, newsletters, weekly news, announcements at consortia meetings, etc.) at its disposal to inform DOCLINE users of updates and/or changes in DOCLINE.

One-on-one consultations with Network members, in person, over the telephone, or using teleconferencing technologies will continue to be employed to assist members to use DOCLINE efficiently. The distributed model enables MCR staff to more easily meet one-on-one with DOCLINE users that need assistance in their states. The NN/LM toll-free telephone number also allows DOCLINE users to contact the MCR with questions. Over the course of the current contract, the MCR has handled over 190 telephone consultations and conducted six in-person training sessions for individual members.

Training to improve efficiency in using DOCLINE will also continue. The online environment has proven to be the most popular method for training members to use DOCLINE. NN/LM MCR has developed several classes that cover the principle features of DOCLINE. Each class earns participants one continuing education credit from the Medical Library Association (MLA). NN/LM MCR will continue to provide quarterly online classes in five major DOCLINE:

- Beginning DOCLINE
- Serial Holdings
- Routing Tables
- Borrowing and Lending
- How to Use and Get DOCLINE Help

Because these classes are online and open to any DOCLINE user, regardless of their region, an impressive 511 DOCLINE users nationwide have attended the classes between January 2010 and March 2010. Four hundred fifty-one participants filled out an MLA class evaluation with 96% reporting the classes met the learning objectives and 94% giving the classes a grade of A or B. Demographic information was not gathered during the evaluation portion of the process in order to protect the privacy of class participants filling out the evaluations. However, demographic information was gathered from the 361 members requesting MLA continuing education credits, which identified thirty-nine individuals from the NN/LM MCR who participated in these online DOCLINE classes.

These high attendance numbers, along with participants giving such high marks to the training, are evidence of a real need for DOCLINE training using the online training environment. The NN/LM MCR will continue to explore other classes of interest to Network members. Future topics will include EFTS (setting up, using, and promoting the benefits of EFTS), and LinkOut[®] (gaining institution support, setting up, and promoting service to PubMed users).

A3c: Work with the NLM DOCLINE Team on DOCLINE system enhancement testing and implementation

The NN/LM MCR will continue to work with the NLM DOCLINE Team on testing and implementing DOCLINE system enhancements. For instance, when the NLM DOCLINE Team asks the regions to test a beta version of a new DOCLINE release, the MCR runs tests on the new features of DOCLINE and reports any anomalies to the DOCLINE Team. The NN/LM MCR will continue to participate in the monthly DOCLINE coordinators' teleconferences, where progress reports of DOCLINE enhancements are given by the DOCLINE Team and where the RMLs provide feedback from DOCLINE users' regarding reported issues with DOCLINE.

A3d: Actively involve Network members in NN/LM infrastructure and outreach programs, including obtaining feedback on regional and NLM programs on periodic basis

NN/LM MCR will continue to actively involve Network members in the NN/LM infrastructure and outreach programs. In this respect, we are distinguishing between Network members as institutions and as individuals employed at Network member institutions. Understanding who individuals are at Network member institutions and what strengths and interests they (and their institution) have will allow us to ensure we are reaching and involving a majority of those individuals and their institutions.

Beginning in Year 5 of the current contract, we will encourage Network members to list all individuals who would benefit from being involved in NN/LM MCR infrastructure and outreach programs in their DOCLINE Institutional Record. **The NN/LM MCR will use the additional contacts in the DOCLINE Institutional Record to push information to or invite participation in**

NN/LM MCR infrastructure and outreach opportunities. DOCLINE lists eight contact type categories that organize individuals by their library function. These contact types are:

- Consumer Health
- Director
- Interlibrary Loan
- LinkOut®
- Loansome Doc
- Reference
- Serial Holdings
- Other

The NN/LM MCR will use the job category types as a filter to promote opportunities to a specific category. For example, if the NLM DOCLINE team asks for enhancement ideas from DOCLINE users, we could send targeted emails to individuals who work with interlibrary loan, LinkOut, Loansome Doc, and serial holdings and ask them about changes they would like to see in DOCLINE. Using DOCLINE to identify these individuals will simplify the process and reduce the number of databases where member information is tracked. Because they have read/write access to their records, Full members can easily update their own information as necessary. Because our Affiliate members do not have access to modify their institutional records, the NN/LM MCR will work directly with them to ensure their contact information is current.

Member Involvement in Infrastructure

We have identified four activities where our members can be actively involved in NN/LM infrastructure:

1. Advisory board and groups
2. Special project working groups
3. Focus groups
4. Questionnaires

Network members, representing the diversity of our membership, are invited to be on the Regional Advisory Board and participate in one of the special project work groups led by RML coordinators. Participating in focus groups and responding to questionnaires are other ways members can be involved in NN/LM infrastructure. (For more information about member feedback, see our response to SOW section A9) In addition to being part of the MCR's infrastructure, this participation provides members with the opportunity to comment and advise the RML on its programs and services.

Member Involvement in Outreach

We have also identified three areas where our members can be actively involved in NN/LM outreach programs:

1. Outreach to unaffiliated health professionals and health consumers. Members can indicate their involvement by noting outreach services in their DOCLINE Institutional Records. These services include:
 - a. Loansome Doc
 - b. Internet Training
 - c. Mediated Searching
 - d. Onsite Collection Access
 - e. Online Searching Training
 - f. Reference Services
 - g. Authorize their institutions' listing in MedlinePlus Consumer Health Libraries Directory
2. Exhibiting on behalf of or co-exhibiting with NN/LM MCR coordinators
3. Teaching on behalf of or co-teaching with NN/LM MCR coordinators

Any individual at a Network member institution wishing to be involved in NN/LM MCR outreach programs will be provided with training needed to participate in these activities. Members interested in exhibiting on behalf of or with the NN/LM MCR will continue to be required to have a certain level of knowledge and skill. The NN/LM MCR has an exhibitor training program that provides instruction on NLM and NN/LM resources and services, along with how to use laptop computers, and setting up and taking down exhibits. In the next contract, the NN/LM MCR will offer teaching certificates to Network members wishing to teach for or co-teach with the NN/LM MCR. The process will include a train-the-trainer model of education. Certificates are evidence that member skills and knowledge are valued by a regional professional organization. Many Network members keep certificates of achievement or participation in their portfolios and include them in their annual reports and for MLA academy credit.

To continue to encourage Network members' participation in NN/LM programs, we will publish opportunities in our quarterly newsletter, our weekly e-news compilation, on the MCR web site, on the MCMLA-L listserv, and through direct mail and email. Opportunities to participate will also be described at health sciences library meetings, both regional and local.

In addition to promoting and supporting Network member involvement, the MCR uses a variety of methods to obtain feedback from our Network members on NLM and NN/LM resources and services. We have had success with several formal assessment instruments, our Network Member Questionnaire and focus groups, and regularly record anecdotal feedback. (For more information, see our response to SOW section A9)

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Renew full and affiliate Network members and distribute Network member certificates	X				
Recruitment strategy plan created and organizations indentified to be targeted	X				
Training for NN/LM MCR staff on recruitment resources and procedures	X				
Develop and offer online LINKOUT and EFTS class	X	X	X	X	X
Quarterly monitoring of Network membership numbers	X	X	X	X	X
Quarterly (or as needed) promotion of how to get DOCLINE assistance	X	X	X	X	X
Quarterly announcements inviting Network member involvement in NN/LM MCR infrastructure and outreach programs	X	X	X	X	X
Announcements of changes to DOCLINE as needed	X	X	X	X	X
Monthly DOCLINE class offerings	X	X	X	X	X
Attend monthly DOCLINE Coordinators' meeting	X	X	X	X	X
Provide DOCLINE Team with feedback when requested	X	X	X	X	X
Bi-quarterly offerings of NN/LM MCR Exhibit and Teaching Certificate training	X	X	X	X	X

A4 – NN/LM MCR Regional Service Plan

Statement of Work

Implement the portion of the Regional Services Plan concerned with document delivery to provide health professionals, including unaffiliated health professionals throughout the Region, with efficient, rapid access to health sciences information resources, and promote network participation in the Electronic Fund Transfer System (EFTS). The plan for the Region shall conform to the NN/LM Resource Sharing Plan (Appendix 2);

Applicable NN/LM Goal

Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

Supporting efficient and rapid access to health sciences information has been a critical component of the NN/LM from the time of its inception and continues through the present. Document delivery services through the NLM DOCLINE system remain the primary means of health sciences information delivery to health professionals, including unaffiliated health professionals. NLM reports that DOCLINE interlibrary loan requests have steadily decreased on an average of 7.2% between FY2003 and FY2007. In FY2008 there was a 6% decrease from the previous year.¹⁵ This downward trend does not mean that the value of DOCLINE has diminished for the end user. Health care providers still want access to journal articles. We speculate that user habits are changing. More full text articles are immediately available from their library or from sources such as PubMed Central at no extra charge. Health professionals are using these sources and not seeking additional articles to answer their questions.

The NN/LM MCR, as a region, has a fill rate of 91% (U.S. NN/LM Fill Rate is 93%). To keep this number climbing, current member information is extremely important so that DOCLINE requests can be appropriately routed to the library that has the resource to lend and can fill the request in compliance with the borrower's criteria. The NN/LM MCR will continue to track and work with individual members who need to update their institutional record or serial holdings information by utilizing the DOCLINE reports provided by NLM. The primary reports to be used are the "Routing Tables Not Updated Within 1 Year," "Institutional Records Not Updated Within 1 Year," and "Holdings Not Updated Within 1 Year."

¹⁵ US Department of Health and Human Services Public Health Services. National Institutes of Health National Library of Medicine: Programs and Services. Bethesda, Maryland; Fiscal Year 2008 13 p. Available from: www.nlm.nih.gov/ocpl/anreports/fy2008.pdf

Promoting the use of EFTS (Electronic Fund Transfer System) as a proven cost saving enhancement to the DOCLINE system to Network members remains an important component to improving the performance of the NN/LM document delivery services. The NN/LM MCR recently conducted a study¹⁶ on non-EFTS MCR Network members in order to identify barriers to using EFTS. The findings showed that primary barriers are at the Network members' institutions. The majority of respondents (51%), do not charge or are not charged for document delivery and would not benefit in participating in EFTS. Another 26% reported that changing their institution's policy regarding EFTS was beyond their ability or would require too much effort with little perceived gain for the library. As a result of this study, the NN/LM MCR has a better understanding of these barriers and how to address them. NN/LM MCR will continue to work directly with EFTS to find effective ways to promote the benefits of online billing to Network members, specifically the policymakers, and to provide better training for Network members on how they can implement an EFTS program at their institutions.

Coordinating and encouraging the use of the MCR Resource Sharing Plan is overseen and implemented by the Member Services Coordinator. Assisting the Member Services Coordinator is the DOCLINE Coordinator. The NN/LM MCR state coordinators also assist in implementing the MCR Resource Sharing Plan for members located in their respective states. The Member Services Coordinator, DOCLINE Coordinator, and state coordinators all support new and current members' participation in the Resource Sharing Plan. RML staff assists members in:

- Entering and maintaining serial holdings
- Creating and maintaining efficient DOCLINE routing tables
- Borrowing and lending procedures
- Establishing and using EFTS accounts

The Member Services Coordinator and the DOCLINE Coordinator provide monthly¹⁷ online training sessions (<http://nmlm.gov/mcr/education/docline.html>) that are promoted to and open to all DOCLINE users. Between January 2010 and March 2010, the classes have reached over 500 DOCLINE users from the United States and Canada. Each class qualifies participants for one Medical Library Association Continuing Education Credit. The classes cover:

- Introduction to DOCLINE
- Serial Holdings
- Routing Tables

¹⁶ Bramble JB, Kelly B. Report on Network Member Institutions that do not use Electronic Funds Transfer Service Utah; 2009. Contract No. NO1-LM-6-3504. Supported by the National Library of Medicine and the University of Utah Spencer S. Eccles Health Sciences Library. Available from: <http://nmlm.gov/mcr/rsdd/efts/eftsreport.pdf>

¹⁷ National Network of Libraries of Medicine MidContinental Region. Document Delivery Resources and DOCLINE Classes. [Internet]. Utah: Contract No. NO1-LM-6-3504. Supported by the National Library of Medicine and the University of Utah Spencer S. Eccles Health Sciences Library.; [updated 2010 Mar 10; cited 2010 May 5]. Available from: <http://nmlm.gov/mcr/education/docline.html>

- Borrowing and Lending
- Using and Getting Help with DOCLINE

In addition to responding to questions from Network members, the Member Services Coordinator monitors messages and discussions on the DOCLINE-L and responds to MCR members who post questions and comments there. The Member Services Coordinator and DOCLINE Coordinator regularly participate in the monthly DOCLINE Coordinator teleconferences where DOCLINE changes are discussed. News of DOCLINE changes impacting MCR Network members are posted to MCR publications (*RML News* and *Plains to Peaks Post*). Messages are posted in order to inform members of new DOCLINE developments and how-to-tips.

Approach & Methodology:

Outcome: -Network members and other organizations are better able to support access to health information resources

Appendix II - NN/LM Resource Sharing Plan: Coordinate the contribution, review, and maintenance of serial holdings data to DOCLINE in a manner that is timely, efficient, and accurate

The MCR will continue to coordinate working with members to encourage regular review and maintenance of their libraries' serial holdings data. One of the requirements of full Network membership is the expectation to accurately report and maintain holdings on at least an annual basis. Level two holdings will be corrected and modified to become level three holdings within a 30-day period. Members that are reciprocal borrowing DOCLINE participants will be required to have at least twenty-five current (five years to the present) and lendable (license restriction free/embargo free) holdings listed in their records. The Member Services Coordinator is responsible for alerting members that have not reviewed or maintained their serial holdings for more than one year.

Appendix II - NN/LM Resource Sharing Plan: Provide standardized policies and procedures to assure appropriate regional consistency within the national Network

The MCR will provide and promote standardized policies and procedures to assure appropriate regional consistency with the NN/LM. The MCR will monitor performance data from DOCLINE to identify Network members not meeting the minimum requirements of policies that govern Network membership. The NN/LM MCR coordinators will work with individual Network member institutions to meet the requirements of their desired level of membership. DOCLINE reports from NLM will be used to identify Network members potentially needing assistance.

- Fill Rate – All reciprocal borrowing participants will understand they are required to maintain a fill rate of 75% or higher
- Routing Tables – All reciprocal borrowing participants will understand they are required to maintain a current routing table and will verify or update it on at least an annual basis. The NN/LM MCR will continue to encourage members to update their Routing Tables
- Institutional Records – All membership levels will understand they are required to maintain current institutional records and will verify or update them on at least an annual basis. The NN/LM MCR will encourage Full members to update their Institutional Records. Affiliate members will not have access to update their institutional records; MCR state coordinators will update affiliate member records

Appendix II - NN/LM Resource Sharing Plan: Investigate and test new methods of resource sharing which use existing or new technologies for access and/or delivery

The NN/LM MCR will investigate and test new methods of resource sharing that use existing and new technologies in the area of information access and delivery. Some of this exploration will come from the expertise of our Network members. An example of this was the investigation into workflow tools for online resources. Network member Rosalind Dudden, Library Services Director at National Jewish Health, Denver, Colorado, shared her knowledge of this topic with the rest of the Region by writing an article for the spring 2010 *Plains to Peaks Post* newsletter (http://nnlm.gov/mcr/services/comm/newsletter/PTPP_April_2010.pdf). She shared a comprehensive report of her experiences and recommended time-saving workflow tools used by scientists and physicians. Her contribution is an example of how involving Network members can widen the MCR knowledge base and investigational reach.

Appendix II - NN/LM Resource Sharing Plan: Provide guidance on managing and negotiating e-journal subscriptions related to ILL and document delivery privileges

The NN/LM MCR will continue to provide ILL and document delivery service management and guidance regarding e-journal subscriptions to Network members. Network members will have access to several sources of support in this area.

The NN/LM MCR maintains a web page of resources that contains current and vetted information on the licensing of electronic resources. The NN/LM MCR web page supporting e-journal licensing guidance will be kept up to date and informative. This page provides links to effective methods of managing collections and licensing strategies members may use to increase their knowledge and skills in this aspect of librarianship. Network members also have free access to NetLibrary, through a license purchased by the NN/LM MCR. The current collection consists of e-books in the areas of technology and library management.

Another resource is a regularly taught class called “Librarians are from Venus, Vendors are from Mars: Strategies for Developing Respectful Vendor Relationships and Strong Contracts.” Class participants learn:

- How to work and communicate in a language that vendors understand
- How to make sure they are being understood by sales and vendor representatives
- Fundamentals of getting the best contract for their institutions that also meets the needs of the vendors
- How to manage collections, contract information, and correspondence

This is a live web class that qualifies participants to earn four continuing education credits from the Medical Library Association. Participants also have an opportunity to work with a classmate on their homework portion. This opportunity not only increases skills and knowledge but also is chance for networking between members.

The third resource is the NN/LM MCR coordinators, who will continue to provide consultation services to members needing assistance in this area. The NN/LM MCR will continue to encourage members to contact their state coordinator or the Member Services Coordinator to work with them on questions or concerns they may have.

Appendix II - NN/LM Resource Sharing Plan: Develop a Network strategy to provide document delivery and access to collections in the event of a regional or national disaster

The MCR has developed a comprehensive emergency plan that provides continuity of service, which essentially diverts and redirects services away from the impacted area to resources that can provide services. The plan includes document delivery services and collection access. A more detailed description can be found in our response to SOW section A6.

For a large scale emergency, the MCR and the New England Region have an agreement to be “buddy” regions. This essentially means that if there were a large scale emergency impacting an entire region, for example the MCR, someone from the MCR RML would initiate the emergency plan and all services for the MCR, including document delivery support and collection access, would be redirected to the New England Region.

Appendix II - NN/LM Resource Sharing Plan: Facilitate and promote electronic document delivery with a goal of increasing electronic delivery in the Network

There are six electronic delivery options available in DOCLINE that members may select as the method of delivering requested journals:

1. Ariel
2. Email PDF
3. Email TIFF
4. Web PDF
5. Web TIFF
6. FAX (the NN/LM MCR does not consider FAX a form of electronic delivery)

Early in the current contract, the MCR learned that all DOCLINE users provided some form of electronic document delivery. Currently, all MCR Full Network members continue to provide some form of electronic delivery. Because members already meet this standard of document delivery service, the NN/LM MCR will not devote resources to facilitating or promoting the use of electronic delivery other than annual monitoring.

Appendix II - NN/LM Resource Sharing Plan: Encourage and promote the use of Electronic Fund Transfer System (EFTS) throughout the NN/LM

Promoting the use of EFTS (Electronic Fund Transfer System) as a proven cost saving enhancement to the DOCLINE system to Network members remains an important component to improve the performance of NN/LM document delivery services. The MCR recently performed a study on non-EFTS MCR Network members in order to identify barriers blocking Network members from using EFTS. The findings showed that primary barriers are at the Network members' institutional levels. As a result of this study, the MCR has a better understanding of these barriers and recognizes that promotional efforts will need to be implemented in a way that is understandable to members' institutional policy makers as well as the members themselves. **EFTS promotional materials have been created that are more in tune with what institutional policy makers consider to be important. For instance, EFTS has created promotional material that shows the return on investment for EFTS users versus those using paper invoices and checks.**

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Annual monitoring and reporting of Network member performance data (Serial Holdings, Routing Table, Fill Rates, Institutional Record, and not using electronic method for document delivery)	X	X	X	X	X
Quarterly promotion encouraging: <ul style="list-style-type: none"> • Updating Serial Holdings information • Updating Institutional Records • Review of DOCLINE Fill Rate • Participation in EFTS 	X	X	X	X	X
Annual review of available resource sharing technologies and publishing findings in NN/LM MCR communication venues	X	X	X	X	X
Quarterly offering of the class “Librarians are from Venus, Vendors are from Mars: Strategies for Developing Respectful Vendor Relationships and Strong Contracts”	X	X	X	X	X
Annual review of ILL and document delivery service management and negotiating e-journal subscriptions resources posted on the NN/LM MCR web page	X	X	X	X	X
Quarterly promotion of consultation services on ILL and document delivery service management and negotiating e-journal subscriptions	X	X	X	X	X
Annual review of the NN/LM MCR document delivery and access to collections emergency plan	X	X	X	X	X

A5 – Resource Libraries

Statement of Work

Enter into formal agreements with a limited number of institutions in the Region to serve as Resource Libraries:

- a. Criteria for selection of Resource Libraries will be proposed by the offeror and may include, but are not limited to:
 - (1) Quality, uniqueness and/or size of the collection which add significantly to the resources of the Region;
 - (2) Special expertise which contributes to improving regional or national programs, in areas such as distance learning, advanced applications of technology to solving information access and delivery problems, digitization of information, commitment to the retention and preservation of print materials, library and information research, etc.;
- b. The RML will negotiate with Resource Libraries that are willing to develop projects that will build on their expertise to address the needs of the Region and to enhance the Resource Libraries' ability to contribute to their institutional goals and priorities.
- c. All Resource Libraries and the RML must agree to:
 - (1) Support DOCLINE libraries in the Region, participate fully in the DOCLINE system, and keep detailed library profile information up-to-date in the system;
 - (2) Contribute their institution's serial holdings data to DOCLINE and keep holdings current by updating them online;
 - (3) Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms;
 - (4) Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
 - (5) Participate in the Electronic Fund Transfer System (EFTS); and
 - (6) Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation.

Objective & Rationale:

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

Resource Libraries play a major role in the region. They subcontract with the University of Utah to help carry out the mission of the NN/LM through regional coordination of special projects and/or state outreach. They have assisted the University of Utah's Spencer S. Eccles Health Sciences Library in providing NN/LM services to the Region since 2001.

Approach and Methodology:

Outcome: -Resource Libraries are partners in carrying out the NN/LM 2011-2016 contract

In the MidContinental Region decentralized model, Resource Libraries subcontract to assist the Regional Medical Library with the implementation of the NN/LM contract. Each Resource Library hires staff who are dedicated at varying levels of FTE to NN/LM work. Each Resource Library has statewide outreach and/or regional special project responsibilities. The strong relationship between the RML and its Resource Libraries is based on this decentralized model.

In the current contract, responsibilities are apportioned as follows:

Library	State Outreach	Special Project Area
Health Sciences Library University of Colorado Denver	Colorado	Health Information Literacy
A.R. Dykes Library of the Health Sciences, University of Kansas Medical Center	Kansas	Technology
Bernard Becker Medical Library, Washington University	None	Assessment and Evaluation
J. Otto Lottes Health Sciences Library, University of Missouri, Columbia	Missouri	Library Advocacy
Creighton University Health Sciences Library/Learning Resources Center	None	Health Information Literacy
McGoogan Library of Medicine, University of Nebraska Medical Center	Nebraska	Education
University of Wyoming Libraries	Wyoming	Funding Resources
Spencer S. Eccles Health Sciences Library (RML), University of Utah	Utah	Member Services Technology

Table 4. Resource Libraries and their Responsibilities

In the proposed contract, the Assessment and Evaluation Coordinator ~~is~~ **will continue to be** funded at .5 FTE. The Utah based Technology Coordinator is shared with the NN/LM Pacific Southwest Region.

The Director, Associate Director, and Resource Library Directors have excellent rapport. Bi-monthly meetings between the RML and Resource Library Directors foster this relationship. Issues that any of the parties have identified concerning the administration of the RML program or those concerning academic health sciences libraries are included as agenda items and

discussed during these meetings. In preparing for the next contract, an in-person meeting was held by the RML for the Resource Library Directors. This meeting fostered an increased awareness of each library's priorities and environment. The sharing that took place during the meeting was invaluable, and included experiences in providing outreach to communities and integrating the library in to medical school and university initiatives. The RML gained insight into challenges facing Resource Libraries that will translate into programming for academic health sciences Network members. In the new contract, bi-monthly videoconferences will be supplemented by three in-person meetings.

During the current contract, the RML came under new leadership when Wayne J. Peay, Director, retired and Jean P. Shipman became the new Director. To introduce Ms. Shipman to the region and the region to Ms. Shipman, she and the Associate Director visited each state and each Resource Library, and whenever possible met with Network members and Regional Advisory Board members. The Director and Associate Director plan to repeat these visits to the Resource Libraries and include meetings with local health sciences library consortia in these visits. This will give the RML leadership additional opportunity to network directly with Network members.

Resource Libraries have agreed to all the required and optional responsibilities listed in the Statement of Work. In their Memoranda of Understanding (see Appendix B), they have also agreed to the following:

1. Whenever possible sign license agreements that permit document delivery from electronic resources
2. Coordinate and manage special project for the region and/or state responsibilities of the RML
3. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and SharePoint
4. Participate in regularly scheduled meetings of the Resource Library Directors
5. Directors serve, on a rotating term, as a Regional Advisory Board member and participate in appointed workgroup
6. Institution's coordinator assesses his/her experience carrying out the work of the RML within the Resource Library setting
7. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system
8. Submit reports and invoices in a timely manner
9. Develop a service continuity plan
10. Include NLM resources as part of Resource Library outreach
11. Provide the facility and host at least one training visit by the National Training Center and Clearinghouse instructors

12. Share with the region, information and experiences that address the changing roles of biomedical librarians

Evaluation

The RML will use several monitoring procedures to verify that Resource Libraries are meeting their responsibilities.

- The Network Services Coordinator monitors the DOCLINE reports produced by the National Library of Medicine. If a Resource Library starts having problems, he will identify the problem and contact the library to resolve the problem.
- RML coordinators working at each of the Resource Libraries file daily activity reports in the Activity Reporting System. These reports are reviewed monthly by the Associate Director. She will recognize if there are problems at the Resource Library in carrying out project or state responsibilities and will follow up with the coordinator or the Director, as appropriate.

Utilizing the logic model and the Activity Reporting System, Resource Library activities are monitored by the Associate Director to assess that they are carrying out the responsibilities listed in the Memoranda of Understanding and are fully contributing to the implementation of the NN/LM program in the MidContinental Region.

Additional evaluation will be administered: one to assess the coordinator's environment at the Resource Library and another to assess the Resource Library's collaboration in carrying out the mission of the NN/LM.

- Once during the contract, the RML administers a survey to the coordinators to assess their experiences working within a Resource Library of the RML program. Coordinators give feedback on space, budgets, working conditions, benefits, workload and challenges, support, cooperation, tools, RML staff, etc. Issues identified by their responses are jointly addressed as appropriate by the RML and the Resource Library.
- Once during the contract, the RML administers a questionnaire to the Resource Libraries to gather the opinions and concerns of directors and staff on fulfilling the Resource Library subcontracts. This tool will be distributed to improve how the RML administration manages the coordinators and the Resource Library subcontracts.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Sign subcontracts with Resource Libraries	X				
Monitor that the responsibilities of the Resource Libraries are being carried out as agreed through the logic model reports and the Activity Reporting System	X	X	X	X	X

	Year 1	Year 2	Year 3	Year 4	Year 5
Administer coordinator experience questionnaire					X
Administer Resource Library questionnaire					X

A6 – Emergency Preparedness & Buddy System

Statement of Work

Implement the NN/LM National Emergency Preparedness & Response Plan (<http://nnlm.gov/ep>).

- a. Each RML is responsible to one other RML as a backup in an emergency, referred to as the Buddy System. Buddy responsibilities are located at: https://staff.nnlm.gov/wiki/Emergency_Preparedness#RML_pairs
 Buddy relationships are as listed:
 MAR and SCR
 SEA and PNR
 GMR and PSR
 MCR and NER
- b. RMLs also serve as backup for NLM customer service inquiries

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective & Rationale:

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

Current events are raising awareness of the disruption to library services due to natural phenomena. Severe snowstorms in the winter of 2009 closed the National Library of Medicine’s customer services for a week. Network members in the MidContinental Region (MCR) are subject to some of the more severe forces of nature. Three states, Missouri, Kansas, and Nebraska, are located in “Tornado Alley,” where annual tornado activity places many Network members at risk. Additionally, Colorado and Wyoming experienced tornado damage to populated areas during the current contract. Many populated areas in the region are situated along major river systems that are prone to flooding. Geologic fault lines run through several of the states. A dormant super volcano is located in the northwestern corner of Wyoming,

potentially threatening populated areas in all the states in the region with falling ash and debris. There are innumerable possibilities for human caused service disruptions as well (e.g., chemical spills, fires, terrorism, and pandemics).

The NN/LM Outreach Evaluation Resource Center conducted a national assessment of emergency preparedness through a questionnaire administered to a random sample of Network members during the current contract. A summary report for the NN/LM MCR found that 69% of responding Network members did not have an emergency preparedness and response plan and 63% indicated they did not have a continuity of services/operations plan. In response to the question “What types of support could NN/LM offer to make your library better prepared to respond to an emergency?” 56% indicated “Training in emergency preparedness and response” and 69% indicated “Assistance in developing continuity of services/operations plans.” These results indicate that more training and education of Network members is needed for emergency preparedness.¹⁸

The NN/LM MCR addressed these results by conducting hands-on training sessions at the annual chapter meeting to raise awareness of the importance of emergency planning and offer training on the components of a continuity of service plan. Member feedback at these meetings indicated that they understood they should have an emergency preparedness plan even though many of them did not. More opportunities are needed to encourage members to create a continuity of service plan.

The NN/LM MCR also conducted a successful table-top exercise with its “buddy region,” the New England Region (NER) in Year 4 of the current contract. Both regions will benefit by annually conducting that exercise to support readiness for transfer of services during a region-wide emergency.

¹⁸ NN/LM National Emergency Preparedness Project: Baseline Preparedness Assessment Mid-Continental Region Summary Report. Bethesda (MD): National Network of Libraries of Medicine, Outreach Evaluation Resource Center. [2008]

Approach & Methodology:

Outcome: -MCR customers are satisfactorily served in time of disasters

A6: Implement the NN/LM National Emergency Preparedness & Response Plan
(<http://nnlm.gov/ep>)

NN/LM MCR coordinators will continue to promote the value of creating emergency preparedness plans to every member institution. Ongoing training for NN/LM MCR members in the 10-Step Approach to Service Continuity Planning, as presented in the NN/LM Emergency Preparedness & Response Toolkit, will be a priority. Coordinators will conduct live web-based instruction on the concepts presented in the 10-Step Approach. We will encourage members to submit their disaster plans to the Toolkit to be shared with other members in the NN/LM. Participants are offered MLA CE credit as an incentive to complete the instruction. **A reasonable target to reach by the end of the contract would be that 66% of full members have continuity of service /emergency preparedness and response plans in place.**

A6a: Each RML is responsible to one other RML as a backup in an emergency, referred to as the Buddy System

Just as members need continuity of service plans, the NN/LM and NLM need to have plans in place to assure continuity of services should they be impacted by a disaster. Because of the decentralized model in the MCR, Resource Libraries play an essential role in providing coverage of any gaps in service during a local disaster. In the NN/LM MCR plan, RML services and communication can be coordinated from any of the Resource Libraries.

Although unlikely, a major disaster scenario could affect the entire region and require the NN/LM MCR to request our “buddy,” the New England Region (NER), to assume services for the MCR. The NN/LM MCR has developed a comprehensive emergency plan and has placed it on the NN/LM staff intranet for reference by staff in both regions. The NN/LM NER is able to access those instructions in the event of a major disaster in the MCR. The NN/LM NER has login access to the NN/LM MCR blog and DOCLINE members’ accounts. The 800 number will be transferred to the NER. The NER will have access to the regional email list of members and will set up a listserv for NN/LM MCR members. They will request that NLM make the Emergency Access Initiative (EAI) available for the first responders and health care providers in the affected area. The EAI, a partnership between the National Library of Medicine and publishers, allows affected librarians, healthcare professionals, and the public free access to major biomedical journal titles during a disaster. NN/LM MCR staff will make every effort to keep communication lines open to the NN/LM NER and with one another during a disaster affecting the entire region. The NN/LM MCR will reciprocate with these services for the NER if that region experiences a major disaster. The NN/LM MCR will regularly conduct internal emergency drills with coordinators located at the Resource Libraries to test its continuity of service plans. The

NN/LM MCR and the NN/LM NER will conduct regularly scheduled table-top exercises to test the communication and back-up service plans that each has developed for the other. The internal plans and buddy plans will be updated as inconsistencies and needed changes are identified.

A6b: RMLs also serve as backup for NLM customer service inquiries

Outcome: -NN/LM MCR customers are satisfactorily served when NLM customer service is unavailable

When NLM customer service is unavailable a message and link is triggered to appear on the NLM web site indicating the NLM is closed but that questions will be accepted. Questions arising from the six states in the MidContinental Region will be forwarded to the MCR. A message and link will also appear on the NN/LM MCR web site. One of the Technology Coordinators will activate the special NN/LM Request Form if it has not been already activated by Web-STOC staff or another RML web coordinator.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Verify internal emergency preparedness system for the NN/LM MCR is working	X	X	X	X	X
Offer online continuity service training to Network members		X	X	X	
Verify NN/LM NER's preparedness to initiate services for the NN/LM MCR	X	X	X	X	X
Serve as back up for NLM customer services inquiries as needed	X	X	X	X	X

A7 – Effective Communication

Statement of Work

Identify and maintain effective methods of communication with current and potential NN/LM participants. All print and electronic communication should include an acknowledgment of NLM funding and the NN/LM Logo using the National Network of Libraries of Medicine Graphic Standards dated July, 1992. The contractor shall:

- a. Distribute important information about regional and national programs, policies, services, and procedures to the Region;
- b. Coordinate the development of materials with other RMLs and NLM to avoid duplication of effort;
- c. Develop and maintain a regional Web site as an integral component of the NN/LM Web site, that incorporates the guidelines of 508 compliance (<http://www.section508.gov>);
- d. Participate in monthly teleconferences with NLM and the other RMLs to discuss topics of importance in the overall management of the NN/LM program;
- e. Develop working relationships with other networks and relevant organizations by identifying common program interests and goals, work to develop regular lines of communication and develop appropriate cooperative programs;
- f. Inform NLM about regional, state and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to the programs of the NN/LM, NLM and the national information infrastructure;
- g. Obtain ongoing feedback from users about their information preferences, needs and uses, and recommend ways of improving health professional and consumer access to information;
- h. Assist in the identification of training resources to be added to the MLA Educational Clearinghouse;
- i. Participate in testing and using alternative methods of communication; and
- j. Participate in RML Directors' meetings.

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective & Rationale:

Objectives:

- Librarians, health care providers and consumers receive information from the NN/LM MCR and provide feedback about health information resources, services and programs
- NN/LM MCR will collaborate with NLM and other RMLs

All publications of the NN/LM MCR will acknowledge NLM funding and include the logo following the NN/LM graphic standards.

Identify & Maintain Effective Methods of Communication

Effectively communicating with current and potential NN/LM participants is critical to the success of the NN/LM MCR program. Advanced computing and networking technologies continue to transform communication capabilities as seen in the variety of ways users access the Internet (e.g., mobile devices, smart phones, tablet devices and netbooks) and increasingly offer affordable and speedier access to the Internet. Better online applications are helping users get organized and get noticed without losing the human element. Web 2.0 technologies, live peer2peer and peer2many applications (e.g., video conferencing, VoiceOver IP, chat, text messaging, etc.), web collaboration applications (e.g., GoogleGroups, wikis) are a few examples.

The MCR continues to be a leader in educating Network members in the use and demonstration of the relevance of these communication technologies. We are committed to understanding the preferences of our constituency on where and how information is provided.

Distribute (A7a)

The use of Adobe Connect has been very popular with our members. We consistently receive overwhelmingly positive comments about the time saving benefits of reducing travel (even across town) to learn about topics that assist them in their work. “Breezing Along With the RML” is a monthly presentation that uses Adobe Connect. “Breezing” covers topics that range from updates on NLM or NN/LM resources to invited presenters highlighting projects on which they are working. Members have the option to attend the live session or view the recording at a time better suited to their schedule. “Spotlight! on National Library of Medicine Resources” sessions are another series of monthly classes delivered via Adobe Connect. The sessions focus on one or more NLM databases and are complete with exercises and interaction. “Spotlight!” sessions are eligible for Medical Library Association Continuing Education credit.

Our Network members also like receiving information from the MCR’s weekly “RML News” (distributed via the MCMLA-L listserv) and receiving RSS feeds from the MCR News Blog. Messages are short and concise news items related to health information access with links to the more complete stories. Our quarterly published *Plains to Peaks Post* newsletter remains popular with readers. Between May 2006 and May 2010, the online issues of the *Plains to Peaks Post* received 3679 views (or an average 229 views per issue) with an average of ten minutes spent per view. Also most of the views were repeat visitor/readers; there were 423 unique visitors. Network members as well as MCR staff contributed articles published in the newsletter.

Coordinate Development of Materials with RMLs (A7b & h)

In the current contract, the Educational Clearinghouse Database will be phased out and educational materials will be added to the Medical Library Association (MLA) Continuing Education Clearinghouse. This transition could make instruction created by NN/LM Coordinators and Network members more broadly available. It is not necessary to “recreate the wheel,” especially when user friendly technologies exist for sharing and collaborating online. Tutorials and videos are now available in addition to print materials (e.g., PowerPoint presentations, speaker handouts, class handouts, etc.). NN/LM regions will share in the

development and maintenance, minus the duplication, of MLA Education Clearinghouse materials, spreading the workload and taking advantage of RML expertise.

NN/LM MCR Web Site (A7c)

The NN/LM MCR web site is our “face” to the world and as such must be attractive, easy to navigate, and clearly branded part of the NN/LM. The web site also acts as a portal to NN/LM MCR social networking opportunities (such as Twitter and Facebook) as well as informing members about upcoming events and classes. The web site is designed to comply with the Section 508 accessibility guidelines.

NLM & RML Monthly Teleconferences & RML Directors’ Meetings (A7d & A7j)

An important way to stay connected with the NN/LM regions and the NLM is by attending regularly held teleconferences where important topics are addressed. This is also an opportunity to provide input and to ask questions. NN/LM MCR staff members attend all NN/LM teleconferences and convey news and events to Network members when appropriate. RML Director’s meetings are also a way to stay connected and contribute to the NN/LM.

Relationships with Other Networks & Relevant Organizations (A7e)

Communicating with organizations and networks outside the NN/LM is key to providing access to health information, especially for underserved populations and the health care providers who serve them. The NN/LM MCR created the “Bringing Health Information to the Community” (BHIC) blog (<http://nmlm.gov/mcr/bhic>) as a communication device for interested consumers and providers to remain current in minority and public health issues. There are currently over 500 subscribers to the BHIC blog, along with an unknown number of readers who access the blog through RSS feeds.

The NN/LM MCR staff has become directly involved in community, library, and public health consortia and organizations in the region. Working with these organizations as gatekeepers, trusted resources and communication avenues increase access to health information by underserved populations.

Inform NLM of Regional, State & Local Activities (A7f)

Keeping NLM informed of activities in the Region that are related to health and health information is very important to the NN/LM MCR. If NLM understands the environment and issues in the NN/LM MCR, NLM will better understand how its resources and services are impacting intended users. The NN/LM MCR submits a variety of reports to inform NLM of activities in the NN/LM MCR. Assessment is a key element to measure the impact of resources and services from the NN/LM and NLM.

Obtain Feedback (A7g)

Understanding and adjusting to user preferences is an area where the NN/LM MCR has years of experience. The NN/LM MCR has devoted a .5 FTE coordinator to collect, analyze, and report on feedback from users. Every RML activity has some form of assessment that measures users’

feedback, which is used to make improvements. Improvements are shared with other RML coordinators and leadership.

Communications Technologies (A7i)

Motivated by the distributed structure of the NN/LM MCR, where team members are working in six different states, the RML is constantly scouting new technologies or improved technologies that facilitate internal communications. This organizational need has supported a program to introduce new communications technologies to our membership. During the current contract, the NN/LM MCR has tested many communication applications. We have found that the mix and match approach serves us best - using selected features of multiple applications to achieve the results needed.

Approach & Methodology:

A7a: Distribute important information about regional and national programs, policies, services, and procedures to the Region

Outcome: - NN/LM MCR communications mechanisms are effective

The NN/LM MCR will continue to distribute important information about regional and national programs, policies, services, and procedures to current and potential NN/LM participants in the Region. The NN/LM MCR feels it is important that information is distributed where our current and potential NN/LM participants congregate, whether it is online or in person.

The NN/LM MCR will continue to provide important information in person at conferences and meetings where librarians and health care providers meet. The NN/LM MCR presents and exhibits at library and healthcare provider meetings in each of our states plus health sciences library organization meetings where news and updates are regular parts of the meeting agendas.

The NN/LM MCR will continue to have a strong presence in online communication conduits that reach both Network members and our partnering organizations. The NN/LM MCR distributes information to Network members and NN/LM MCR partner organizations via:

National
<ul style="list-style-type: none"> • “Bringing Health Information to the Community” blog is used as a tool to communicate with public health and community based organizations • LIBNET (listserv for public and school libraries) • American Indian Library Association listserv • REFORMA listservs • HELP Adult Services Wiki

Regional	
	<ul style="list-style-type: none"> • RML News postings (available through an RSS feed and direct access on our web site as a blog, as well as sent to the MCMLA listserv weekly as an e-mail) • NN/LM MCR Twitter page postings • NN/LM MCR Facebook page postings • <i>Plains to Peaks Post</i> newsletter • “Breezing Along with the RML” (Adobe Connect) • “Spotlight! on National Library of Medicine Resources” (Adobe Connect) • HHS Region VIII eNews • Tribal Connections Four Corners Listserv

State	
CO	<ul style="list-style-type: none"> • Colorado State Library Blog • Colorado Council of Medical Libraries <i>CCML Council Quotes</i> newsletter • Rocky Mountain Chapter of SLA listserv • Colorado School of Public Health @theForefront • Colorado Public Health Association News
KS	<ul style="list-style-type: none"> • BlogJunction Kansas • KANLIB Listserv (Kansas Libraries) • Health Science Library Network of Kansas City postings
NE	<ul style="list-style-type: none"> • Nebraska Library Association Listserv • Nebraska Educational Media Association Listserv • Nebraska Distribution list (key public health, CBOs, hospitals, academic staff) • Lincoln Metropolitan Medical Response System Wiki • Office of Inter-professional Scholarship Service and Education at Creighton Wiki • Public Health Association of Nebraska Listserv
MO	<ul style="list-style-type: none"> • St. Louis Medical Library Group postings • Missouri Distribution List (Missouri Network members, key public health contacts and CBO contacts)
UT	<ul style="list-style-type: none"> • Utah State Library Division’s <i>Utah Libraries</i> Blog • Utah Library Association newsletter • Center for Utah Multicultural Health newsletter • Rural Health Association of Utah newsletter • Metro Library Directors’ listerv • Utah Academic Library Directors’ listserv • Utah Health Sciences Library Council listserv/blog

State	
WY	<ul style="list-style-type: none"> • Wyoming Library Association Listserv • Wyoming State Library email Listserv • WYLD Databases & Online Resources blog (Wyoming State Library) • Wyoming Comprehensive Cancer Control Consortium

Table 5.

The NN/LM MCR will continue to distribute important information in person and via online communication conduits to Network members, potential members, and partnering organizations. We will continue to evaluate what communication methods are best suited for these groups. For instance, the results of the Network Member Questionnaire informed us that the majority of Network members prefer traditional methods of communicating (e.g., email, mailings, web site); however, web 2.0 technologies will continue to be used in order to reach members who are using these tools. Exhibiting and presenting in person at conferences and meetings where potential members (librarians and health care providers) meet will remain an effective method for distributing important information. The NN/LM MCR will continue to distribute important information to the many partnering organizations using their preferred communication tools (e.g., newsletter and listserv messages, blogs).

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Transition of Bringing Health Information to the Community blog to national status	X				
Daily health information access related news postings to the RML News Blog	X	X	X	X	X
Daily postings to the NN/LM MCR Twitter and Facebook pages	X	X	X	X	X
Weekly distribution of the RML News via the regional listserv	X	X	X	X	X
Monthly presentations via Breezing Along with the RML sessions	X	X	X	X	X
Quarterly publication of the <i>Plains to Peaks Post</i> newsletter	X	X	X	X	X
Contributions to the NN/LM MCR Delicious social bookmarks list	X	X	X	X	X

A7b: Coordinate the development of materials with other RMLs and NLM to avoid duplication of effort

Outcome: - NN/LM MCR collaborations are valuable

Sharing information with other RMLs through NN/LM Coordinator meetings

As a standing topic of NN/LM Outreach and Education Coordinators' monthly webinar meetings, a session will be suggested where each RML's Outreach/Education coordinator reviews resources on his/her respective web site that should be shared with other RMLs. This will also include DOCLINE, technology, and consumer health topics.

Currently, the NN/LM MCR collects materials to share and post on its web site. (<http://nnlm.gov/mcr/education/online.html>). This includes webinar recorded sessions that are archived as well as PowerPoint presentations and other materials that correspond to project areas and initiatives intended for MCR audiences. All RMLs have similar collections on their web sites. Sharing these web resources in a meeting will allow each region the opportunity to select links that would benefit its membership. The NN/LM MCR would appreciate knowing what the other RMLs have produced that could be linked from our web site. By sharing this information among the regions and NLM, web site awareness and usage of materials will increase.

Classes Under Development Page

Classes that are currently under development are shared in the NN/LM staff intranet. Utilizing this site offers opportunities for collaboration with NN/LM staff working on similar topics. The NN/LM MCR currently does not have classes under development. When an NN/LM MCR coordinator begins to develop a class, it will be noted on the NN/LM staff intranet and will be announced to appropriate NN/LM coordinators. For instance, if a new DOCLINE class is being developed, it will be announced to the DOCLINE Coordinators.

Establish a "Trainer's Bureau" for online classes

The NN/LM MCR will ~~propose at an Outreach/Education Coordinators' monthly meeting to establish a~~ **contribute to the NN/LM** "Trainer's Bureau" for online classes. ~~If an NN/LM~~ **When a** coordinator develops a class which is suitable for sharing as a webinar in another region, that person's name and topic ~~could be maintained on a~~ **will be added to the** "Trainer's Bureau" list. Having this list of presenters would not preclude coordinators in the region from developing a baseline of expertise, but would open up the talent base to include other NN/LM presenters. For example, the NN/LM MCR staff has presented webinars on the MLA/NLM sponsored Health Information Literacy Research Project and on using the value of library services' calculators. Other RMLs have staff whose expertise would be valuable to share with the NN/LM MCR's members. A directory would facilitate cross training among the regions.

Bringing Health Information to the Community Blog

In 2002, the NN/LM MCR established a regional communication mechanism for community organizations through the “Bringing Health Information to the Community” (BHIC) blog. The Community Outreach Coordinator regularly posts information to the blog that falls into the following categories: articles, conferences, environmental health, HIV/AIDS, inner city issues, minority health concerns, public library, public health, regional information, rural, and scholarships/grants. The blog has garnered a national readership over the years, and periodic questionnaire results of readers indicate that the blog makes an impact in their daily workflow. Beginning May 1, 2011, the BHIC blog will become a national communication tool, with collaborative authors from four additional NN/LM regions, the Greater Midwest Region, the Southeastern/Atlantic Region, the Pacific Northwest Region and the South Central Region. Procedural changes will be made to incorporate additional authors and branding will reflect its national status.

~~The MCR will coordinate the development of materials with one or more RMLs and the NLM to avoid duplication of effort, which will reduce the duplication of materials between these partners.~~ **When the blog moves to national status, the MCR will have administrative responsibility. In the initial transition, the MCR Health Information Literacy Coordinator will make all posts to the BHIC blog. Staff at other regions will email the Health Information Literacy Coordinator items they wish to be posted. This first step will provide a way to ensure that items are not duplicated in the blog. As the other regions become more comfortable with finding and sending items to be posted, staff at other regions will post items to the blog directly without using the MCR Health Information Literacy Coordinator as a filter.**

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Promote information shared on NN/LM MCR web site to other RMLs	X	X	X	X	X
Sharing of RML web sites at coordinators' meetings	X	X	X	X	X
Remind other appropriate NN/LM Coordinators of classes under development annually	X	X	X	X	X
Establish and maintain Contribute to the NN/LM coordinators' "Trainers Bureau" for online class topics	X	X	X	X	X

A7c: Develop and maintain a regional Web site as an integral component of the NN/LM Web site, that incorporates the guidelines of 508 compliance (<http://www.section508.gov>)

Outcome: - NN/LM MCR communications mechanisms are effective

Regional Web Site

The NN/LM MCR web site (<http://nnlm.gov/mcr/>) is designed to use the approved nnlm.gov template created by Web-STOC. The home page features an "In the Spotlight" box that is dynamically updated with new information about upcoming events. The box includes links to the three most recently posted news stories from the news blog. Tabs at the top delineate major sections of the web site.

The web site content is maintained on a regular basis. MCR technology staff receive notifications from an automated weekly link checking program run by Web-STOC. Broken links are fixed immediately. NN/LM MCR staff also schedule a review of the web site once a year to check for outdated information.

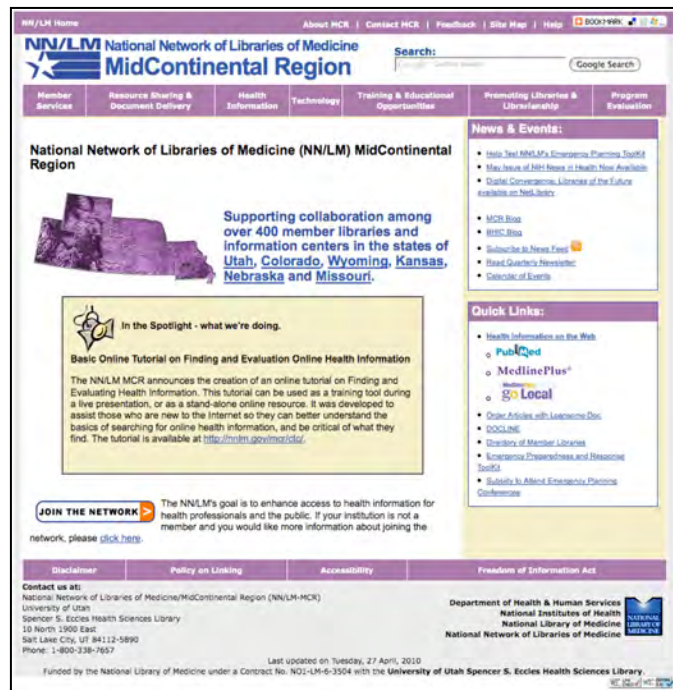


Figure 8.

Web-STOC plans to coordinate usability tests of the nnlm.gov web site. We will participate in the usability tests and make improvements to the site based on the results. In addition, Web-STOC plans to eventually make a content management system (CMS) available so that it is easier for web site authors to edit the web pages; NN/LM MCR will adopt the CMS as soon as it is available. This will improve the efficiency of web page editing.

Traditionally, the web site has "pushed out" information to our members rather than offering two-way communication. With the advent of new social networking tools, we have more opportunities for direct communication with our members. We will include prominent links to new communication mechanisms (such as Twitter and Facebook) on our home page. The web page also dynamically updates the latest NN/LM MCR Twitter and Facebook posts.

In the Spring of 2009, we sent a questionnaire to our members with the question "Has the NN/LM MCR web site increased your awareness of health information resources and regional

activities?" One hundred three respondents answered the question. Seventy-eight (75.7%) said yes and twenty-five (24.3%) said no. We will continue to send an annual questionnaire using SurveyMonkey to our members to determine if the web site and social networking pages are useful to them in their work.

We have also used data from the Google Analytics tool provided by Web-STOC to analyze the use of our web site and specific sections of the web site. This tool allows us to determine the most frequently used pages, the number of visitors, and how visitors found our site. In May 2010, we compared the web site statistics for Year 3 (May 2008 – April 2009) and Year 4 (May 2009 – April 2010). Analysis of the data showed the following results:

- There was no significant change in the number of visits to all MCR pages between Year 3 and Year 4; an average of 50,000 total visits per year
- 31% of the visits to the MCR pages come from the MCR states; of these most of the visits are from Utah (31%) and then Colorado (26%)
- The most visited sections of the web site are the Bringing Health Information to the Community (BHIC) blog (30% of visits) and the RML News Blog (10% of visits)
- The most visited project sections of the web site are the "Health Information" (10%) and "Program Evaluation" sections (8%)
- Most users find the MCR web site via search engines, except for the "Promoting Libraries and Librarianship" and "Training and Educational Opportunities" which were more often found via direct links from offline materials (such as bookmarks and promotional materials)
- Most users coming to the "Health Information" project pages and the State Resource pages were directed from search engines

We will continue to analyze web site statistics using Google Analytics. We will improve the content and usability of our web site based on the information provided by the member evaluation and the Google Analytics data.

Mobile Users

Web-STOC and the NN/LM Technology Coordinators have discussed creating a mobile device style sheet for the nnlm.gov web sites. NN/LM MCR will participate in testing the style sheet and adding it to the web site after it is developed. We will publicize this option to our members in a "Breezing Along with the RML" session. We will ask our members whether the mobile style sheet was useful to them in their work in the annual technology questionnaire.

Section 508 Compliance

The MCR web pages and documents stored on the web site must meet Section 508 guidelines in order to be accessible to users with disabilities. In the current contract, we are using a variety of resources to learn about techniques for compliance:

- The accessibility checklist available on the nnlm.gov staff wiki (https://staff.nlm.gov/wiki/GMR-508_Compliance_Checklists, available only to nnlm.gov staff)
- W3C WAI: Strategies, guidelines, resources to make the Web accessible to people with disabilities (<http://www.w3.org/WAI/guid-tech.html>)
- W3C Web Accessibility Quick Reference(<http://www.w3.org/WAI/WCAG20/quickref/>)
- WebAIM PowerPoint Accessibility Techniques (<http://www.webaim.org/techniques/powerpoint/>)

Web page, PowerPoint, and document 508 compliance are validated using these tools:

- Dreamweaver CS 4 Built-in Accessibility Checker
- Adobe Acrobat Pro Built-in Accessibility Checker
- AccessColor: For checking color contrast of web sites for color-blind or vision impaired users (<http://www.accesskeys.org/tools/color-contrast.html>)

We will continue to use these resources and tools in the next contract.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Maintain and regularly review the NN/LM MCR web site	X	X	X	X	X
Maintain the NN/LM MCR social networking pages	X	X	X	X	X
Adopt the CMS	X	X	X	X	X
Adopt the mobile device style sheet	X	X	X	X	X
Continue to monitor for Section 508 compliance	X	X	X	X	X

A7d: Participate in monthly teleconferences with NLM and the other RMLs to discuss topics of importance in the overall management of the NN/LM program

Outcome: - NN/LMMCR collaborations are valuable

The NN/LM MCR is regularly represented at all the NN/LM teleconferences (Consumer Health Coordinators, Outreach and Education Coordinators, DOCLINE Coordinators, Web-STOC, and All RML Staff) with a primary and back up staff member designated. NN/LM MCR staff will continue to attend these meetings, suggest topics to be discussed and facilitate teleconferences.

The NN/LM MCR will actively contribute and participate in NN/LM and NLM teleconferences.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Participate in monthly teleconferences with NLM and the other RMLs	X	X	X	X	X

A7e: Develop working relationships with other networks and relevant organizations by identifying common program interests and goals, work to develop regular lines of communication and develop appropriate cooperative programs

Outcome: - NN/LM MCR communications mechanisms are effective

The NN/LM MCR staff will continue their direct involvement in community, library ,and public health consortia and organizations in the region. The NN/LM MCR has been successful in reaching populations that these groups represent in the current contract. The groups have acted as gatekeepers to health information resources for the NN/LM MCR. They already have trusted lines of communication with their population, and are often open to acting as a bridge between the NN/LM MCR and the groups they represent. The NN/LM MCR works with libraries and with community organizations, especially those who serve minority and other underserved groups in our region. For example, the Health Information Literacy Coordinator is on the board of HELP Adult Services, an organization that loans health equipment such as wheel chairs, hospital beds, etc, at little or no cost to people on Medicare, Medicaid, or those who are uninsured or underinsured. The staff often receive questions beyond how to use and maintain the equipment a client is borrowing. The Health Information Literacy Coordinator was able to provide hands on computer training to the staff at HELP Adult Services on NLM resources such

as MedlinePlus, so that the staff can include a recommendation to MedlinePlus in addition to referring the client back to their health care professional. She also provided the organization with MedlinePlus bookmarks and the group will include a bookmark with each piece of equipment that they loan out.

Health Literacy Missouri

Health Literacy Missouri advocates for health literacy issues at the state and national level, working to effect policy change, inform stakeholders, and support and initiate grassroots and community activities. The Missouri/Library Advocacy Coordinator has worked closely with Health Literacy Missouri throughout this contract, including helping to develop a librarian tract at the June 15, 2010 Health Literacy Summit being held in Columbia, Missouri. The MCR will continue to work with Health Literacy Missouri in ways that complement both. Health Literacy Missouri will host a Health Literacy Summit in Year 2 of the contract in collaboration with the NN/LM MCR. (See our response to SOW section B2b for summit details)

Library Organizations

NN/LM MCR Coordinators are members of local, state, regional, and national library and health sciences library organizations. Membership in these groups provides coordinators opportunities to present updates at monthly, quarterly and yearly meetings, to participate in listservs, and to be members of committees and governing boards of these groups. In addition, each coordinator is a member of his/her state library association and is able to send out information on the listserv for his/her respective state. The NN/LM MCR also maintains the listserv for the Midcontinental Chapter. Memberships in organizations include:

National	
	<ul style="list-style-type: none"> • Outreach Connections: Native Health Information

Regional	
	<ul style="list-style-type: none"> • Midcontinental Chapter of the Medical Library Association • Four Corners Tribal Connections • Four Corners Library Directors

State	
CO	<ul style="list-style-type: none"> • Colorado Association of Libraries • Colorado Council of Medical Librarians • Rocky Mountain Chapter of the Special Library Association • Alliance: The Colorado Alliance of Research Libraries
KS	<ul style="list-style-type: none"> • Health Sciences Library Network of Kansas City (HSLNKC) • Kansas Biomedical Librarians (KBML)
MO	<ul style="list-style-type: none"> • Health Science Library Network of Kansas City • St. Louis Medical Library Group • Missouri Library Association

State	
NE	<ul style="list-style-type: none"> • ICON (the Nebraska Health Sciences Library Consortium) • Nebraska State Library Advisory Council Board • Nebraska Library Association
UT	<ul style="list-style-type: none"> • Utah Health Sciences Library Consortium • Utah Academic Library Consortium • Salt Lake City Metro Library Directors Group
WY	<ul style="list-style-type: none"> • Wyoming Federal Depository Library Consortium

Table 6.

Coordinators Embedded in CBOs

In the current contract, coordinators have been embedded in community based organizations. **Being embedded in a CBO means that the RML Coordinator is an active member of the organization, on the board, or on a committee where he/she participates in carrying out of the work of the CBO. This process is able to be carried out in the MCR due to the distributed nature of the staff; it is possible to join and work for a CBO in each state since coordinators live in each state.**

Through this effort, potential public health and community organization have been identified for NN/LM membership and training has been provided. In Year 1, the NN/LM MCR will review its relationships with these organizations to determine whether continued partnership is still beneficial to both parties.

State	
CO	<ul style="list-style-type: none"> • Colorado Public Health Association, Professional Education
KS	<ul style="list-style-type: none"> • Mother & Child Health Coalition, Adolescent Health Committee
MO	<ul style="list-style-type: none"> • Health Literacy Missouri, Resource Inventory Committee • Health Literacy Missouri, Librarian Expert Group • Public Health Practice Research Network of the Missouri Institute for Community Health • Missouri Institute for Community Health
NE	<ul style="list-style-type: none"> • HELP Adult Services • Rural Health Education Network • Wyoming Comprehensive Cancer Control Consortium, Cancer & Environment Working Group
UT	<ul style="list-style-type: none"> • Utah Multicultural Health Network Data Committee • Utah Multicultural Health Network Conference Committee • Utah Library Association Multicultural Services Roundtable
WY	<ul style="list-style-type: none"> • Wyoming Comprehensive Cancer Control Consortium, Cancer & Environment Working Group

Table 7.

***Aberdeen Area Tribal Chairmen's Health Board
Northern Plains Tribal Epidemiology Center***

The Health Information Literacy Coordinator and the NN/LM Greater Midwest Region's (GMR) Public Health Librarian have contacted Dr. Corey Smith, Epidemiologist and Health Informatics Specialist at the Northern Plains Tribal Epidemiology Center. This center is part of the Aberdeen Area Indian Health Service Office. "The Aberdeen Area Office in Aberdeen, South Dakota, works in conjunction with its 13 Service Units to provide health care to approximately 94,000 Indians on reservations located in North Dakota, South Dakota, Nebraska, and Iowa."¹⁹ Dr. Smith is planning to assess health information for the Tribal Colleges in the Indian Health Service's Aberdeen Area, which include the Winnebago Tribal College and the Nebraska Indian Community College, both in Nebraska. He will be pursuing funding through the GMR, since the Aberdeen Area Office is located in the GMR, but will also work with the NN/LM MCR Health Information Literacy Coordinator to approach tribal college librarians in Nebraska. Following the assessment, the NN/LM MCR will work with the Dr. Smith to develop tools and training to fill gaps identified in the assessment.

Once this pilot project has taken place with the Aberdeen Area Office, the NN/LM MCR will investigate other Indian Health Service Area Offices to determine if similar projects can be carried out in those areas. Indian Health Service Area Offices in the NN/LM MCR include:

- Aberdeen (North Dakota, South Dakota, Iowa, and Nebraska)
- Navajo Area (Arizona, New Mexico, and Utah)
- Albuquerque (New Mexico, Colorado, and Texas)
- Oklahoma Area (Oklahoma, Kansas, and Texas)
- Billings Area (Montana and Wyoming)
- Phoenix Area (Arizona, California, Nevada, and Utah)

Tribal Connections 4 Corners is a collaboration of health sciences librarians and RMLs working in the Four Corners area of Arizona, Colorado, New Mexico and Utah. As part of the collaboration, NN/LM MCR will propose that the group encourage its IHS Area Offices to use the assessment tool. It will also propose that Tribal Connections 4 Corners follow up with the tribal college librarians to address the needs identified by the assessment tool.

The NN/LM MCR will evaluate the working relationships with other networks and relevant organizations via feedback from NN/LM MCR coordinators. For instance, the NN/LM MCR will know it is having a positive impact when it assumes a leadership role in an organization, can schedule health information resources training sessions, has presentations accepted at conferences or meetings, or when articles are published in an organization's publications or moderated listservs.

¹⁹ <http://www.ihs.gov/FacilitiesServices/areaOffices/aberdeen/>

The NN/LM MCR's working relationships with other networks and relevant organizations, as well as contributions to common program interests and goals, will continue to develop.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Continue to work with Aberdeen Area to expand relationship		✕	✕	✕	✕
Apply lessons learned in Aberdeen Area to forge relationships with Tribal Health Boards in other states		✕	✕	✕	✕
Develop tools and training based on Aberdeen Area Tribal Chairmen's Health Board Assessment of Nebraska Tribal Colleges	✕				
Coordinators are active members of health sciences library consortia	X	X	X	X	X
Health Literacy Missouri will host a Health Information Literacy Symposium in collaboration with the NN/LM MCR		X			

A7f: Inform NLM about regional, state and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to the programs of the NN/LM, NLM and the national information infrastructure

Outcome: - NN/LM MCR collaborations are valuable

The NN/LM MCR will continue to inform NLM on regional, state, and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to NN/LM programs, NLM, and the national information infrastructure through quarterly and annual reports.

Reports will be added to the NLM integrated outreach system that collects information on outreach activities, exhibits, and projects funded by the NN/LM MCR. NN/LM MCR staff will informally send news from the region that it deems to be of interest and will respond to NLM's requests for data from the region. More information about how the NN/LM MCR gathers information about regional, state and local activities of health professionals and health sciences libraries, networks and other organizations can be found in our response to SOW section A9.

The NN/LM MCR will produce informative reports that are submitted in a timely manner.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Contributions to NLM integrated outreach system	X	X	X	X	X
Submit quarterly and annual reports to NLM	X	X	X	X	X

A7g: Obtain ongoing feedback from users about their information preferences, needs and uses, and recommend ways of improving health professional and consumer access to information

Outcome: - NN/LM MCR communications mechanisms are effective

The NN/LM MCR will continue to obtain ongoing feedback from users about their information preferences, needs and uses, and recommend ways of improving health professional and consumer access to information. This feedback will accompany quarterly and annual reports. When requested, the NN/LM MCR will respond to NLM’s request for data from the regions. (See SOW sections A9 and A10 for more information about obtaining feedback)

The NN/LM MCR will produce data that are representative of users in the Region and are submitted in a timely manner.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Obtain feedback and evaluate NN/LM MCR activities	X	X	X	X	X
Questionnaire sent to BHIC blog readers to assess usefulness/ satisfaction of the BHIC blog		X		X	
NN/LM MCR staff feedback gotten on MCR operations’ questionnaire		X			

A7h: Assist in the identification of training resources to be added to the MLA Educational Clearinghouse

Outcome: - NN/LM MCR collaborations are valuable

NN/LM MCR coordinators will submit training resources to the MLA Continuing Education Clearinghouse. These coordinators work in the different Resource Libraries of the Region. They are in a good position to identify resources produced by the Resource Libraries and assist in adding them to the clearinghouse. The MLA Continuing Education Clearinghouse will be promoted monthly to Network members and materials appropriate for this repository will be solicited (e.g., presentations, brochures, distance learning classes, tutorials and webinars).

The NN/LM MCR will identify training resources developed in the NN/LM MCR and coordinate their submission to the MLA Continuing Education Clearinghouse in a timely manner.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Include a link to the MLA Educational Clearinghouse on the NN/LM MCR web site under "Training and Educational Opportunities"	X				
Assist in submitting entries to the MLA Educational Clearinghouse	X	X	X	X	X

A7i: Participate in testing and using alternative methods of communication

Outcome: - NN/LM MCR communications mechanisms are effective

Currently, the NN/LM MCR team incorporates the following communications technologies into its day-to-day work:

- Skype, a voice over IP program, for audio communications (point-to-point and conference calls), chat, screen sharing, and point-to-point video calls. Skype is also a tool to determine team "presence" (i.e., who is in the office, who is available for communication, etc.)
- Adobe Connect, offered through an NIH license. Internally, NN/LM MCR uses Adobe Connect for weekly staff meetings, where team members can see and hear each other and share computer applications. Externally, Adobe Connect is used for classes, the

monthly “Breezing Along with the RML” updates, “Spotlight!” sessions, work group meetings, and Resource Library Director meetings.

- Polycom videoconferencing is used for the Technology Coordinator, who shares her position with the Pacific Southwest Region (PSR), to participate in PSR staff meetings. One unit is located at University of Utah and one unit is located at UCLA.
- Until March of 2010, QuickPlace was used internally as NN/LM MCR’s collaboration and document sharing tool. In March of 2010, NN/LM MCR adopted SharePoint through a University of Kansas Medical Center license.
- Social networking tools used by NN/LM MCR to push information out to members include Facebook, the RML News Blog, Bringing Health Information to the Community (BHIC) blog, Delicious social bookmarking, and Twitter updates published to the BHIC blog.

Mobile devices, including smartphones and new tablet devices such as Apple’s iPad, are an alternative method of accessing information and communicating via social networking sites. The NN/LM MCR will test mobile device applications related to health information as well as applications that allow for new methods of communication. We will disseminate information about what we learn through RML News blog postings, newsletter articles, and presentations at the “Breezing Along with the RML” sessions.

The NN/LM MCR has also experimented with high-end videoconferencing, streaming video broadcasts and podcasting. The mobile video broadcasting unit used by the Spencer S. Eccles Health Sciences Library often had technical difficulties at remote sites, making it difficult to offer a quality experience for members. NN/LM MCR staff created two podcasts related to community health outreach (<http://nmlm.gov/mcr/services/podcasts/podcasts.html>) but a questionnaire sent to members in August 2007 indicated that most members had not listened to the podcast and still needed to be educated about how to access podcasts.²⁰ The NN/LM MCR has subsequently offered classes about podcasting, but has not produced any additional podcasts. The high-end videoconference system available at the Spencer S. Eccles Health Sciences Library, the Access Grid, also proved to consistently have technical difficulties, most likely due to inadequate bandwidth at the library and other sites.

New opportunities for videoconferencing, video broadcasts, and audio and video podcasts will become available. We will explore these opportunities as they emerge.

NN/LM MCR now has access to a high-end videoconferencing system through the Utah Education Network (UEN). UEN has professional videoconference facilities available for use free of charge. The UEN system is compatible with the H.323 and SIP videoconference systems, so it

²⁰ Dennis S. The MCR Podcasting Service: Results from the Feedback Survey. Utah: MidContinental Region Plains to Peaks Post Utah; 2008. 3 p. Contract No. NO1-LM-6-3504. Supported by the National Library of Medicine and the University of Utah Spencer S. Eccles Health Sciences Library. Available from: http://nmlm.gov/mcr/services/comm/newsletter/PTPP_February_2008.pdf

can work with other high-end videoconference facilities in the region, such as the University of Missouri at Columbia’s “Cisco Telepresence” system. Desktop users can also join the system through a free conferencing program. Working with the MCR Resource Libraries, we will scan the region for other facilities that can be scheduled for little or no charge. We will offer classes that require small group interaction and hold other interactive events, such as a health literacy conference or an e-science forum (see SOW section B4a) using the videoconferencing system.

The Eccles Health Sciences Library continues to successfully offer streaming video broadcasts of educational events at University of Utah (<http://library.med.utah.edu/ed/videoresources.php>). We will revive the idea of broadcasting events to the region from the University of Utah.

NN/LM MCR will investigate whether audio and video podcasts can be published using iTunesU, and continue to promote and educate our users about podcasting.

The NN/LM MCR will continue to investigate and implement new forms of communication, including audio, video, social networking, and collaboration tools. Technologies that work will be communicated to the region so that they can be incorporated into the services and operations of Network members.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Investigate and implement new technologies for communication and collaboration	X	X	X	X	X

A7j: Participate in RML Directors’ meetings

Outcome: - NN/LM MCR collaborations are valuable

NLM schedules and coordinates two RML Directors meetings a year. The first is held in conjunction with the annual Medical Library Association (MLA) meeting; the mid-year meeting is held in December or January. The RML staff and Resource Library Directors are consulted on agenda items they would like to have discussed. The Director and Associate Director inform RML staff and Resource Library Directors of the outcomes of discussions. All RML staff attends the RML Directors’ meetings preceding MLA and participates in the appropriate break out sessions.

The Director and Associate Director actively participate by suggesting topics, facilitating discussions, and collecting regional information in preparation for the meetings. Suggested topics that have been incorporated in past meetings include: changing demographics of

Network members, scholarly communication, and sharing of a technology coordinator with PSR.

The NN/LM MCR volunteered to host a mid-year meeting in Salt Lake City, Utah. The RML has successfully used group processes with the Regional Advisory Board, with members at chapter meetings, and with mixed groups at state meetings. Appreciate Inquiry, Open Space, Café to Go and Work-Thru are all tools that we use when working with a group. The RML will use this experience for agenda items that require idea generation, group involvement, and consensus building. If there is no mid-year meeting scheduled for Salt Lake City, the NN/LM MCR will volunteer to coordinate one of the Directors’ meetings held in conjunction with MLA.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Participate in RML Directors’ meetings	X	X	X	X	X

A8 – Regional Advisory Board

Statement of Work

Implement a Regional Advisory Committee (RAC). The RAC must include health professionals and health sciences librarians from hospital libraries and other large and small medical libraries within the Region. The RAC should also include representatives of state library agencies, public and school libraries, health information consumer groups, special populations, as well as representatives of community organizations with which the RML has partnerships. The RAC need not be structured as a single body, nor is it necessary for it to meet in a physical location, as long as a system is in place that enables the RAC to:

- a. Advise the RML within the framework of the NN/LM contract on ways to develop and implement outreach programs to improve health professionals' and the public's access to biomedical information;
- b. Advise the RML in establishing regional priorities, policies and procedures, including the development and implementation of a regional emergency preparedness plan, and reviewing regional programs;
- c. Develop plans to encourage health professionals and health sciences librarians to participate actively in regional and national programs affecting the delivery of health information; and
- d. Assist the RML in identifying health professionals without access to health information.

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective & Rationale:

Objective:

- The Regional Advisory Board contributes to improving access to health information in the MCR

The advisory group for the MidContinental Region is called the Regional Advisory Board.

An advisory group is a useful mechanism to enable organizations such as the NN/LM to be responsive to the constituency it serves. This group can act as the sounding board before programs are piloted, provide outside perspectives, and bring additional expertise and useful contacts to the program. Through its diverse composition and participatory activities, membership in the Regional Advisory Board can also establish collaborative relationships that enable organizations such as the NN/LM to be effective.

The Regional Advisory Board is made up of health professionals, health sciences librarians from hospital libraries and other large and small health sciences libraries within the region, representatives of state library agencies, public and school libraries, public health, health

information consumer groups, special populations, as well as representatives of community organizations.

Approach & Methodology:

Outcome: - The Regional Advisory Board effectively advises the RML on outreach and programming for Network involvement and access to health information for health professionals and public

Make Up of the Board

The Board is made up of eighteen members who serve staggered two year terms, with the RML holding the option of re-appointing members for a third year.

The RML uses the following criteria for selecting Regional Advisory Board members:

- Network member, health professional or member of a community organizations or representation from stake holders (commercial, governmental)
- Exhibited interest and/or support for access to health information (e.g., with electronic health records)
- Evidence of status with a priority population (public librarians, public health workforce, **those who work with minority populations, health educators who promote health information literacy, researchers who are involved in E-science, representatives from Regional Extension Centers, representatives from health insurance companies, and Network members, etc.**)
- Lives or works in the MidContinental Region
- Recommended by staff of the RML, Resource Library, or previous Regional Advisory Board member
- Experience working with the NN/LM at a local level

In order to have a representative board, the RML selects representatives for: each state in the region, each special project area, Resource Library Directors, and MCMLA (Midcontinental Chapter of the Medical Library Association). In the current contract, the members have been health professionals, health sciences librarians from hospital and academic libraries, public librarians, public health professionals, and staff of community organizations. We will invite representation from the commercial sector such as Walmart and health insurance companies who are involved in personal health records, and governmental agencies who are involved in health reform. We will continue to have a representative board in the next contract to help the RML move forward on its initiatives.

Members of the Board are listed on the RML web site and are introduced to the region in an article in the RML newsletter. This is done to acknowledge member participation and to notify those in the region about who they can talk to about programming in addition to RML staff.

Board Responsibilities

Each year as new members are added to the Board, the Director and Associate Director provide an orientation to introduce and review the organizational structure of the NN/LM, the organizational structure of the NN/LM MCR, the personnel who carry out programming and their responsibilities including special project areas, and expectations for the board. Board members have indicated that this is a good introduction to the organization.

RML expectations from board members are described when recruiting new members. The RAB will continue to have the following responsibilities:

- a. Advise the RML within the framework of the NN/LM contract on ways to develop and implement outreach programs to improve health professionals' and the public's access to biomedical information
- b. Advise the RML in establishing regional priorities and policies including the development and implementation of a regional emergency preparedness plan and reviewing regional programs
- c. Develop plans to encourage health professionals and health sciences librarians to participate actively in regional and national programs affecting the delivery of health information
- d. Assist the RML in identifying health professionals without access to health information
- e. Assist the RML in reviewing subcontract proposals
- f. Provide advisory responsibility for one of the RML's project areas
- g. Present information on their organization or area of expertise/work in one of the NN/LM MCR's publications or presentation mechanisms
- h. Assist the RML in reaching the constituency that the member represents (e.g., Network members, public libraries, public health workforce, etc.)

This includes:

- Promoting NLM resources
 - Forwarding RML messages to constituency group/population
 - Recommending ways to best communicate with this group/population
 - Providing insights into the organizational structure, culture of this group/population
- i. Provide input on RML concerns from the perspective of the population they represent

Each Board member is assigned a special project reflecting the strengths of the member. For example, members who work in health education have been assigned to the education special project area. Public librarians have been assigned to the consumer health project area. As part of his/her focus on a specific project area, the board member participates in a working group established to assist in carrying out an activity. This has worked especially well in the current contract with the members assigned to community outreach; they helped produce an

introductory series on collaboration for the region. Members assigned to Network membership developed policies and procedures for the Region's reference continuity effort. We will continue this approach as a way to actively involve our board in RML programming.

Board Meetings

The NN/LM MCR will continue to bring the board together for an annual meeting. During these meetings, we will include an update from the National Network Office (NNO) staff to introduce and keep our board members abreast of the accomplishments of the National Library of Medicine (NLM) and the scope of its work. We include information on NLM resources so that RAB members can promote these resources with the populations they represent.

The annual Board meeting initiates the annual planning process for the upcoming year. Issues will be brought forward for Board input on strategies that the RML can employ. In the past, the Regional Advisory Board has provided advice on encouraging member involvement in emergency preparedness, adopting new technologies, participating in professional development, supporting members' advocacy efforts, and promoting health information literacy. These topics all represent challenges facing the RML and were brought to the Board to gain perspectives not just from librarians representing multi-type libraries but from health care providers as well. The RML has found that using the Regional Advisory Board meeting to initiate the planning process focuses the Board on real issues which results in ideas that can be incorporated into the following year's activities. Since the majority of the time spent at a Board meeting is dedicated to discussion and group processes, we have found that in-person meetings are the most effective.

To provide Board members with another opportunity to interact with and advise the RML, we will establish regular virtual special project meetings. We will hold web-based conferencing sessions where two or three RML project areas will be featured. Coordinators will describe current activities, challenges related to those project areas as well as inviting comment and suggestions.

RML Events

In another effort to encourage greater involvement with and understanding of the RML, staff will extend invitations to Regional Advisory Board members to all events planned for the state where the Advisory Board member works. This would include invitations to the exhibit hall where staff is promoting NLM and NN/LM resources and services as well as training sessions offered by the RML. Board members will also be invited to regional events such as those planned for e-science and health information literacy. Participation in these additional activities will provide Board members with awareness of the broad scope of the RML and areas where they can provide input to assist us to be more effective.

The RML will pay travel costs to attend events when appropriate, for example if the RAB member helps to staff an exhibit booth or is a co-presenter. If there is not direct involvement in the event, the advisory board member will be invited but will be responsible for picking up the cost of attending the event.

Evaluation of the Regional Advisory Board Experience

The RML is interested in capturing feedback from Regional Advisory Board members on their experience as well as identifying ways in which the Regional Advisory Board has assisted the RML in its programming. The NN/LM MCR will develop a feedback mechanism for Regional Advisory Board members to tell us what they thought of their experiences: Was it time well spent? What were the benefits to them or their organizations? What would they like to see done differently? The RML will use these comments to revise its management of the Regional Advisory Board.

Midway through the contract and at the end of the contract, the RML will review the activities of Board members through meeting minutes and through special project group activities to identify where and how the Regional Advisory Board has assisted the NN/LM MCR in its programming, and specifically in the areas of responsibility identified in the statement of work.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
New member selection and orientation	X	X	X	X	X
Advisory Board members are assigned to specific project areas	X	X	X	X	X
Coordinators review logic model with members	X	X	X	X	X
Virtual Board meetings focused on special projects in July, January, and April	X	X	X	X	X
Annual Board meeting held in September or October	X	X	X	X	X
Assess Regional Advisory Board experience in April	X	X	X	X	X
Review the impact of the Board on RML programming and responsibilities identified in the statement of work			X		X

A9 – Monitor and evaluate the Region's programs to assess their effectiveness

Statement of Work

Monitor and evaluate the Region's programs to assess their effectiveness in meeting NN/LM goals and to identify and resolve problems which impede the effective delivery of health information services. The contractor shall:

- a. Evaluate and/or assess selected regional programs in consultation with the NN/LM Outreach Evaluation Resource Center and the Regional Advisory Committee;
- b. Provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups; and
- c. Participate in a formal contract site visit and review of the regional program, to be conducted at least once during the contract, by selected representatives from NLM, the RAC and/or Network members, and at least one other RML

Applicable NN/LM Goal

Understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public

Objective & Rationale:

Objective:

- NN/LM MCR is effective in assisting Network members in the delivery of health information services

The effectiveness of the NN/LM MCR in primary access to health information, is a primary goal of the NN/LM MCR. We focus on creating assessment and evaluation tools that will generate data to ensure the resources and services we provide meet the needs of our members in delivering health information services. The Assessment and Evaluation Coordinator is responsible for coordinating this program.

We use logic models in our annual planning process to articulate the work we will do and to relate that work to the goals of the NN/LM program and our region. Logic models are a means of organizing our work according to the goals of the NN/LM. The model includes the goals articulated for the NN/LM, the objectives that the NN/LM MCR believes will move the Region toward achieving those goals, outcomes that define the progress we expect to make in our work and indicators that represent how we measure our success.

Every fall, the NN/LM MCR staff develops the logic model for programming the activities of the next year. The models are the foundation for our web based system called the Activity Reporting System (ARS); this system is used by NN/LM MCR staff to record activities that can be aggregated into monthly, quarterly and annual reports. Coordinators enter nearly 1,400 reports

annually. The Activity Reporting System data is used to determine how closely MCR staff activities match plans for the year and what activities contribute to achieving the goals and outcomes articulated for the RML. Coordinators summarize their work quarterly, sharing their progress with their colleagues, discussing their successes and noting where more attention is needed. Using the Activity Reporting System the Associate Director and Project Coordinator create quarterly reports for the National Network Office that describes the activities of each state and special projects coordinator. Through the use of logic models and ARS, the NN/LM MCR staff understand how their work relates to each others', what efforts are required to carry out RML activities, and which activities and types of work are most effective in meeting the articulated goals of the RML.

To evaluate whether we are serving the needs of our Network members, NN/LM MCR administers Network Member Questionnaires and conducts focus groups to elicit input. During the fall of 2002, a questionnaire was designed and administered to obtain baseline information and feedback from NN/LM MCR libraries. The questionnaire was repeated in 2005 and the data compared to the baseline data. Also, in 2003, NN/LM MCR conducted a series of six focus groups in which thirty-three librarians from all states of the Region participated. The data provided by our Network members from the questionnaires and focus groups were used for program planning during the contract period. The Network Member Questionnaire and focus groups were repeated during the current contract to ascertain Network members' perceptions of the resources and services of the NLM and the NN/LM. Public librarians participated in focus groups on training issues held in 2007 and health sciences Network members discussed future trends in groups held in 2010. We evaluate new data for the knowledge we can gain and also compare it to previously collected data to better understand changes occurring in health sciences libraries and identify progress being made through our work of supporting access to health information. Reports from the three Network Member Questionnaires and three series of focus groups are posted on the RML web site in the Member Input section of Evaluation. (<http://nnlm.gov/mcr/memberinput>)

Approach & Methodology:

Outcome: - Evaluation data demonstrates the effectiveness of the Region's programs

A9a: Evaluate and/or assess selected regional programs in consultation with the NN/LM Outreach Evaluation Resource Center and the Regional Advisory Committee

The NN/LM MCR uses both formal and informal methods to collect data about the effectiveness of its programs and services. All project coordinators build assessment into their programs, and this approach is included in each section of this response narrative.

Formal Assessment

The NN/LM MCR uses questionnaires and focus groups periodically during the five year contract to solicit Network member input about programs, services and resources. These tools are developed with the assistance of the Outreach Evaluation Resource Center and the Regional Advisory Board. Both groups are asked to review drafts of questions being considered and also to help test the tools once they are in final draft form.

The NN/LM MCR will administer the Network Member Questionnaire during 2012. We will again review and revise the questions in consultation with the Outreach Evaluation Resource Center and Regional Advisory Board. We have employed an outside consultant, who, together with NN/LM MCR staff, analyzed the data from the 2002, 2005, and 2008 Network member questionnaires and wrote final reports. We will continue our practice of employing a qualified consultant to analyze and write the report for the 2012 Network Member Questionnaire. We will compare data collected to data obtained from earlier questionnaires and use that to inform future planning and programs.

Focus groups will be held in Year 3 to ascertain Network members' perception of the impact of health care reform, e-science, and new developments in health information on their work and services. We successfully used web conferencing for our 2010 focus groups allowing Network members from all over the region to participate. This approach broadened the pool of participants since it eliminated the need to live near or travel to a focus group session location. The effect of health care reform on our Network members and what the NN/LM MCR can do to support Network members' work as it is affected by health care reform, particularly related to electronic health records and personal health records, will be added to the question sets. A consultant will be employed for the analysis and technical writing required to report the results of the focus groups that are planned.

The results of the questionnaire and focus groups will be shared with Network members, Regional Advisory Board, NLM, and other NN/LM regions. In response to the analysis of information obtained during earlier Network Member Questionnaires and focus groups the NN/LM MCR:

- Increased the number of online educational opportunities
- Offered classes that teach DOCLINE skills
- Introduced new and emerging technologies
- Continued to push information to our Network members through our listserv
- Developed a suite of advocacy tools for hospital librarians to use in demonstrating their value

The NN/LM MCR distributed model was untested when it was proposed for the contract beginning in 2001. In questionnaires, focus groups, and other feedback, Network members have made it clear that they are extremely happy with the model. They speak of "their" coordinator and repeatedly voice their support for having coordinators distributed in each state. While the main NN/LM MCR administration occurs at the University of Utah library,

Resource Library Directors have also taken on an administrative role for the MCR. Each coordinator reports both to the NN/LM MCR Associate Director and also to the Resource Library Director. The success of this model depends on Resource Libraries viewing this model as a benefit not only to the Region but also to their libraries. A questionnaire will be administered in the last year of the contract soliciting input from the directors. They will be asked specific questions and also given opportunities to provide additional comments. The first evaluation revealed that the directors support the model and that they feel having an NN/LM MCR coordinator on their library staff has increased awareness of the NN/LM MCR and its programs. ~~Some suggested that the model added an administrative burden but all felt that the benefits outweighed any negatives.~~ **While Resource Library Directors indicated that having an MCR coordinator on their staff resulted in a certain overhead for their operations they also said that the burden of this overhead was more than offset by the benefits realized from having the MCR coordinator available. The overhead included providing space and infrastructure support while the benefits included:**

- **(It) helped the existing library staff to take a broader view in some issues, particularly outreach. The coordinator models outreach behavior, and this has made it easier for me to talk with staff about the importance of outreach activities.**
- **It has extended both our outreach activities and provided a better understanding of what is going on with other programs around the country. There are certainly financial advantages for the library.**
- **We are more aware of the needs of our state and I believe we are more connected to the state as a result of that outreach.**
- **(We) have incorporated her expertise in evaluation and assessment into library programs; clearly (have) a greater sense of membership in the NN/LM community among library staff; (it) has provided a mechanism for greater outreach through the promotion of MedlinePlus.**
- **Having someone dedicated to a national program such as the RML has brought some additional recognition to the library that would not otherwise have happened.**

Coordinators and directors have worked together to make any desired adjustments and coordinators actively work at contributing expertise and time in support of their home library's programs and services. This process will be repeated in Year 5 of the next contract.

While the distributed model requires the cooperation and support of the Resource Libraries, staffing adds another dimension to the model. Coordinators in the NN/LM MCR must be self-directed and able to work independently. At the same time they must work with their NN/LM MCR colleagues to carry out Regional programs. They must be facile with technology; comfortable traveling, presenting and teaching; able to develop comfortable working relationships with their Resource Library colleagues; and always be aware of how their plans or programs intersect with other coordinators' work. The NN/LM MCR administers a questionnaire

once during a contract soliciting coordinators' feedback and input on issues related to working in a distributed model. The questionnaire will be repeated in Year 5 of the current contract and in Year 5 of the next contract.

Internally, NN/LM MCR will continue to employ logic models for annual planning as well as use the Activity Reporting System to collect data about its work. Outcome evaluation is built into the logic model and an ongoing review tracks progress toward achieving the goals and outcomes. Activity reports will be reviewed monthly. We will review our progress quarterly and will modify activities to ensure that goals and outcomes are addressed. The year's activities will be matched against the planned goals, outcomes and activities in the logic model, enabling us to evaluate each of our program areas.

Annual analysis of ARS data related to outcomes achieved is another means of understanding the impact of the NN/LM MCR. We specifically review our work in terms of improved access to health information. We have learned over the four years that we have conducted this analysis that improved or increased access is frequently achieved at the end of a continuum that begins with developing awareness, building skills, and encouraging behavior change. With this understanding, we develop programs that meet our Network members' needs wherever they are on the continuum.

Informal Assessment

NN/LM MCR uses participant responses to polls during online presentations, evaluations of face-to-face and online classes, and periodic questionnaires addressing specific programming areas to gather data. Informal feedback obtained during conversations, visits, and meetings will be recorded in the ARS to ensure inclusion in quarterly reports to NLM.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Review achievements during previous contract in terms of outcomes and indicators met and the kinds of change each represents and evaluate for the effect on ongoing work	X				
Develop questions for Network Member Questionnaire and consult with Regional Advisory Board and Outreach Evaluation Resource Center on Network Member Questionnaire	X				
Consult with Regional Advisory Board and Outreach Evaluation Resource Center on focus group questions		X			
Administer Network Member Questionnaire		X			

	Year 1	Year 2	Year 3	Year 4	Year 5
Hold focus groups			X		
Develop logic models for next contract year	X	X	X	X	X
Reports of activities entered in ARS are produced and reviewed monthly; adjustments to planned activities will be identified during the review process	X	X	X	X	X
Review of year's activities against planned goals/outcomes/activities in logic model	X	X	X	X	X
Investigate and implement additional methods for obtaining information about our Network members' needs	X	X	X	X	X
Conduct coordinator feedback assessment					X
Conduct Resource Library feedback assessment					X

A9b: Provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups access to electronic consumer health information at the local, state, and regional levels

The NN/LM MCR regularly solicits feedback from Network members and others attending regional programs and presentations. The polling feature is used for every session offered using Adobe Connect. Every in person and online class (whether synchronous or asynchronous) has an evaluation form for participant feedback. Coordinators regularly receive comments from Network members. All responses pertaining to NLM or NN/LM products and services are shared with NLM. In addition to these evaluation tools, the NN/LM MCR uses a comprehensive questionnaire to obtain Network member input and feedback and conducts at least one series of focus groups during each five year contract.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Share results of Network Member Questionnaire with Regional Advisory Board, NLM and other regions			X		

A9c: Participate in a formal contract site visit and review of the regional program, to be conducted at least once during the contract, by selected representatives from NLM, the RAC and/or Network members, and at least one other RML

During the last NN/LM site visit, the NN/LM MCR had participation from all around the Region. Using videoconferencing technology, team members heard from and conversed with Resource Library Directors, Regional Advisory Board members, and Network members who gathered at Resource Libraries. We welcome another site visit so that RML staff and Network members can share their regional experience. In preparation for the visit, we will review the last site visit report, gather information to demonstrate the program’s effectiveness, develop presentations in response to questions from NLM, and publicize and invite Network members to participate either in person or via videoconferencing.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Review report from previous site visit in preparation for visit		X			
Host site visit			X		

A10 – Participate in Tests, Usability Studies, and User Needs Assessments

Statement of Work
 Participate in tests, usability studies, and user needs assessments of NLM and NN/LM products and services

Applicable NN/LM Goal
 Understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public

Objective & Rationale:

Objective:

- Develop a mechanism to provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups

One program objective of the RML is health information outreach to populations that include Network members, health professionals, and consumers. As stated in *Measuring the difference: guide to planning and evaluating health information outreach*, “The outreach planning process thus begins with a community assessment to understand the context of the group...” “This process is a critical beginning to planning and evaluating a health information program as it sets the stage for developing overall program goals and objectives.”²¹

In order for products and services of the NLM and NN/LM to continue to meet the needs of its users, testing and feedback is necessary. During the current contract, NN/LM MCR staff have both formally and informally assessed the use of NLM and NN/LM products and services by Network members, health professionals, and members of the community. We have reported our informal findings from exhibits, meetings, and workshops and our formal findings from questionnaires and focus groups in regular reports to NLM.

Approach & Methodology:

Outcome: - NLM and NN/LM products and services better reflect the needs of users

Use of NLM Products

The MCR administers a comprehensive Network Member Questionnaire every three years and holds a series of focus groups with Network members once or twice during each contract period. One of the purposes is to ascertain Network members’ perception of the resources and services of the NLM and the NN/LM. The table below compares hospital library Network member responses to questions about NLM products and services on the questionnaires administered in 2002, 2005, and 2008.

²¹ Burroughs, Catherine M. *Measuring the difference: guide to planning and evaluating health information outreach*. Seattle, Wash.: National Network of Libraries of Medicine, Pacific Northwest Region; Bethesda, MD.: National Library of Medicine, 2000. Pp xx

NLM Products and Services Use and Assessment, Hospital Libraries

NLM Products and Services	Very Useful or Useful (Like)			Not Useful (Don't Need)			Haven't Used Yet			Don't Know What It Is	
	2002 n= 86	2005 n=105	2008 n=81	2002	2005	2008	2002	2005	2008	2005	2008
DOCLINE	84	92	71	1	1	0	0	2	2	1	1
PubMed	81	89	72	1	0	0	0	2	2	1	0
MedlinePlus	81	87	71	0	0	0	2	5	3	1	0
Household Products Database*	n/a	23	35	n/a	5	0	n/a	46	33	19	6
Genetics Home Reference™*	n/a	17	28	n/a	4	0	n/a	50	37	22	9
Partners website*	n/a	5	13	n/a	2	0	n/a	36	44	50	13
Weekly update subscriptions to NLM services*	n/a	36	28	n/a	1	2	n/a	39	32	16	6

*New item on 2005 questionnaire

Table 8.

During 2003, NN/LM MCR conducted a series of six focus groups in which 33 librarians from all states of the Region participated. Public librarians were invited to participate in focus groups held in 2007 and health sciences Network members in groups held in 2010. The 2010 Network member focus group sessions were held via teleconference allowing more librarians to participate since the need to travel or live near the session site was eliminated. Reports from the three Network Member Questionnaires and three series of focus groups are posted on the RML web site in the Member Input section of Evaluation. (<http://nnlm.gov/mcr/memberinput/>)

Coordinators will continue to elicit information from members, health professionals, and the community during classes, exhibits, visits, and meetings. NN/LM MCR will hold a series of focus groups with a subset of Network members. These sessions will explore the effects of health care reform on participants' libraries and information services and will help the NN/LM MCR identify services and programs that can support Network members working in the changing health care landscape.

Testing of Products and Services

During the current contract, NN/LM MCR staff have provided feedback on the usability of the NN/LM web site, Serhold® policy revisions, and the Regional Class Registration system as well as an NLM resource on cultural competency. We have also tested new versions of NLM resources, including PubMed, and forwarded suggestions by users to improve NLM systems. Results of the Network Member Questionnaire concerning NLM products and NN/LM products and services have been and will continue to be shared with NLM in the RML's quarterly reports.

NN/LM MCR participated in the NN/LM web usability study in 2005 and as a result redesigned the entire NN/LM MCR web site. Feedback from Network members continues to indicate that the site is useful and that they can find information they need. In a Spring 2009 questionnaire, seventy-eight of 103 respondents (76%) agreed that the NN/LM MCR web site increased their awareness of health information resources and regional activities. The site was rated useful or very useful by 56% of respondents who indicated a rating of the site on the 2008 Network Member Questionnaire.

We will continue to participate in testing and usability studies so that NLM resources will meet the needs of Network members, health professionals, patients, and communities.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Develop questions for the Network Member Questionnaire to be administered in Year 2	X				
The 2013 Network Member Questionnaire will ask members about their use of NLM and NN/LM products and services		X			
Hold focus groups			X		
Analyze and report on data obtained from Network Member Questionnaire			X		
Analyze and report on data obtained from focus groups				X	
Coordinators will elicit information from members and health professionals during classes, exhibits, visits, and meetings	X	X	X	X	X
RML staff will participate in tests as requested by NLM and provide feedback	X	X	X	X	X

A11 – E-Licensing Support

Statement of Work

Assist Network members with negotiating e-licensing agreements that meet the needs of their institutions and support the mission of the NN/LM by providing resources on and training in e-licensing issues;

Applicable NN/LM Goal

Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

Having license agreements for electronic resources that meet the needs of Network member institutions is an important objective for the NN/LM MCR. In a 2004 assessment of Network members, a significant number of respondents indicated they would benefit if the NN/LM MCR provided licensing negotiation services. As a result, the NN/LM MCR established and managed the NN/LM MCR Licensing Consortium. The goals of the consortium were to:

- Provide access to high quality resources at reduced rates
- Ensure little or no interaction with product sales representatives
- Make available contracts with terms already negotiated

In partnership with the Bibliographic Center for Research (BCR), and with guidance from an advisory group consisting of Network members, the consortium began providing licensing services to NN/LM MCR Network members. Several online products, primarily health provider decision support applications, were offered (EBSCOHost, Elsevier, and Access Medicine) with ACP PIER being the most successful. In late 2007, many Network members were still not licensing online products through the consortium despite heavy promotion by the NN/LM MCR and the advisory group. To identify reasons for poor participation, a study was conducted. The results indicated that although Network members were interested in consortia purchasing, they either 1) did not have funding to purchase, 2) had existing licenses for products offered or, 3) had existing licenses to products offered through local consortia. In mid 2008, BCR determined it could no longer sustain the negotiating and billing services it had originally agreed to provide. In order to continue the licensing relationship with BCR, the RML would have to increase BCR's annual fee approximately 1000%. Coupled with the results of the study and the fee increase, the NN/LM MCR dissolved the consortium in fall 2008.

The NN/LM MCR learned that there is truly a need for assistance with negotiating e-licenses, but conducting the negotiations for Network members was neither practical nor sustainable. The NN/LM MCR responded by directing more energy towards providing resources and training/consultation services to increase knowledge and skill of Network members in negotiating e-licenses.

The online class “Librarians are from Venus, Vendors are from Mars: Strategies for Developing Respectful Vendor Relationships and Strong Contracts,” created by the NN/LM MCR, teaches Network members how to work with and communicate with vendors, discusses the fundamental of contract terms important to libraries, and introduces electronic management systems. Participants evaluating the class have given it high marks for content, delivery, and its online venue. Class participants earn continuing education credits from the Medical Library Association. The NN/LM MCR offers this as an online course and approximately 30% of the participants come from outside the Region. The NN/LM MCR has also been invited to teach the class at the 2010 Online Florida Health Sciences Library Association conference.

The NN/LM MCR maintains a web page of current vetted resources on licensing electronic resources (<http://nmlm.gov/mcr/rsdd/licensing>). This page provides links to effective methods of managing collections and licensing strategies for Network members to increase their knowledge and skills in this aspect of librarianship.

Approach & Methodology:

Outcome: - Network members and other organizations are better able to support access to health information resources

Licensing Electronic Resources Training

The NN/LM MCR will continue to provide training that assists Network members with negotiating e-licensing agreements. We will continue to schedule the class “Librarians are from Venus, Vendors are from Mars: Strategies for Developing Respectful Vendor Relationships and Strong Contracts” on a regular basis. This class will be updated as necessary to reflect the changing licensing environment. The class evaluation will also inform improvements to the class.

Develop and Maintain Resources on Licensing Electronic Resources

The NN/LM MCR will continue to maintain a web page containing current and vetted information on licensing electronic resources (<http://nmlm.gov/mcr/rsdd/licensing>). This page will continue to provide links to effective methods of managing collections and strategies Network members can use to increase their knowledge and skills in this aspect of librarianship.

Network members also have free access to NetLibrary, through a license negotiated by the NN/LM MCR. The current collection consists of e-books in the areas of technology and library management. In the next contract, we will add e-books on negotiation and licensing. Members

will be given an opportunity to provide feedback on the content on the web page and e-books collection.

Provide Consultation Services on Negotiating e-licenses

NN/LM MCR staff will continue to provide consultation services for members needing assistance in negotiating e-licensing agreements, and will continue to encourage members to contact us, so we can work with them on questions or concerns they may have. After each consultation, members will be given an opportunity to provide feedback about their experience.

Participation in Licensing Consortia

For members that would prefer benefits from group licensing, the NN/LM MCR has identified active consortia within the region (Colorado Council of Medical Librarians and Health Sciences Library Network of Kansas City Consortium) and outside the region (The Statewide California Electronic Library Consortium) that negotiate e-licenses for their members. Some have been amenable to extending their services to members not in their geographic scope of service. Discussions are underway with consortia leadership to encourage them to test the feasibility of extending their geographic service area. At this stage, the concept holds promise to benefit Network members. The NN/LM MCR is also working with companies that are resellers of online resources (e.g., LYRASIS). These types of service providers are potential resources for NN/LM MCR Network members.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Identify health sciences consortia willing to extend their group licensing services to NN/LM MCR Network members	X				
Create a consultation feedback tool	X				
Quarterly offering of the class “Librarians are from Venus, Vendors are from Mars: Strategies for Developing Respectful Vendor Relationships and Strong Contracts”	X	X	X	X	X
Conduct an annual review of NN/LM MCR web resources on licensing electronic resources	X	X	X	X	X
Conduct a quarterly review of available e-books on negotiating electronic licenses in NetLibrary	X	X	X	X	X

	Year 1	Year 2	Year 3	Year 4	Year 5
Compile an annual list of recommended e-books on negotiating electronic licenses	X	X	X	X	X
Quarterly promotion of consultation services on negotiating electronic licenses	X	X	X	X	X
Quarterly promotion of health sciences consortia willing to extend their group licensing services to NN/LM MCR Network members		X	X	X	X

A12 – Consultation on NLM and NN/LM Funding

Statement of Work

Provide consultation to Network members as well as community-based, faith based and other organizations representative of special populations on preparing proposals for projects to compete for NLM and NN/LM funding

Applicable NN/LM Goal

Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- Network members and other organizations have resources to support and improve information services for health professionals and others

The NLM and NN/LM both provide funding opportunities for small institutions and hospital libraries to offer a service or conduct research that may be beyond the capabilities of local budgets. For libraries, pursuing such funding opportunities is an excellent advocacy strategy, as it increases the perceived value of librarians to their institutions.

The funding process can be intimidating with complex instructions and innumerable forms to be completed. Even experienced proposal writers must carefully examine the fine print so that all the stipulations are met. Principal Investigators (PIs) may also need to call the funding agency for clarification. Providing proposal consultation services for Network members as well as for community-based, faith based, and other organizations representative of special populations will increase the quality of the proposals received by the NLM and the NN/LM.

Approach & Methodology:

Outcome: -Network members have the necessary skills to develop projects and programs

Throughout the current contract, NN/LM MCR coordinators have been available to consult with Network members and other organizations applying for NLM and NN/LM funding. As part of our consultation service, we discuss the feasibility of the project, help develop an idea, recommend funding sources, review proposals before submission, and when appropriate, write a letter of support. Our service is very effective when Network members take advantage of it and carry out our recommendations. For RFPs issued by the NN/LM MCR, we have noticed that proposals are more successful when a coordinator has provided assistance. Proposals that were not funded were rejected for common mistakes (e.g., not following instructions) that would have been fixed in a consultation.

As part of our consultation, we recommend partnerships between CBOs and Network members as fundable projects. The NN/LM MCR offers several resources to those who are proposing projects with a community-based organization; for example, the Navigating Collaboration toolkit (<http://nnlm.gov/mcr/resources/community/collaboration.html>) developed by the Community Outreach Working Group, provides Network members with resources to use as a starting point in developing collaborations. Entries in the Library Success Wiki include descriptions of Network member/CBO partnership funded projects. Collaborations provide a way for health information to reach a wider audience from trusted community resources. The Library Success Wiki (<http://www.libsuccess.org/>) is a resource for librarians to share and to find ideas and information on effective practices occurring in all types of libraries. The "Services for Health Information Consumers" category serves to collect and organize activities dedicated to providing increased access to health information for health care providers and the general public.

During the current contract, we provided sixteen online technical sessions to Network members who were interested in applying for the Continuity of Health Information Award. In each session, we reviewed the entire process of applying for funding by walking through the RFP:

- Developing an idea
- Working with appropriate partners
- Developing a budget
- Building evaluation into the proposal
- Program sustainability

The technical sessions will be offered again in Years 1-4 in conjunction with the offering of the different awards in the Region.

The Community Outreach and Consumer Health Coordinators are offering the Medical Library Association Continuing Education Class “Grant and Proposal Writing” in June 2010 at the Denver Public Library. The Associate Director will be offering a 90-minute proposal writing session for the Utah Academic Library Consortium meeting in the summer of 2010. In the next contract, coordinators will promote the availability of these classes to health sciences library consortia groups.

The NN/LM MCR promotes our consultation services on a regular basis using all of our communication tools, including the NN/LM MCR blog/weekly news, the Bringing Health into the Community blog, the NN/LM MCR Facebook page, and the NN/LM MCR web site. We believe that it is important to provide Network members with resources throughout the year, so when an opportunity to pursue funding arises, they are prepared. We will track our consultation efforts through follow up contacts.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Promote consultation services on preparing proposals for funding	X	X	X	X	X
Provide Network members resources on successful partnership practices with CBOs	X	X	X	X	X
Offer continuing education classes on proposal writing	X	X	X	X	X
Offer technical sessions in conjunction with offering funding opportunities	X	X	X	X	

A13 – Promote Applications for NLM Grants

Statement of Work :
 Promote and encourage the submission of applications for NLM-sponsored grants

Applicable NN/LM Goal:
 Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- Network members and other organizations have resources to support and improve information services for health professionals and others

For small institutions and for hospital libraries in particular, grants provide opportunities for funding that may be beyond the capabilities of local budgets. Equally important, pursuing grants is an excellent survival strategy, as bringing in outside funding increases the perceived value of librarians to their institutions. The grants process can be intimidating with lengthy instructions and innumerable forms to be completed. Even experienced grant writers must carefully examine the fine print so that all the stipulations are met. It is common practice to call the grants officer for clarification. Because of the rapidly changing environment and increasing demands on health science librarians, encouraging health sciences libraries to submit proposals for NLM grants is more important than ever.

Approach & Methodology:

Outcome: -Network members and other organizations are aware of NLM grants available for application and funding

NN/LM MCR coordinators will track the announcements of relevant health information grants announced on the Grants.gov resource (<http://www.grants.gov/>). This resource now includes all grants offered by the U.S. government and is working with agencies to standardize their forms. All National Library of Medicine grants can be found on the site as well as those of the Institute for Museum and Library Services (<http://www.ims.gov/>), two major funding sources for library projects.

NN/LM MCR staff will promote NLM's Extramural Programs using our normal communication tools. Through the *RML News*, we will announce upcoming deadlines for NLM grants. We will also seek input and participation in promotion from Regional Advisory Board members who may have ideas of how to promote these grants to the constituents they represent and serve who are not part of the health sciences library community.

In our presentations about the NN/LM and the NLM, we will include information about the availability of funding from the National Library of Medicine so that more health professionals and community-based organizations will view NLM as a funding agency.

Potential principal investigators for NLM grants are Network members in the Region who have successfully proposed and carried out NN/LM MCR funded awards. As NN/LM MCR coordinators manage subcontracts, they will consider whether projects could be pilots for larger efforts and whether they would be appropriate for NLM grants. If pilots could be

expanded, the coordinator will encourage the Network member to apply for an NLM grant. A potential source of information on the types of projects being funded is the NIH RePorter (<http://projectreporter.nih.gov/>). NN/LM MCR coordinators will use and recommend this source when consulting with interested Network members.

NN/LM MCR staff will announce successful proposals from Network members using NN/LM MCR communication tools, for example: articles in the quarterly newsletter, *Plains to Peaks Post*, or “Breezing Along with the RML” webinars. For example, successful project managers will be featured in “Breezing Along with the RML” webinars; they will describe their projects, the development process, and possible methods others could use to implement a similar project. This will provide those thinking of writing a proposal with a successful example to emulate.

To evaluate the success of our efforts, we will annually document the number of proposals being submitted to NLM on which we consult. Consultation activities will be documented in our Activity Reporting System.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Promote NLM grants using our communication tools	X	X	X	X	X
Include NLM funding in presentations about the Network	X	X	X	X	X
Seek input and participation in promotion from Regional Advisory Board members	X	X	X	X	X
Identify potential NLM projects from NN/LM MCR funded projects	X	X	X	X	X
Document the number of NLM proposals on which NN/LM MCR staff consult	X	X	X	X	X
Promote NLM funded proposals awarded to Network members using NN/LM MCR communication tools	X	X	X	X	X

A14 – Changing Role of Information Professionals

Statement of Work:

Develop programs, which may include pilot projects, to assist the information professional in promoting evidence based health information in the institution. The programs shall identify health information issues and address the changing role of the information professional with a special emphasis on hospital librarians. The programs may include but not be limited to: advocacy, education and training to address knowledge management, clinical information systems, patient safety programs, electronic health records, health literacy, or patient education.

Applicable NN/LM Goal:

Promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to the Healthy People 2020 goal of eliminating health disparities.

Objective & Rationale:

Objective:

- Network members, especially hospital librarians, promote evidence based health information

The health sciences librarians' environment is changing rapidly and increasing in complexity. The evolution of online materials and databases has created competition for librarians' expertise. A common perception is that the skills that the library profession values are no longer necessary to the user. At the same time, the costs associated with health care have increased tremendously. "According to the Congressional Budget Office, in the past 30 years, health care spending has risen two percent faster annually than the rest of the economy. In 2007 the total U.S. health care bill came to \$2.3 trillion—more than we spent last year on food."²² This increases the economic competition that libraries face within their institutions.

Economic and perceptual challenges are increasing. The practice of health care is becoming more complex. As more conditions are identified, more treatments are developed, and global travel increases the likelihood of epidemics. This increased complexity offers opportunity to those who are alert and positioned to take advantage of changes and emerging needs.

While opportunities are being presented daily, they require new skills and awareness. These changes are occurring so rapidly that graduate library schools are lagging behind in preparing students for the new environment. Most practicing librarians did not receive any business

²² Brownlee, Shannon. Why does health care cost so much? AARP Magazine [Internet]. July-August, 2008. [cited 2010 April 25]; Available from: http://www.aarpmagazine.org/health/health_care_costs.html?NLC-WBLTR-CTRL&DET=F5-62708 4/25/2010.

training in their graduate studies and must rely on conference attendance and continuing education to develop awareness and skills needed in the current environment. This means that many health sciences librarians need additional exposure and training in order to position themselves to take advantage of new and emerging opportunities.

The NN/LM MCR's programming will bridge the gap between traditional library approaches and new opportunities. Professional organizations such as MLA and MCMLA provide high-quality training in traditional areas such as expert searching. NN/LM MCR will reach out into new areas such as knowledge management, patient safety, health information literacy, clinical information systems and electronic health records. The NN/LM MCR will also bridge the gap that practicing librarians have in business knowledge. This will enable librarians to successfully advocate for their positions within the financial structure of their institutions.

Approach & Methodology:

Outcome: - Network members, especially hospital librarians, participate in emerging practices to promote evidence based health information in the institution

Workshop: Knowledge Management/Knowledge Sharing Role for Librarians in Hospitals
As funding becomes available, NN/LM MCR will sponsor a 1.5 day workshop for hospital librarians and an accompanying team member from the same hospital to explore how the concepts of knowledge management and transfer as applied in a corporate environment can be incorporated in the hospital/health care environment. This workshop will prepare librarians to adopt an expanded role in their institution.

Elements of the workshop include:

- Determining of how hospital librarians and others define knowledge management
- Sharing of best practices of knowledge transfer activities in hospitals
- Using experiences to illustrate existing responsibility for knowledge sharing
- Developing descriptions of envisioned projects, and formulating ways to support the proposed roles in hospitals - One example is addressing how an expansion of the information professional's role in knowledge management/transfer can affect organizational learning about error and quality improvement
- Developing team projects to be carried out in the participating hospitals
- Establishing relationships among the hospital teams attending the workshop to create a support group to test assumptions, discuss barriers, measure impact and share lessons learned

The workshop will be preceded by two sessions conducted through Adobe Connect to establish a common definition of knowledge management and review the processes that will be used in

the workshop. It will be followed by four sessions conducted through Adobe Connect for teams to share experiences and help each other to achieve success of their projects in their respective hospitals. Participants will be asked to share their experiences and project implementations through presentations on “Breezing Along with the RML” webinars and articles in *Plains to Peaks Post*.

Patient Safety Online Classes

The NN/LM MCR will sponsor a series of online classes on patient safety entitled “Patient Safety at the Sharp End.” The “sharp end” refers to the point where patient care is delivered and the most immediate risks and visible failures can occur. In order to contribute to safe and high quality patient care, librarians need to understand the information and knowledge exchange activity both at the hospital care unit level and the bedside.

Patient Safety Symposium

Building on the education previously offered in knowledge sharing and patient safety, the NN/LM MCR will offer a 2-day symposium focused on bringing together patient safety and knowledge management experts to explore linkages between complexity theory, learning organizations, safety culture, evidence-based management, and librarians’ roles in making those linkages reliable in the healthcare environment. Learning objectives for the symposium include:

- Understand the basics of systems thinking, complexity theory and the learning organization
- Learn how to apply those concepts to enable strategic thinking about knowledge sharing programs in the hospital through the use of dialogue, project planning and prioritization exercises
- Apply skills to engage with multidisciplinary groups and explore information and knowledge sharing programs to affect patient safety and experience sharing
- Envision and plan ways to disseminate learned content to reduce opportunities for failure in a complex environment based on clinical and librarian practice
- Identify opportunities for improved teamwork to enhance safety efforts in hospitals
- Look at the information/evidence/knowledge continuum and identify key opportunities for knowledge services process improvement and crosswalk those improvements to reduce medical errors

Content from the Patient Safety Symposium will be shared through the various communication methods used by the MCR. We will consider videobroadcasting or recording key presenters for later viewing. Following the symposium, articles will be published in *Plains to Peaks Post* by the Advocacy Coordinator and attendees of the symposium. These articles will be made available to RMLs interested in posting them on their blogs or re-printing them in their newsletters. A summary of the content will be posted on the MCR web site, and any bibliographic material referenced in the symposium will be posted also. Additionally, a *Breezing Along with the RML* session containing material from the symposium will be

developed and presented in one of our regularly scheduled sessions following the symposium.

Health Literacy Summit

The NN/LM MCR has identified health information literacy as an issue of significant concern and an area where librarians can have an impact on both health professionals and health consumers. In order to focus librarians' attention on this issue and to develop effective practices on health information literacy, the NN/LM MCR will co-sponsor a Health Literacy Summit with Health Literacy Missouri. Health Literacy Missouri has organized and run health literacy summits for several states in the past two years. Individuals from the six states in the region will be invited to attend including Network members, Regional Advisory Board members, health professionals, professionals from community based organizations, and others interested in this topic. A significant feature of this summit will be a health information literacy track. The objective of the Health Literacy Summit is to establish a coalition of stakeholders who will work together to build health literacy skills. The objective of the health information literacy track will be to identify the roles librarians can play in health literacy projects. Network members who attend will be asked to contribute their experience and knowledge gained through presentations to the Region and articles in *Plains to Peaks Post*. (See response to SOW section B2b for more information on the Health Literacy Summit)

Business Practices

Librarians are called to perform many business activities, and to advocate for their work in a business context in their practice. Unfortunately, few librarians are trained to perform and interact successfully in this area. In the current contract, the Library Advocacy Coordinator and the Assessment and Evaluation Coordinator have developed online calculators for determining the retail value of services provided, the cost/benefit analysis and return on investment of library books, journals and databases. These calculators have been presented at national and regional meetings as well as in online training sessions. Also, a Hospital Librarians' Toolkit has been established which furnishes librarians with brief descriptions of various business practices, including networking, marketing and promotion, as well as links to content developed by other professional organizations such as the Medical Library Association. All of these tools are available on the NN/LM MCR web site (<http://nmlm.gov/mcr>).

In the next contract, the NN/LM MCR will continue to build on the work done in the current contract. NN/LM MCR has been a leader in training librarians in project planning and evaluation. Co-developed in 2004 by the Assessment and Evaluation Coordinator, "Measuring Your Impact: Using Evaluation for Library Advocacy," has been taught more than nine times in the Region, reaching 149 librarians and more than forty times in the U.S. and Canada, reaching nearly 600 librarians. The class introduces students to environmental assessment, goal setting, articulating desired outcomes through the development of a logic model and the importance of planning for evaluation from the beginning of any proposed project. "Measuring Your Impact" will be held at least two more times in Year 5 of the current contract – at MLA 2010 and in St Louis. The class continues to be relevant and well received and will continue to be offered in the NN/LM MCR during the contract period. An online curriculum will be developed offering the

class in one hour segments over six weeks. In addition, online sessions discussing evaluation tools, including the online calculators for determining library value and institutional return on investment from library services (<http://nmlm.gov/mcr/evaluation/tools.html>) will be held periodically.

The NN/LM Outreach Evaluation Resource Center developed a series of three and four hour classes which, as a whole, address community assessment, project development and planning, data collection and data analysis and reporting. These complement the six hour “Measuring Your Impact” class, enabling students to spend more time on each concept than is available during the longer class. Two of the classes, “Answering the Right Questions: Data Collection for Health Information Outreach” and “Finding Information in Numbers and Words: Data Analysis for Health Information Outreach” will be offered in the MCR during the contract. Students in the “Measuring Your Impact” class regularly comment on the need for and the difficulty of doing data collection and analysis. These classes will offer NN/LM MCR librarians another source of training in this vital area.

The Assessment and Evaluation Coordinator will co-teach the first time the OERC classes are offered and then will be able to teach alone or with OERC staff in the future. The workshops will be offered in person and also using distance education technology, if the OERC has developed the necessary materials and curricula for teaching online. In order to determine whether Network members have acquired needed skills, we will include a question in the post-class evaluation for all classes asking if Network members feel that they are more proficient in project planning and evaluation. We will also follow up with students six months and one year after the class to find out how the students have used their planning and evaluation skills.

The NN/LM MCR will offer partial scholarships to five librarians for each of five online business classes offered by a well-known trainer and business consultant in the library industry. These classes are each approximately six weeks long, and have each been approved for eight MLA CE credits. The classes are:

- Everyday Leadership - getting people to get out of the tasks of medical librarianship and into leadership
- Influence - politics class for medical librarians
- Change Management - what mistakes do managers and leaders make when making changes
- Supervision
- Strategic planning

Individuals receiving scholarships will be required to apply their knowledge in their practice, and to share the results with colleagues through communication tools such as “Breezing Along with the RML” and articles in the *Plains to Peaks Post*.

The NN/LM MCR will continue the work begun in Year 5 of the current contract by the Woods Hole Bioinformatics Course alumni group. This is a group of librarians from the MCR and the

Pacific Southwest Region who have attended the Woods Hole Bioinformatics course and are interested in advising the regions on methods for librarians to become involved with bioinformatics projects. The group is working on identifying those librarians who have successfully participated in their institution's electronic health records (EHR) program and/or in the development of clinical information systems. The group has asked them to present their experiences, recommendations and best practices to Network members through "Breezing Along with the RML" webinar or articles in the *Plains to Peaks Post*, the NN/LM MCR quarterly newsletter. The emphasis of this program will be to illustrate the roles that librarians can play within a specific institution, for instance, serving on an EHR implementation committee to recommend links to evidence-based medicine or personal health information. The webinars and articles will build a base of knowledge throughout the Region.

The NN/LM MCR is very interested in facilitating pilot projects conducted by Network members where changing roles of librarians are tried. The NN/LM MCR will offer funding for pilot projects which may be granted for the development of new roles for librarians through the Continuity of Health Information Award and the New Collaborations for Health Sciences Librarians Award. (See our response to SOW section B6 for more information on our award program)

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Hold Knowledge Sharing Workshop	X				
Hold Health Literacy Summit		X			
Offer Scholarships for librarians taking business classes	X	X			
Patient Safety Classes offered online			X		
Patient Safety Symposium offered				X	
Network members report on training activities and implementation in "Breezing with the RML" and <i>Plains to Peaks Post</i>	X	X	X	X	X
Individuals participating in electronic health records and/or clinical information systems projects share their experience and knowledge through Breezing with the RML sessions and <i>Plains to Peaks Post</i> articles	X	X	X	X	X

A15 – Historical and Unique Materials

Statement of Work

Assist NLM in identifying collections of historical and unique materials related to the health sciences and developing ways to increase access to these materials (Appendix 3)

Applicable NN/LM Goal

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

Objective & Rationale:

Objective:

- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

Because history of medicine collections represent our past and the path to our current state of health care and biomedical research, the National Library of Medicine (NLM) includes a directory to other libraries that house historical collections. NLM's web site also provides information on its historical collection and the Exhibition Program. These resources reinforce the commitment of the NLM to "collect, preserve, and make available to researchers and the public, print and non-print materials that document the history of medicine, health, and disease in all time periods and cultures."²³

The NN/LM MCR, in support of this commitment, will focus on three initiatives with regard to historical and unique materials: 1) to promote the multiple historical collections that exist within the NN/LM MCR, 2) to promote the History of Medicine division of the National Library of Medicine and 3) to promote the Exhibition Program of the National Library of Medicine, including both online and traveling exhibits.

Approach & Methodology:

Outcome: -Network members are aware of and have access to historical collections within the region as well as those from the National Library of Medicine

²³ National Library of Medicine, History of Medicine, About Us [Internet]. Bethesda (MD): National Library of Medicine (US), [updated 9 Jun 2009; cited 2010 May17]. Available from: <http://www.nlm.nih.gov/hmd/about/index.html>.

Regional Collections

Eight collections in four states of the NN/LM MCR, (Colorado, Kansas, Missouri and Nebraska) are registered with the National Library of Medicine's Directory of History of Medicine Collections (<http://wwwcf.nlm.nih.gov/hmddirectory/directory/locations.cfm>).

- Aurora, Colorado
 - James J. Waring, M.D., History of Medicine and Health Sciences Collection, University of Colorado Denver, Health Sciences Library
- Leawood, Kansas
 - Center for the History of Family Medicine, American Academy of Family Physicians Foundation
- Kansas City, Kansas
 - Clendening History of Medicine Library and Museum, University of Kansas Medical Center
- Columbia, Missouri
 - Western Historical Manuscript Collection - Columbia
- Kansas City, Missouri
 - Western Historical Manuscript Collection - Kansas City
- Kirksville, Missouri
 - Still National Osteopathic Museum and the National Center for Osteopathic History
- St. Louis, Missouri
 - Archives and Rare Books Section, Becker Medical Library, Washington University School of Medicine
- Omaha, Nebraska
 - Special Collections Department/UNMC Archives, McGoogan Library of Medicine, University of Nebraska Medical Center

In 2009, four archivists presented in a “Breezing Along with the RML” webinar session. Each highlighted special parts of their collection. A reprisal of this event is planned with the additional inclusion of other archivists. These individuals may be identified through the Network Member Questionnaire, which is used to gain information on our members on a number of different areas and will be conducted in Year 2. This query would focus on the following criteria: whether the members have medically-related unique and historical collections, whether they are open to the public, whether they serve public patrons upon presentation of a valid request, whether they answer reference requests on their collections and would, within their policies, provide limited interlibrary loan service. Should members answer in the affirmative to all of the above, the NN/LM MCR would ensure that the repository librarian or staff member submit an entry for the NLM's Directory of History of Medicine Collections.

During the five years of the contract, each archival librarian who manages historical collections in the Region will be asked to write an article for the *Plains to Peaks Post* newsletter highlighting their collections.

National Library of Medicine - History of Medicine

The National Library of Medicine maintains a History of Medicine web site, complete with multiple collections:

- Books and Journals
- Archives and Manuscripts
- Prints and Photographs
- Films and Videos
- Digital Collections

A speaker from the NLM History of Medicine division will be featured on a “Breezing Along with the RML” webinar to offer attendees a tour of the multiple resources available at this web site.

National Library of Medicine - Online Exhibitions and Digital Projects

The NLM’s Long Range Plan for 2006-2016, Goal 2.3 Promote knowledge of the Library’s services through exhibits and other public programs, states:

“Primarily via the Regional Medical Libraries and other members of the National Network of Libraries of Medicine, NLM’s products and services are exhibited and in some cases featured in Continuing Education classes and program sessions ...the NLM should continue this program.”²⁴

In the current contract, two Resource Libraries (Creighton University and the University of Kansas), and a number of public libraries hosted programs from the Exhibition Program featuring an exhibit at their libraries. A speaker from the NLM will be invited to present to members on the “Breezing Along with the RML” session to highlight available exhibits, considerations for exhibiting, and the application process.

To encourage members within the region to apply for traveling exhibits, the Continuity of Health Information award may also be used to allow members to apply for funding to host exhibits, if the exhibit is part of a health information outreach effort.

²⁴ Charting the Course for the 21st Century: NLM’s Long Range Plan 2006-2016, [Internet]. Bethesda (MD): U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Library of Medicine, 2006 [cited 2010 May 17] Available from : http://www.nlm.nih.gov/pubs/plan/lrp06/NLM_LRP2006_WEB.pdf.

Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
Articles in <i>Plains to Peaks Post</i> highlight historical collections in the Region	X	X	X	X	X
A speaker from the NLM History of Medicine Division presents at “Breezing Along with the RML” webinar session	X				
National Library of Medicine Exhibition Program speaker presents at “Breezing Along with the RML” webinar session	X				X
Archivists present at “Breezing Along with the RML” session to highlight their collections			X	X	

A16 – Training Facility

Statement of Work

Provide a training facility equipped with personal computers as well as technologies supporting distance learning, including webcasts for conducting NLM training classes as outlined in the NLM Training Center Statement of Work. There will be one personal computer for every student. Equipment requirements are in (Appendix 4). Priority shall be given for scheduling regional training. When not in use for regional training classes, the facility may be used for other types of training.

Applicable NN/LM Goal

Develop, promote, and improve electronic access to health information by network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- Health information resources are within easy reach of practicing U.S. health professionals

The National Library of Medicine Training Center (NTC) staff travel around the country providing classes to health sciences librarians, health care providers, public librarians, members of the public health workforce, and anyone interested in learning to effectively retrieve information from the National Library of Medicine’s health information resources. In order to

offer these hands-on classes, the training center requires the use of facilities equipped with proper hardware and software.

Approach & Methodology:

Outcome: -Health professionals, librarians, students and members of other organizations have increased skills to use resources for health information

The Spencer S. Eccles Health Sciences Library will provide a training facility outfitted with twenty computers to host the NLM Training Center classes in Salt Lake City. During the current contract, the library has used laptop computers set up classroom style in the Health Sciences Education Building whenever the Training Center instructors trained in Utah. The School of Medicine, and Colleges of Nursing, Pharmacy, and Health are given priority in reserving rooms for their classes in this building. The use of these rooms is so competitive that it is almost impossible to find a classroom of the size needed to accommodate Training Center classes except during the summer or during school breaks.

In Year 5 of the current contract, the Spencer S. Eccles Health Sciences Library will be renovating two rooms in the library to create a single computer lab of adequate size to meet the NLM Training Center requirements. It will be outfitted with twenty computers, a projector, telephone, and speakers necessary to provide in-person and distance education classes. The RML will have priority access for scheduling the room. Hardware and software within the facility will be maintained and supported by the Spencer S. Eccles Library Systems Department.

The NN/LM MCR’s seven Resource Libraries have also agreed to make their facilities available to host the NLM Training Center classes. This increases the number of training facilities so that there is at least one facility in each of the states in the Region where students can participate in NLM Training Center classes.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
The expanded computer lab at Eccles Library is outfitted with computers and distance education technology	X				
The NN/LM MCR hosts the NLM Training Center at 2-3 sites in the Region	X	X	X	X	X

Regional Services Plan

Section B: Outreach Programs

B1 – Outreach Programs Health Professionals and Public Health Workers

Statement of Work

The contractor shall develop, implement, and evaluate outreach programs that bring biomedical information resources within easy reach of U.S. health professionals and the public health workforce, who are not directly affiliated with an institution with a medical library. In carrying out these programs, the contractor shall focus on unaffiliated health professionals located in rural, inner city, and Medically Underserved Areas (MUA), public health workers, and minority health practitioners or those who serve minority populations. The outreach to health professionals program shall enlist the assistance of Network members through the use of subcontracts, agreements and other mechanisms. Specifically, the contractor shall undertake the following:

- a. Develop programs that reach practicing health professionals, including but not limited to: physicians, physician assistants, nurses, pharmacists, complementary and alternative medicine and allied health practitioners, veterinarians, public health workers, and health educators, with particular emphasis on collaborations with organizations/institutions that represent these groups;
- b. Develop programs that reach minority health practitioners and students in Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges, Community Colleges, and Vocational Schools, including institutions and organizations that focus on Native Hawaiians and Alaska Natives and the health professionals serving those populations or working in those disciplines. Programs should also focus on subject disciplines that have been identified as priority initiatives (e.g., health disparities, consumer health, health information literacy, HIV/AIDS, health services research, toxicology and environmental health);
- c. Develop pilot projects, which may include professional schools and organizations, to identify and promote the roles of libraries in institutions that have e-science initiatives;
- d. Develop programs, which may include pilot projects, with recently funded DHHS regional extension centers (RECs) (<http://www.hhs.gov/news/press/2010pres/02/20100212a.html>) to assist health professionals with implementing and using health information technology; and
- e. Develop culturally and linguistically appropriate resources and provide training in the effective use of electronic health information resources. Before developing any training materials, the MLA Educational Clearinghouse will be checked to avoid duplication. Copies of all training materials developed will be registered with the MLA Educational Clearinghouse. Training should include, but not be limited to: PubMed, MedlinePlus, and other NLM resources.

Applicable NN/LM Goal

Promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to the Healthy People 2020

Objective & Rationale:

Objectives:

- Health information resources are within easy reach of practicing U.S. health professionals (applies to B1a, B1b, and B1e)
- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information (applies to B1c)
- Personal health information and access to evidence-based health information are incorporated into EHR systems (applies to B1d)

The National Library of Medicine's core mission includes outreach programs "to help assure that its users, including researchers, health professionals, and the lay public, are aware of and make effective use of health information available from NLM."²⁵ The NN/LM MidContinental Region will advance this mission by building on and enhancing outreach efforts to the unaffiliated health professional workforce currently in the Region. Over the past four years, coordinators have sought opportunities to exhibit and present to health professionals and the public health workforce practicing in urban and rural areas. During 2006-2010, over 1,000 health care providers and 460 public health workers received training. The NN/LM MCR has a unique distribution of the health care workforce, with many states illustrating a high percentage of Medically Underserved Areas (MUAs). These are areas or populations designated by Health Resources and Services Administration as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population.²⁶

Practicing in a MUA can impact health care providers' ability to access health information – they can be hundreds of miles from an academic health sciences or hospital library. The NN/LM MCR's distributed model allows coordinators to connect with the healthcare workforce in these areas through the public library, an often overlooked professional resource in the community. **Individuals at public libraries that are NN/LM MCR Network members will become knowledgeable in ordering articles from medical and scholarly biomedical related journals through Loansome Doc from health sciences libraries. Public libraries could become a Loansome Doc access point for health professionals or could provide Loansome Doc information so health professionals can set up their own Loansome Doc accounts.**

Public libraries in the MCR are not full DOCLINE members nor do they lend medical or scholarly journal articles. Each state has interlibrary loan systems in place for public libraries to borrow medical and scholarly journal articles for their patrons. We believe that establishing public libraries as Loansome Doc access points is a more efficient way to deliver medical articles to the end user. ~~Public libraries can provide access to articles through their interlibrary loan services, as well as assist users with consumer health information questions.~~

²⁵ Charting a course for the 21st Century – NLM's long range plan 2006-2016 [Internet]. Bethesda (MD): National Library of Medicine; 2006 September [cited 2010 May 17]. Available from: http://www.nlm.nih.gov/pubs/plan/lrp06/report/LRP_Goal2.html#R2_1.

²⁶ Find shortage areas: MUA/P by state and county [Internet]. Rockville: Health Resources and Services Administration [cited 2010 May 17]. Available from: <http://muafind.hrsa.gov/>.

NN/LM MCR coordinators have worked closely with public library staff in rural areas, conducting in-person and virtual train-the-trainer sessions on NLM resources such as PubMed and MedlinePlus. Coordinators promote the public library as a source for health information, as well as Loansome Doc (connecting providers to document delivery service via health sciences libraries) through one-on-one contact with care providers, and through contacts at professional conferences.

Having a presence at conferences and meetings where these geographically dispersed workforces convene is vitally important. It is a strategic way to reach a wide audience, and reduce the cost of travel to individual practices, clinics, medical centers and hospitals.

Nationwide, nearly 12% of the population lives in a MUA.²⁷ Figure 9 illustrates the total number of MCR counties in comparison to the number of rural counties and Medically Underserved Areas.²⁸ Overall, 60-75% of the MCR counties have MUA status.

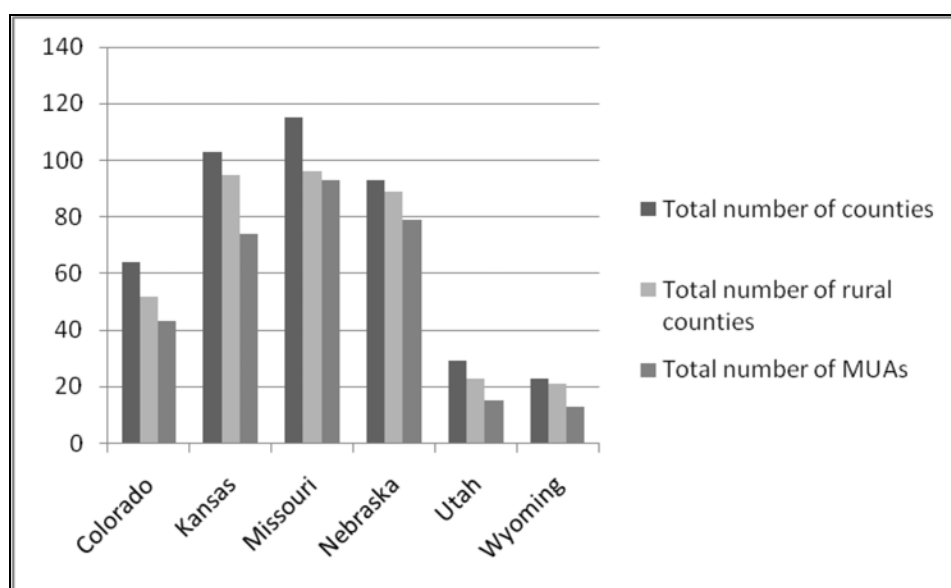


Figure 9. Medically Underserved Areas in the MCR

Individuals in rural areas face some distinctive health issues, especially those in MUAs. These issues include shortages of health professionals and limited or no access to health services. The Kansas Health Institute notes that patients often travel longer distances for care than people in cities and suburbs.²⁹ Geography also impacts the ability of unaffiliated health providers to access health information for themselves and their patients. The NN/LM MCR remains

²⁷ National report card on women's health [Internet]. Washington: National Women's Law Center [cited 2010 May 17]. Available from: <http://hrc.nwlc.org/status-indicators/Womens-Access-to-Health-Care-Services/People-in-Medically-Underserved-Areas.aspx>.

²⁸ Find shortage areas: MUA/P by state and county [Internet]. Rockville: Health Resources and Services Administration [cited 2010 May 17]. Available from: <http://muafind.hrsa.gov/>.

²⁹ Rural health topics [Internet]. Topeka: Kansas Health Institute [cited 2010 May 17]. Available from: <http://www.khi.org/news/rural-health/>.

committed to serving unaffiliated health professionals and encouraging the development of programs linking the unaffiliated to health information (e.g., document delivery, Loansome Doc, and electronic resource access). Public health departments tend to be a key source of healthcare access in rural areas. Roughly one-half of all local public health departments in the United States are both small and rural.³⁰

Advances in public health have increased the average life expectancy more than twenty-five years, while advances in medicine have increased life expectancy by four years.³¹ Yet the public health workforce remains one of the largest bodies of contributors to health that lacks access to health information. The need for improved access to evidence-based public health information has been recognized by public health practitioners, researchers, policy makers, and librarians. A 2006 study of public health found the major challenges to be limited or no access to full-text journals, unpublished research and systematic reviews. The study participants indicated a high need for access to free full-text, grey literature and conference proceedings, systematic reviews, and evidence-based guidelines related to public health.³²

New opportunities are opening up for health sciences librarians to enhance access to health information. Innovations in collaborative information distribution initiatives play a role in the sharing of biomedical information resources. Integrating health sciences librarians in the implementation of e-science, Clinical and Translational Science Awards (CTSA) initiatives, and electronic health records is key. Understanding the technology and collaboration required in implementing these programs will ensure that evidence-based health information is incorporated and shared through all of these programs.

Approach & Methodology:

The NN/LM MCR has a high number of rural and frontier areas (fewer than 6 people per square mile), which isolates health care providers seeking health information, or excludes some communities not only from access to health information, but to healthcare providers themselves. Bolstering the number of Network members participating regionally in health information outreach will increase the opportunities for practitioners to learn about NLM resources.

³⁰ Public health at the crossroads [Internet]. Topeka: Kansas Health Institute [cited 2010 May 17]. Available from: <http://www.khi.org/news/2006/mar/02/public-health-crossroads/>.

³¹ Ten great public health achievements – United States, 1900-1999 [Internet]. Atlanta: Centers for Disease Control [cited 2010 May 17]. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm>.

³² Hatheway Simpson, E, LaPelle N, Russo Martin, E. Improving access to public health information: a study of information needs in a state health department [Internet]. Baltimore: University of Massachusetts Medical School; 2006 [cited 2010 May 17] 20 p. Available from: http://escholarship.umassmed.edu/cgi/viewcontent.cgi?article=1061&context=lib_articles.

- 85% of Missouri counties are designated Health Professional Shortage Areas³³ (areas designated as having a shortage in primary medical care, dental or mental health providers)
- 15 of 38 frontier counties in Nebraska have no health care providers for almost all categories of health professionals³⁴
- 11% of Colorado's physicians serve 73% of the state³⁵
- Wyoming is ranked forty-fifth among the fifty states in physicians per 100,000 population³⁶
- 86% of Utah counties are designated Health Professional Shortage Areas³⁷
- Kansas currently is short about 500 to 750 doctors including about 400 primary care or family practice physicians³⁸

B1a: Develop programs that reach practicing health professionals, including but not limited to: physicians, physician assistants, nurses, pharmacists, complementary and alternative medicine and allied health practitioners, veterinarians, public health workers, and health educators, with particular emphasis on collaborations with organizations/institutions that represent these groups

Objective:

- Health information resources are within easy reach of practicing U.S. health professionals

Outcome: - Health professionals, librarians, students, and members of other organizations have increased skills to use resources for health information

³³ Shortage designations: HPSAs, MUAs and MUPs [Internet]. Rockville: Health Resources and Services Administration [cited 2010 May 17]. Available from: <http://bhpr.hrsa.gov/shortage/>.

³⁴ Mueller K, Nayar P, Shaw-Sutherland, K, Nguyen, A, Xu L, Vanosdel N, Hummel D. A critical match: Nebraska's health workforce planning project final report [Internet]. Omaha: Nebraska Center for Rural Health Research; 2009 September [cited 2010 May 17] 216 p. Available from:

<http://www.unmc.edu/rural/documents/NebraskaWorkforceProjectFinal091509.pdf>.

³⁵ Sustainable towns: rural innovation, development, expansion and success [Internet]. Aurora: Colorado Area Health Education Center [cited 2010 May 17]. Available from: <http://hschealth.uchsc.edu/ahec/strides/index.asp?cat=strides>.

³⁶ Rural health care [Internet]. Laramie: Center for Rural Health Research and Education [cited 2010 May 17]. Available from: <http://www.uwyo.edu/health/TopicView.aspx?TopicId=5>.

³⁷ Find shortage areas: HPSA by state and county [Internet] Rockville: Health Resources and Services Administration [cited 2010 May17]. Available from: <http://hpsafind.hrsa.gov/HPSASearch.aspx>.

³⁸ Primary care grants to underserved areas to expand [Internet]. Topeka: Kansas Health Institute [cited 2010 May 17]. Available from: <http://www.khi.org/news/2009/oct/19/primary-care-grants-underserved-areas-expand/>.

The NN/LM MCR will advance programs that reach practitioners by engaging Network member hospital and academic librarians to represent the NN/LM MCR at local, state or regional conferences and other public programs by offering the Training Health Professionals Award. The Network member who applies for the award to teach classes and/ or exhibit will be expected to attend a webinar training class offered by the NN/LM MCR, and is “certified” as an NN/LM MCR representative, to ensure they have a working knowledge of NLM databases and services.

Network members in the NN/LM MCR can be an important component to the extension of RML staff outreach efforts. Though few Network members do outreach, those who are involved have a long history of offering and supporting outreach programs beyond the walls of their institutions. Table 9 illustrates the outreach conducted by hospital and academic libraries in the NN/LM MCR. These members promote their services to public health departments, public libraries, rural health professionals, inner city health professionals, Native Americans, Spanish language speakers, immigrants and new Americans, and African Americans. A Network Member Questionnaire conducted in 2008 found that one-fifth of hospital libraries and one-third of academic libraries in the NN/LM MCR engage in training groups or individuals outside of their institutions.³⁹ This outreach, when expanded, will contribute greatly to the NN/LM mission of improving access to health information. With many institutions unable to fund professional development due to institutional budget cuts, the awards provide not only an incentive, but an opportunity for health sciences librarians to participate in professional development offerings at the conferences.

Network members in the MCR can be an important component to the extension of existing RML staff outreach efforts. Network member collaborations with the community healthcare workforce through face-to-face training can bolster community building and engagement. Hospital and academic health sciences librarians have experience in the instruction of NLM resources (e.g., PubMed, MedlinePlus), Internet searching skills, web 2.0 tools, and mobile devices for information access. This outreach, when expanded, will contribute greatly to the NN/LM mission of improving access to health information. The Training Health Professionals Award will encourage members to connect with unaffiliated healthcare providers in their communities to raise awareness of NLM resources and full text article access through programs such as Lonesome Doc and PubMed Central.

³⁹ NMQ, pg. 27

2008 NMQ Outreach Targets ⁴⁰	Hospital Libraries		Academic and Other Libraries	
	2005	2008	2005	2008
Communities				
General Public	21	11	8	7
Unaffiliated Health Care Providers	12	8	9	10
Public Health Depts., Agencies	6	2	4	7
Public Libraries	12	7	5	9
Other	6	4	3	6
Populations				
Special Populations	12	2	7	5
Urban Health Professionals	2	3	2	5
Rural Health Professionals	9	5	5	6
Primary Language not English	2	1	1	1
AIDS Community	1	1	2	2
Substance Abuse	3	1	0	0
Refugee (added in 2008)		0		0
Other	5	3	1	5

Table 9. NMQ Outreach Targets

Results from the Network Member Questionnaire (Figure 10) in the area of library training topics indicated hospital and academic libraries having experience in the instruction of NLM databases (e.g., PubMed, MedlinePlus), Internet searching skills, web 2.0 tools, and mobile devices for information access.⁴¹

⁴⁰ NMQ, pg. 26

⁴¹ NMQ, pg. 19

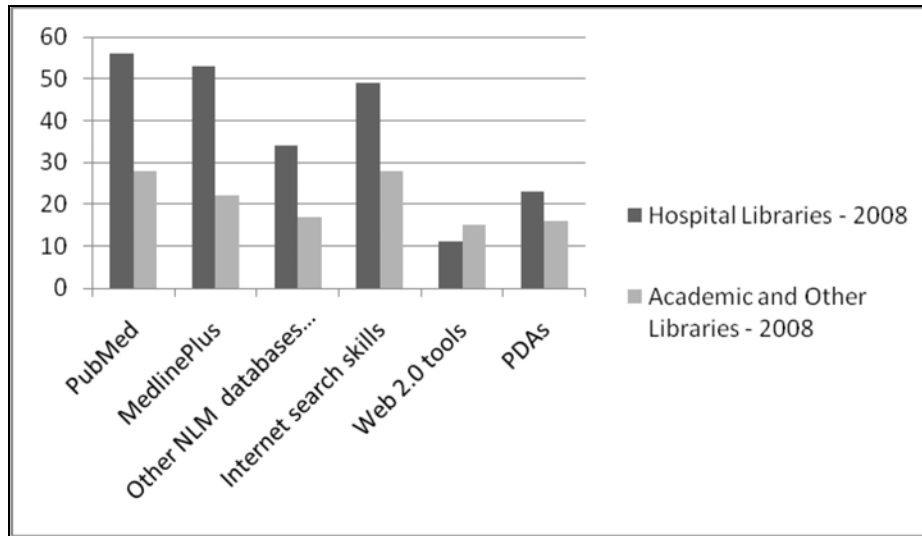


Figure 10. Numbers of Hospital and Academic/Other Libraries Offering Training

In April 2010, the Regional Advisory Board for the NN/LM MCR was asked what they thought about offering a training award. Some of their responses were:

- “It enfranchises more folks in advancing the mission and messages of the NN/LM program, which is bound to have a number of downstream positive outcomes not the least of which is community-building around the NN/LM program.”
- “It has the potential of expanding and reinforcing knowledge about the NN/LM’s resources and services among those members who participate as awardees but also the co-workers and contacts of those engaged members.”
- “I really like the concept of encouraging our presence at healthcare professionals’ conferences, as opposed to library conferences.”
- “I think you guys have come up with a very good idea. You’ve taken away a lot of the obstacles that keep libraries from doing outreach and made it a much more attractive option.”

The NN/LM MCR will develop metrics for measuring the effectiveness and impact of this award program. Based on feedback from Network members who conduct outreach, we will adapt the program to increase participation and garner best practices to share with all participants.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Identify appropriate conferences and community health events to exhibit at and make presentations	X	X	X	X	
Recruit Network members to participate in exhibit and training certificate trainings	X				
Schedule and promote certification training for Network members via webinars	X	X	X	X	X
Develop a toolkit which will consist of training and presentation materials to be used by Network hospital and academic libraries at exhibits and in presentations	X				
Offer the Training Health Professionals Award	X	X	X	X	X
Evaluate outreach activities via metrics developed in Year 1 and 2, and adapt program based on awardees' feedback			X	X	X
Collect data from Network member awardees to understand the impact of the outreach on their institutions and on their professional development	X	X	X	X	X

Health Ministry Outreach

The MCR has established successful relationships with The International Parish Nurses Resource Center, located in St. Louis, Missouri, and the Health Ministries Association. The NN/LM MCR exhibits at the International Parish Nurses Resource Center's annual conference, the Westberg Symposium. The NN/LM MCR will be presenting *"Helping Patients Thrive with Knowledge: Health Information Literacy's Role in Patient Care"* at the 2010 Symposium being held September 17-29, 2010 in Saint Charles, Missouri. The NN/LM MCR also presented *"Making the Most of Web Resources to Enhance Health Disparities Information Programs"* at the 2007 Symposium held in St. Louis. In addition, the Community Outreach Coordinator has worked with the Nebraska Chapter of the Health Ministries Association, and exhibited along with the NN/LM Pacific Northwest Region when the national Health Ministries Association conference was held in Nebraska.

The NN/LM MCR will develop specific strategies to work with parish nurses in the Region by using these two organizations to contact and collaborate with member parish nurses. The Health Ministries Association has two state chapters in the region: Nebraska and Missouri. The

International Parish Nurses Resource Center maintains a list of Parish Nurse Coordinators by state (<http://www.parishnurses.org/DocumentLibrary/Coordinators%20by%20State.pdf>); there are currently eight coordinators in the NN/LM MCR. We will work with the coordinators and chapter leaders to reach practicing parish nurses in the NN/LM MCR. A series of four articles per year will be distributed to parish nurse newsletters. A brochure, similar to the racial and ethnic health information brochures (<http://nmlm.gov/mcr/resources/community/minority.html>), and a “Health on the Internet” series will be developed with parish nurses as the audience. While exhibiting at the Westberg Symposium in Year 1, a questionnaire will be handed to everyone who comes to the booth soliciting input regarding their health information needs. **Should it be discovered that access to journals is an issue for parish nurses, we will develop training tools, such as an online webinar, print brochures, and/or a presentation at the 2012 conference to inform parish nurses of ways they can access journal articles.** A new tool will be developed in Year 2 in response to the identified needs, and will be demonstrated the following year at the symposium, as well as included in newsletter articles distributed to the parish nurses. Possible tools that may be developed after the assessment include a CE class, a webinar, or a web page on the NN/LM MCR web site that focuses on specific information needs. The tool will continue to be evaluated and updated as well as promoted through the exhibit and newsletter articles.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Write and distribute four articles a year for Parish Nurses in the MCR region	X	X	X	X	X
Exhibit at Westberg Symposium, highlighting brochure and tools	X	X	X	X	X
Develop a brochure for Parish Nurses	X				
Solicit feedback on health information needs at Westberg Symposium	X				
Develop, maintain, evaluate and promote health information tools for Parish Nurses		X	X	X	X
Offer a class for faith-based nurses (sensitive issues for a faith-based community)		X	X	X	X

B1b: Develop programs that reach minority health practitioners and students in Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges, Community Colleges, and Vocational Schools, including institutions and organizations that focus on Native Hawaiians and Alaska Natives and the health professionals serving those populations or working in those disciplines. Programs should also focus on subject disciplines that have been identified as priority initiatives (e.g., health disparities, consumer health, health information literacy, HIV/AIDS, health services research, toxicology and environmental health)

Objective:

- Health information resources are within easy reach of practicing U.S. health professionals

Outcome: - Health professionals, librarians, students, and members of other organizations have increased skills to use resources for health information

Minority serving institutions are committed to helping African American, Hispanic, and Native American students reach their full academic potential. The Obama administration has shown its commitment to minority serving institutions, supporting the inclusion of \$2.5-billion for those colleges in the student-loan legislation the President signed in March of 2010.⁴² The NN/LM MCR has seven Hispanic Serving Institutions, two Historically Black Colleges and Universities, and four Tribal Colleges.

- Hispanic Serving Institutions:
 - Adams State College, Colorado
 - Colorado State University, Pueblo, Colorado
 - Community College of Denver, Colorado
 - Otero Junior College, Colorado
 - Pueblo Community College, Colorado
 - Trinidad State Junior College, Colorado
 - Donnelly College, Kansas
- Historically Black Colleges:
 - Harris-Stowe State University, Missouri
 - Lincoln University of Missouri, Missouri
- Tribal Colleges:
 - Haskell Indian Nations University, Kansas

⁴² Kelderman E. White House adviser urges historically black colleges to change how they are seen [Internet]. Washington: Chronicle of Higher Education; 2010 Apr 22 [cited 2010 May 17]. Available from: <http://chronicle.com/article/White-House-Adviser-Urges/65218/>.

- Nebraska Indian Community College, Nebraska
- Little Priest Tribal College, Nebraska
- Wind River Tribal College, Wyoming

Though a smaller presence in the NN/LM MCR than in other regions of the country, these institutions have longstanding health science programs: Haskell Indian Nations University offers an Associate Degree in Health and Physical Education and Little Priest Tribal Colleges offers an Associate of Arts Degree in Alcohol & Drug Counseling. The libraries for Wind River Tribal College and the Nebraska Indian Community College support at least one class related to health. If health information is not already part of the curriculum, NN/LM MCR state coordinators will work with these sites to integrate it into the curriculum or as student electives. Each state coordinator has already demonstrated and/or provided training on NLM resources at each library at the institutions noted above. One library became a Network member as a result of the visit. In the next contract we will continue to encourage all libraries to become Network members.

A review of the level of health information involvement of the Tribal Colleges and Universities will be conducted in Year 5 of the current contract through an informal shadowing program at all locations. Coordinators will conduct an informal health information needs assessment, promote a stronger bond with librarians, and gain a better understanding of the librarians' and their constituents' needs. The shadowing program will bring to light whether and how information resources are included in the health courses, and the experience of the librarian in teaching health information resources as it applies to the health profession courses being offered.

Allied Health Community Colleges

A new area of outreach in the next contract will be the allied health field. The term Allied Health (or Health-Related Professions, at some institutions) is used to identify a cluster of health professions, encompassing as many as 200 health careers. Outreach conducted under the current contract has shown that health professionals are very receptive to learning about accessing professional level health information resources. With over 5 million allied health care providers in the United States,⁴³ the potential audience is huge. Allied health encompasses more than eighty different professions⁴⁴ and represents approximately 60% of all health care professionals. The NN/LM MCR has seventy-eight accredited allied health schools. Reflecting the overall ethnic makeup of the region, the majority of students are White, but the schools do have some representation for American Indian; Black, non-Hispanic; Asian/Pacific Islander, and Hispanic (Figure 11).

⁴³ What is allied health? [Internet]. Reston (VA): Health Professions Network [cited 2010 May 17]. Available from: http://www.healthpronet.org/docs/1342_AH_BrochUpdate_06.pdf.

⁴⁴ Featured health professions [Internet]. Reston (VA): Health Professions Network [cited 2010 May 17]. Available from: http://www.healthpronet.org/ahp_month/index.html.

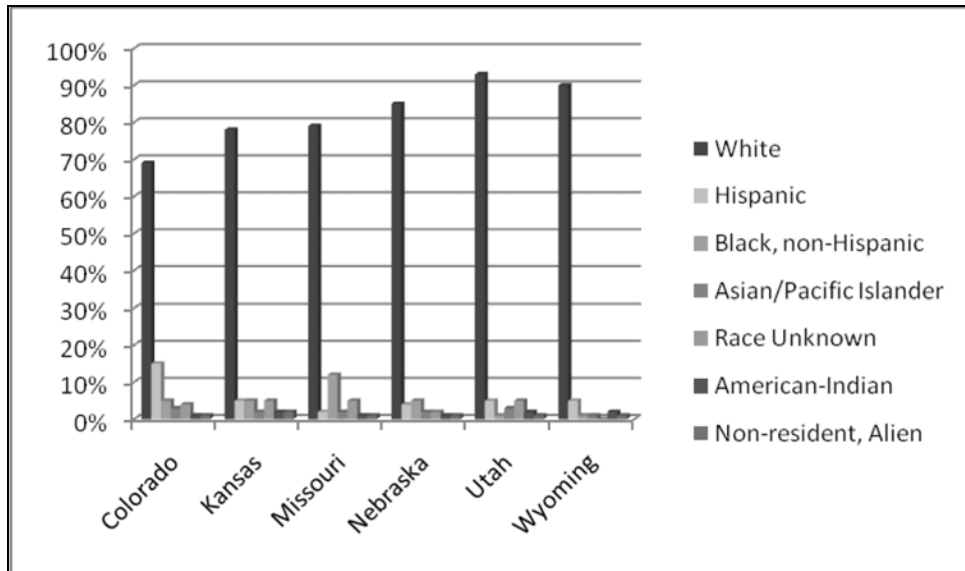


Figure 11. MCR Community College Student Ethnicity⁴⁵

To gain a better understanding of the minority populations in allied health programs in the region, state coordinators will conduct an environmental scan of the seventy-eight schools and community colleges in the region to determine the minority populations enrolled in their allied health programs. State coordinators will work with librarians and faculty at selected sites to integrate health information into the curriculum and provide training. The NN/LM MCR piloted a program in the current contract to integrate health information into the curriculum of schools with a public health programs. Eight public health schools in the region now have this in their curriculum. Informatics, or the understanding of how to acquire, store, retrieve and use information about health and medicine, is a growing area for allied health education (see response to SOW section B1d for information about health informatics training in community colleges). Librarians play a significant role in health and medical informatics. NN/LM MCR coordinators will assist librarians at institutions with allied health programs to understand this new role by providing training on health information databases, such as PubMed.

⁴⁵ Community college enrollment [Internet]. Washington: American Association of Community Colleges [cited 2010 May17]. Available from: <http://www.aacc.nche.edu/AboutCC/Trends/Pages/enrollment.aspx>.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Conduct environmental scan to identify community colleges in the region that have minority populations enrolled in allied health programs	X				
Develop programs to integrate health information into the curriculum at minority serving institutions and identified community colleges	X	X	X	X	
Conduct evaluation at each college/community college to measure impact of health information integration into the curriculum	X	X	X	X	
Build on the work conducted in 2002-2006 to survey and collect curriculum materials from libraries that offer allied health programs	X	X	X	X	

B1c: Develop pilot projects, which may include professional schools and organizations, to identify and promote the roles of libraries in institutions that have e-science initiatives.

Objective:

- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

Outcome: - Network members, especially hospital librarians; participate in emerging practices to promote evidence based health information in the institution

The National E-Science Centre in the United Kingdom defines e-science as, “the large scale science that will increasingly be carried out through distributed global collaborations enabled by the Internet.” Typically, a feature of such collaborative scientific enterprises is that they will require access to very large data collections and very large scale computing resources (<http://www.nesc.ac.uk/nesc/define.html>).

For the purposes of NN/LM MCR program planning, we will operate under a broader definition of e-science; we will use e-science to refer to collaborative scientific activities carried out via the Internet. E-science includes the collection, organization, validation, and preservation of data. Examples of e-science activities include:

- Collaboration wikis or other web services designed for scientists to share data and information during the research process; for example, UsefulChem (<http://usefulchem.wikispaces.com/>);
- Sharing data sets over the network; for example, GenBank[®] (<http://www.ncbi.nlm.nih.gov/genbank/>);
- Utilizing a distributed network to carry out computationally intensive research; for example, the Enabling Grids for E-science (EGEE) computing project (<http://www.eu-egee.org/>) which provides a computing support infrastructure for over 13,000 researchers in a wide variety of disciplines.

E-science initiatives face both technological and policy challenges. Data structures and tools to access data may not be inter-operable. Data sets can be so large that the available server space to house one data set becomes extremely expensive. Distributed computing, or “cloud” computing, may be a solution. Scientists are also concerned about open access policy issues. A group of U.K. scientists from the Open Knowledge Foundation Working Group on Open Data in Science published the Panton Principles (<http://pantonprinciples.org/>), which states “data related to published science should be explicitly placed in the public domain.” Not all scientists are in agreement with the Panton Principles. Librarians need to understand these challenges in order to participate in e-science projects.

The Association of Research Libraries (ARL) E-Science Working Group conducted a survey⁴⁶ of their member libraries in 2009 to discover the level of library involvement with e-science activities. Out of 123 ARL libraries that responded to the survey, sixty-one reported an e-science program of some kind at their institution. Seventy-three percent of the institutions that responded reported that libraries were involved with e-science initiatives. Library involvement in e-science projects covered a wide range of support activities, including offering web sites with e-science information, data management training, and policy issue support.

As practicing librarians need to develop skills in order to participate in new e-science initiatives, library schools need to develop new curricula in order to prepare new generations of librarians for the changing work place. The development of e-science initiatives in 73% of the institutions responding to the ARL 2009 survey indicates that future academic and organizational librarians will be required to have these skills when entering the workforce. The three graduate library programs currently accredited in the MCR are the University of Missouri, Emporia State University, and the University of Denver.

⁴⁶ALA:2009 E-Science Survey Resource Page [Internet]. Washington, DC: Association of Research Libraries: Transforming Research Libraries; [cited 2010 April 4]. <http://www.arl.org/rtl/eresearch/escien/esciensurvey/surveyresearch.shtml>.

E-science is an emerging area for the library profession. Few institutions in the NN/LM MCR are currently involved with e-science projects, and Network members located in other institutions (for example, hospital librarians) have little or no awareness of e-science. The NN/LM MCR will explore the potential for librarians working in e-science by:

- Developing a pilot project for its personnel
- Offering subcontracts for Network members (see our response to SOW section B6 for information on funding opportunities) for pilot projects that identify roles for librarians in e-science
- Investigating the possibility for one of the Region's graduate library programs to develop an e-science curriculum

NN/LM MCR Pilot Project

The NN/LM MCR will develop the e-science skills and awareness of its personnel by developing a pilot project using its own data collected on its members from the Network Member Questionnaires administered in 2002, 2005 and 2008. The data included in the project will describe the services, resources, and experiences collected on our membership. From this project, the NN/LM MCR will understand what is needed to curate the data, add metadata, anonymize the data and put it into a format that enables sharing with researchers. NN/LM MCR will explore the possibility of sharing and comparing this data with that collected by other regions. Through the implementation and execution of this project NN/LM MCR personnel will better understand the challenge and issues of researchers and librarians working in the e-science area.

Pilot Project Subcontract Opportunity

NN/LM MCR will offer an e-science two year subcontract opportunity to Network member libraries in the region. The intent of this subcontract is for one library to develop a role for librarians working collaboratively with an e-science initiative to identify the skills, competencies, and roles for librarians. It will build on the presentations in the e-science forums (see our response to SOW section B4 for a description of the forums). The project opportunity will be funded in Year 2 and run through Year 4, and will develop suggested practices for librarians working with e-science initiatives. The results of the project will be distributed through NN/LM MCR communication channels during Year 5.

E-science is a newly emerging area for librarians. Currently, knowledge of the scope and intricacies of the area is limited. We believe that three years are necessary to investigate and learn enough about e-science in order to craft an appropriate subcontract opportunity. However, if the parameters of e-science become more clearly defined faster than anticipated, so we are able to move this project forward more quickly, we will move the pilot project up in the contract time period.

The MCR is very interested in completing the e-science project by the end of 2013. In order to accomplish this, we need to develop a request for proposal for a subcontract opportunity,

evaluate submissions, and award a subcontract in Year 1. The subcontract would be scheduled to run in calendar years 2012-3 with reports being submitted in 2013. The information gathered from these reports can then be scheduled to be released in late 2013. However, due to current budget restrictions we will not have any funding to offer for this subcontract opportunity. Should there be significant positive changes in the budget amounts, we will reevaluate our ability to proceed with this pilot project.

Graduate Library School Curriculum

In addition to exploring the role for librarians in e-science projects in the workplace, the NN/LM MCR is concerned about the preparation of new librarians entering the field. E-science projects are complex, and require awareness, knowledge and many skills that may not be covered in more traditional course work. A number of library schools have begun offering courses in this area to produce a library professional ready to work with researchers and their data. Illinois Urbana-Champaign Graduate School of Library & Information Sciences offers a Data Curation Education Program, the University of North Carolina School of Information & Library Science offers a Digital Curation Curriculum, and Syracuse University's School of Information Studies is developing an e-Science Librarianship program. During Years 3 and 4, the NN/LM MCR will communicate with the three graduate library school programs in the Region to assess interest in add an e-science course curriculum for their students. The three graduate library programs currently accredited in the NN/LM MCR are the University of Missouri, Emporia State University, and the University of Denver.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
NN/LM MCR pilot project with its personnel to further understand e-science	X	X	X	X	X
NN/LM MCR subcontracted pilot project identifies skills, competencies and roles for librarians in e-science		X	X	X	
Investigate adding an e-science curriculum to a graduate library program in the region			X	X	

B1d: Develop programs, which may include pilot projects, with recently funded DHHS regional extension centers (RECs) (<http://www.hhs.gov/news/press/2010pres/02/20100212a.html>) to assist health professionals with implementing and using health information technology.

Objective:

- Personal health information and access to evidence-based health information are incorporated into EHR systems

Outcome: - RECs and health IT programs are aware of the value of incorporating personal health information and access to evidence based medicine resources in EHR systems

Regional Extension Centers

To help make health information technology (HIT) available to thousands of hospitals and clinics across the country by the year 2014, several programs have been created through the American Recovery and Reinvestment Act of 2009 (ARRA).⁴⁷ One of these programs is the Health Information for Economic and Clinical Health Act (HITECH) that provides financial assistance at the state level, over a four-year period, to facilitate health care providers' efforts to adopt and use electronic health records (EHRs).

Thirty-two non-profit organizations will be funded to support the development of Regional Extension Centers that will offer technical assistance to primary-care providers as they implement HIT in their clinics and become meaningful users of EHRs. *Meaningful use*, as defined by the Centers for Medicare and Medicaid⁴⁸ (CMS), is broken down into two stages. Stage 1 refers to capturing health information in a coded format, such as the International Classification of Diseases (ICD9), and using that information to track clinical conditions, and communicating that information to healthcare professionals to facilitate continuity of care and services. Stage 2 includes support for patient access to their own health information, self management tools, and improving population health outcomes.

Four of the six MCR states have received Regional Extension Centers funding:

- Colorado RHIO
- Kansas Foundation for Medical Care
- CIMRO of Nebraska
- HealthInsight, Utah-Nevada

⁴⁷HITECH Programs [Internet]. Department of Health and Human Services. [cited 2010 May 17]. Available from: http://healthit.hhs.gov/portal/server.pt?open=512&objID=1487&parentname=CommunityPage&parentid=1&mode=2&in_hi_userid=10741&cached=true

⁴⁸ CMS Proposes Definition of Meaningful Use of Certified Electronic Health Records (EHR) Technology [Internet]. Fact Sheets. Centers for Medicare & Medicaid Services. [cited 2010 May 17]. Available from: <http://www.cms.gov/apps/media/press/factsheet.asp?Counter=3564>

Sally Patrick, Outreach Librarian at the University of Utah Eccles Health Sciences Library, is currently part of the Community Task Force working on the HealthInsight, Utah-Nevada project. The vision of HealthInsight is to focus on improving the quality and effectiveness of health care.⁴⁹ The program includes health management tools for healthcare providers and consumers.

Evidence-based Health Information at the Point of Care

The practice of evidence-based medicine, as defined by MEDLINE[®]'s medical subject headings (MeSH[®]) is "the approach of practicing medicine with the goal to improve and evaluate patient care. It requires the judicious integration of best research evidence with the patient's values to make decisions about medical care."⁵⁰ In 1997, a study was conducted at the Nuffield Department of Medicine, University of Oxford, England to see if it was possible for healthcare providers to find and apply evidence-based health information at the point of care. An evidence cart was created that included a laptop computer with Internet access, a projector and screen, and print materials. The wheeled cart accompanied students and physicians on rounds for one month. Two interesting pieces came out of the study; first, it was found that if evidence was available on-demand during rounds, the clinical approach was changed 48% of the time. And second, when access to evidence was not available on demand, the clinicians did not search for answers to their questions.⁵¹ The results of the Neuffield study are consistent with the findings of the Rochester Study done in the early 1990s, where 80% of the physicians reported that they changed their clinical approach as a result of the evidence provided to them by the library⁵² (albeit, on-demand was not available as we know it today). Another study done in 2001 at Duke University Medical Center reported that Residents obtained 77% of their useful data from MEDLINE, and that obtaining useful data altered their approach 47% of the time.⁵³ These studies show the importance of accessible information at the point of care.

Personal Health Records

The Robert Wood Johnson Foundation defines a personal health record as "a platform that gathers patient data from multiple sources and hosts a suite of applications that use those data to help patients understand and improve their health."⁵⁴ There are many companies and organizations currently working to bring this definition to practical fruition; Google Health, Microsoft HealthVault, the Surgeon General's Family Health History Initiative, the NLM's

⁴⁹ HealthInsight [Internet]. Salt Lake City. [cited 2010 May 17]. Available from:

<http://www.healthinsight.org/about/about.html>

⁵⁰ Medical Subject Headings [Internet]. Evidence-Based Medicine. Bethesda (MD): National Library of Medicine (US). [cited 2010 May 17]. <http://www.ncbi.nlm.nih.gov/mesh?term=evidence%20based%20medicine>

⁵¹ Sackett, David L. Finding and Applying Evidence During Clinical Rounds. *JAMA*. 1998. 280(15):1336-1338.

⁵² Marshall, JG. (1992). The impact of the hospital library on clinical decision making: the Rochester study. *Bulletin of the Medical Library Association*. April; 80(2): 169-178.

⁵³ Crowley, SD. (2003). A Web-based compendium of clinical questions and medical evidence to educate internal medicine residents. *Academic Medicine*. 78(3):270-4.

⁵⁴ Feature: The Power and Potential of Personal Health Records [Internet]. Princeton: Robert Wood Johnson Foundation; c2010 [cited 2010 May 17]. Available from: <http://www.rwjf.org/pr/product.jsp?id=49988>

MyMedicationList, and Medicare.gov all offer individuals a means to create a personal health record.

The National Library of Medicine (NLM) has been working with the Institute for Family Health in New York to create patient health record links to MedlinePlus, in order to provide quality health information to their patients. The Institute uses Epic as its electronic health record system; the patient view is called MyChart-MyHealth. The EHR tells MedlinePlus the appropriate ICD9 code; MedlinePlus translates the code into a MedlinePlus health information page, and delivers the page to the patient's browser view.

Community College Consortia

One of the programs created under the HITECH Act is the *Community College Consortia to Educate Health IT Professionals in Health Care Program*. The program awarded five regional consortia, which includes 70 community colleges, to create curriculum for a six month, non-degree training program to expand the availability of skilled health IT professionals to assist with the implementation of electronic health records. Creation of the training programs will be funded over a 2-year time period which began in March 2010. At the end of the 2-year funding period, the participating community colleges will have programs in place, with the capacity to train an estimated 10,500 students annually.

There are five community colleges in the MCR that will offer the training programs that are set to begin in September 2010.

1. St. Louis Community College, Meramec – Kirkwood, MO
2. Johnson County Community College – Overland Park, KS
3. Metropolitan Community College – Omaha, NE
4. Pueblo Community College – Pueblo, CO
5. Salt Lake Community College – Salt Lake City, UT

NN/LM MCR coordinators will contact the librarians at the five community colleges in the MCR to discuss the inclusion of educational materials in the curriculum that address the ability to integrate clinical-decision support tools and consumer-level health information tools into the EHR. Success will be measured by the number of community colleges that include this information in their training programs.

Educating Ourselves

The NN/LM MCR and Network members will investigate EHR systems to learn about their features, options and interoperability potential. Specifically, the NN/LM MCR would like to know which systems can interface with an evidence-based, clinical decision support tool, as well as interface with consumer health information resources, such as MedlinePlus. The NN/LM MCR, and involved Network members, will write a report of their findings and share this with Network members.

Regional Extension Centers

Funding of the Regional Extension Centers has already begun and will end by January 2013. Because of the short time frame of the Regional Extension Centers (a 4-year project), the NN/LM MCR has already begun to make initial contact with the Regional Extension Centers during Year 4 of the current contract or has an established relationship with the organizations on which to build. Sally Patrick, Outreach Librarian at the Spencer S. Eccles Health Sciences Library at the University of Utah, is a member of the HealthInsight Regional Extension Center in Utah; Nebraska Coordinator, Marty Magee has a working relationship with CIMRO of Nebraska; and Rebecca Brown, the Kansas Coordinator, has made initial contact with the Kansas Regional Extension Center. NN/LM MCR coordinators and Network members will attempt to get on appropriate committees of the Regional Extension Centers located in the region. In addition, because Nevada and Utah are covered by the same Regional Extension Centers, there is the possibility for inter-regional collaboration with the Pacific Southwest Region. Success will be measured by the number of health science librarians in the Region who serves as a contributing member of a Regional Extension Center committee.

Many of the groups that the Regional Extension Centers are reaching out to are physicians who are based in small practices that do not have access to libraries, physical or virtual. These unaffiliated physicians are one of our primary audiences. Working with the Regional Extension Centers has the potential for collaboration between the NN/LM MCR and the primary care physicians. We will assist Network members who want to be involved by developing a resource packet on Regional Extension Centers. These resources will be produced by a task force made up of members serving on the Regional Extension Center Committees.

Electronic Health Records and Patient Health Record Links

The NN/LM MCR and its Network members will work with electronic health record selection committees, in states that have Regional Extension Centers, to encourage the use of an electronic health record system that has the ability to integrate with clinical decision support tools and consumer health information resources. By working with the Regional Extension Centers, we hope to provide training and assistance to health professionals on using their electronic health record systems to deliver reliable health information resources to their patients. Success will be measured by the number of electronic health record users in the NN/LM MCR who provide a consumer-level module for their patients.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Work with Regional Extension Centers during their funding period that ends in 2013	X	X	X		
Work with librarians at the five community colleges that are offering the 6-month health IT certification program to educate them on incorporating evidence based health information and NLM consumer health resources into electronic health record systems so they will be able to work with faculty to incorporate this information into the curriculum	X	X	X	X	X
Continue to educate ourselves and monitor new developments and advancements on the implementation and use of electronic health records.	X	X	X	X	X
The NN/LM MCR and its Network members become members of Regional Extension Centers committees	X				
Develop a resource packet on Regional Extension Centers to assist Network members	X				
The NN/LM MCR will form a Task Force of its members that are on Regional Extension Centers committees to share effective practices on adopting the electronic health record model	X				

B1e: Develop culturally and linguistically appropriate resources and provide training in the effective use of electronic health information resources. Before developing any training materials, the MLA Educational Clearinghouse will be checked to avoid duplication. Copies of all training materials developed will be registered with the MLA Educational Clearinghouse. Training should include, but not be limited to: PubMed, MedlinePlus, and other NLM resources

Objective:

- Health information resources are within easy reach of practicing U.S. health professionals

Outcome: - Health professionals, librarians, students, and members of other organizations have increased skills to use resources for health information

“It is a truism of health education that programs and interventions will be more effective when they are culturally appropriate for the populations they serve.”⁵⁵ Many health care systems and organizations have adopted the *National Standards for Culturally and Linguistically Appropriate Services in Health Care* issued by the U.S. Department of Health and Human Services Office of Minority Health. The ultimate goal of the standards is to contribute to the elimination of racial and ethnic health disparities and to improve health, with Standard 7 stating “Health care organizations must make available easily understood patient-related materials”⁵⁶ and Standard 11, “Health care organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.”⁵⁷

Linguistically, the majority of the population in the region speaks English as their primary language. Spanish ranks second, German third, and French fourth. A few MCR states have a small percentage of Vietnamese and Native North American only-speakers. Although the NN/LM MCR is primarily Caucasian, it is growing in diversity with an increasing number of refugees resettled in the region. In 2008, nearly 4,200 refugees were resettled in Colorado, Kansas, Missouri, Nebraska and Utah.⁵⁸ Due to this influx, medical providers may interact with patients and family members from different cultural and linguistic backgrounds. Refugee populations have been shown to have a high prevalence of several mental disorders, including post-traumatic stress disorder (PTSD), depression, substance abuse, somatization disorder (a long-term condition in which a person has physical symptoms that are caused by psychological problems), and traumatic brain injuries. The prevalence of psychiatric symptoms is high in non-clinical as well as clinical refugee populations.⁵⁹ While the refugee populations are small, they can require substantial medical care.

⁵⁵ Kreuter M, Lukwago S, Bucholtz D, Clark E, Sanders-Thompson, V. Achieving cultural appropriateness in health promotion programs: targeted and tailored approaches [Internet]. Thousand Oaks (CA): Sage Publications; *Health Education Behaviors* 2003: 30:133 [cited 2010 May 17]. Available from: <http://heb.sagepub.com/cgi/reprint/30/2/133>.

⁵⁶ National standards on culturally and linguistically appropriate services [Internet]. Washington: The Office of Minority Health [cited 2010 May 17]. Available from:

<http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=15>.

⁵⁷ *ibid*

⁵⁸ Fiscal year 2008 refugee arrivals [Internet]. Washington: Administration for Children and Families - Office of Refugee Resettlement [cited 2010 May 17]. Available from:

<http://www.acf.hhs.gov/programs/orr/data/fy2008RA.htm>.

⁵⁹ Savin D, Seymour D, Littleford L, Bettridge J, Giese A. Findings from mental health screening of newly arrived refugees in Colorado [Internet]. Bethesda: PubMed Central [cited 2010 May 17]. Available from:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497730/pdf/16134561.pdf>.

Access to culturally and linguistically appropriate resources and training has the potential to improve the quality of care and health outcomes, and assist patients and consumers to make informed decisions about their health. However, there are barriers to accessing appropriate resources. A 2008 report exploring refugee populations identified three key issues in providing culturally and linguistically appropriate health information:⁶⁰

1. Lack of existing materials in appropriate languages
2. Expense of buying or producing materials in appropriate languages
3. Finding qualified interpreters and translators

Figure 12 illustrates the top seven countries representing the largest percentage of refugees that resettled in the MCR in 2008. Many of these countries have multiple languages spoken, adding to the complexity of providing appropriate health information. The region also has a small number of refugees from the former Union of Soviet Socialist Republics, Vietnam, and the Democratic Republic of Congo that are not represented in Figure 12.

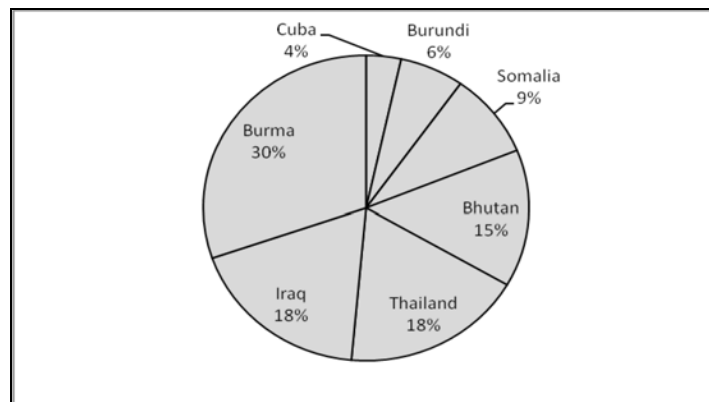


Figure 12. Top seven countries of origin for resettlement in the MCR, 2008⁶¹

Promoting Language Resources

The NN/LM MCR will continue to advance access to and training in culturally and linguistically appropriate resources. We will promote these resources at exhibits and presentations at state and local public health conferences and meetings. NN/LM MCR coordinators will promote resources highlighted on the national NN/LM *Consumer Health Information in Many Languages Resources* site (<http://nnlm.gov/outreach/consumer/multi.html>). This site, a collaboration of the NN/LM Consumer Outreach Librarians provides links to:

- Minority health resources
- Racial and ethnic resources

⁶⁰ Flewelling K. Addressing the need for culturally and linguistically appropriate health information for newly arriving refugee populations: project report [Internet]. Bethesda: PubMed Central; p 13-14[cited 2010 May 17]. Available from: http://rhin.org/document_view.aspx?id=5143.

⁶¹ Fiscal year 2008 refugee arrivals [Internet]. Washington: Administration for Children and Families - Office of Refugee Resettlement [cited 2010 May 17]. Available from: <http://www.acf.hhs.gov/programs/orr/data/fy2008RA.htm>.

- Multi-language resources
- Cultural competency
- Health disparities
- Statistical data and government reports

In addition to promoting the multi-language resources in MedlinePlus, there are numerous authoritative resources dedicated to multi-language health resources (e.g., Refugee Health Information Network (RHIN), EthnoMed, Healthy Roads Media, and SPIRAL: Selected Patient Information Resources in Asian Language), which NN/LM MCR coordinators will promote to health professionals serving culturally and linguistically diverse populations. For the NN/LM MCR's web presence, a professional translator will be hired to translate Spanish sections of the NN/LM MCR state pages (see our response to SOW section B2d for more information).

Training on Cultural and Language Resources

Developing culturally and linguistically appropriate resources is a complex process – high level translation can be costly and time-consuming. Organizations such as the Office of Refugee Resettlement have mechanisms in place to identify minority communities and translate health information pertinent to those groups. Identifying the organizations, including regional Refugee Health Coordinators, that develop these resources will be key to assisting health care providers in the region locate authoritative resources. Developing relationships with the regions five Refugee Health Coordinators and voluntary resettlement agencies (VOLAGS) can also assist NN/LM MCR state coordinators locate developers of culturally and linguistically appropriate health information and promoting access to appropriate health information. NN/LM MCR coordinators will continue to raise awareness regarding the impact of culture and language on health outcomes by offering National Network of Library classes such as the “Health Information Literacy Curriculum,” “¿No Comprende? Spanish Health Information Resources for English Speakers,” “Promoting Health Literacy through Easy-to-Read Materials,” “MedlinePlus® for Health Professionals,” and “Finding Native Health Info Online.”

A new area for the NN/LM MCR will be facilitating relationships between health care providers and the groups tracking cultural and linguistic shifts in the region. Tracking shifts in population is tricky. The Flewelling report noted that health agencies depend on state agencies for health information materials, while health agencies employ resettlement agencies for cultural orientation.⁶² The flow of refugee information touches many agencies and follows a very specific process. For instance, the State Department notifies resettlement agencies and public health officials about the incoming populations. The Office of Refugee Resettlement contracts with VOLAGs and participating states for services to refugees. The Centers for Disease Control and VOLAGs communicate with state and local public health agencies when specific individuals arrive. Finally, local health agencies or contracted clinics conduct initial health screenings. NN/LM MCR coordinators will assist local health providers by raising awareness of the agencies that track pertinent information on refugee populations, and encouraging groups translating health information, such as the Refugee Health Coordinators, to share their resources with sites

⁶² Flewelling, pg. 18

like Refugee Health Information Network (RHIN). The NN/LM MCR will continue to encourage health care organizations to collaborate and consult with community based organizations, community groups, health ministries, and local public libraries who share common outreach goals.

In order to reach providers serving new refugees and facilitate relationships between healthcare providers and Refugee Coordinators, the MCR will exhibit and present at rural and minority health state conferences, promoting RHIN and language resources available in MedlinePlus and sharing the SORC resources and contacts. These conferences provide an excellent venue for face-to-face contact with healthcare providers, and for facilitating relationships between healthcare providers who serve refugee populations and the SORC staff. At these events, MCR staff will have an opportunity to inform providers of the SORC resources appropriate for their community, and contact information of SORC staff in their state. In addition, the MCR will work the Area Health Education Centers (AHEC) to share resources from SORC. Communication with the AHECs allows the MCR to reach direct patient care providers who serve these populations as preceptors in community hospitals, clinics, and private practice.

Outreach Connections: Native Health Information

The NN/LM MCR has been a steering committee member of Outreach Connections: Native Health Information since its inception. This project, coordinated by the University of New Mexico's Health Information Center, was funded through the NN/LM MCR. Since 2006, the Outreach Connections steering committee has worked to develop a collaborative space for those involved and interested in health information outreach to native populations. This includes American Indians, Alaska Natives, and Hawaiians. Members of the steering committee come from all over the country. The collaborative space is a wiki where those who are conducting health information outreach to native populations can share their projects. The NN/LM MCR coordinators will continue to add descriptions of their work to this collaborative space and encourage others who are involved in this type of outreach to do the same.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Evaluate collaborative activities to measure impact, and make changes based on results of evaluation					X
Translate Spanish section of the NN/LM MCR state pages	X		X		
Maintain list of web-based resources and ethnic/racial tri-folds for African American Health, Latino Health, Native American Health, and Asian American Health	X	X	X	X	X

Collaborate with Refugee Health Coordinators to identify developed culturally and linguistically appropriate resources	X	X	X	X	X
Identify local public health agencies and organizations serving multiple ethnic and refugee populations	X	X	X	X	X
Exhibit and present at state and local public health conferences, promoting culturally and linguistically appropriate electronic resources	X	X	X	X	X
Provide training on cultural and language resources	X	X	X	X	X
Contribute to and promote Outreach Connections: Native Health Information	X	X	X	X	X

B2 – Consumers

Statement of Work

The contractor shall develop, implement, and evaluate outreach programs to increase the public's awareness of and access to high quality electronic health information. In carrying out these programs, the contractor shall work with a variety of intermediaries including Network members, health professionals, public health workers, information professionals, educators, community, faith-based, volunteer, and other types of organizations, including those serving minorities, special and underserved populations, health advocacy and self-help groups, through the use of subcontracts, agreements, and other mechanisms.

- a. Develop programs that reach special populations (e.g. minorities, seniors, teens, veterans' groups, low income populations, etc.), focus on special topics (e.g. health disparities, health information literacy, HIV/AIDS, public health, culturally and linguistically appropriate information, personal health records, emergency preparedness, etc.), and promote NLM resources to consumers;
- b. Foster collaborations and encourage outreach partnerships among Network members, community, faith-based, and volunteer organizations including those serving minority and underserved populations, and other types of organizations, to improve access to electronic consumer health information at the local, state, and regional levels;
- c. Provide consultation for Network members in project planning, preparation, writing and evaluation;
- d. Develop culturally and linguistically appropriate resources and provide training in the effective use of electronic health information resources. Before developing any training materials, the NLM Training Center and MLA Educational Clearinghouse will be checked to avoid duplication. Copies of all training materials developed will be registered with the MLA Educational Clearinghouse. Training should include, but not be limited to: PubMed, MedlinePlus, and other NLM resources; and
- e. Develop pilot projects to identify and promote the roles of libraries in institutions that have received or are seeking NIH Clinical and Translational Science Awards (CTSA) with a focus on community engagement.

Applicable NN/LM Goal

Promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to the Healthy People 2020

Objective & Rationale:

Objectives:

- The NN/LM MCR increases the public's awareness of and access to health information
- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

The NN/LM MCR has demonstrated the value collaboration plays in outreach through the use of the distributed model. State coordinators are members of their state library association and

of state or local health sciences library consortia; they are embedded in local public and community health organizations. They can participate in these local organizations because they live in the states the NN/LM MCR serves. The NN/LM MCR coordinators have developed projects and tools, such as the Navigating Collaboration Toolkit (<http://nnlm.gov/mcr/resources/community/collaboration.html>) with the assistance of Network members, as a way to develop a cadre of leaders in health information outreach within our region. We recognize the truth of the statement: "Hospitals, clinicians, public health departments, and other service providers are learning that when it comes to delivering health care, it no longer pays to go it alone."⁶³

The NN/LM MCR works with intermediary groups, such as libraries, community and faith based organizations, and governmental agencies that already have developed trusted relationships with consumers. Working with these entities allows us to integrate health information into programs that have been successful in reaching the health information consumer, especially special populations. Health Sciences libraries are an integral piece of the health care system, and they have always been collaborative within their institutions; public libraries are integral members of their communities' infrastructure. The NN/LM MCR works with Network members to assist them as they take steps outside their institutions and bring their collaborative skills to work in the greater community, partnering with public health departments and community organizations to increase consumer access to health information.

Cultivating partnerships with public libraries will continue to be a major strategy in the MCR in order to promote access to consumer health information. Public libraries are largely supported by their local community or government and are highly focused on serving their local constituency. A study done by the PEW Internet & American Life Project "challenge(s) the assumption that libraries are losing relevance in the Internet age. Libraries drew visits by more than half of Americans (53%) in the past year for all kinds of purposes."⁶⁴ We wish to empower public libraries to provide health information services and improve health information literacy in the region as well. We see health information literacy as impacting health information providers and end users as it advances the identification of and access to health information resources; improves the ability to evaluate, analyze and understand the content; and increases the use the health information to make informed decisions.

Our work to facilitate access to consumer health information also supports NLM's strategic objective to "[e]xpand partnerships among various types of libraries and community-based organizations with the goal of forming community coalitions to improve access to health

⁶³ Torres GW, Margolin FS. The Collaboration Primer: Proven Strategies, Considerations and Tools to Get You Started [Internet]. Chicago, IL: Health Research and Education Trust, 2003. 24 p. [cited 2010 April 1] Available from <http://www.hret.org/hret/programs/content/colpri.pdf>

⁶⁴ Raine L, Estabrook L, Witt E. Information Searches That Solve Problems [Internet]. PEW Internet & American Life Project: 2007 December 30. 43p. [cited 2010 April 1] Available from <http://www.pewinternet.org/Reports/2007/Information-Searches-That-Solve-Problems.aspx>

information for members of minority and underserved populations as well as health professionals serving these populations.”⁶⁵

The demographic make-up of the NN/LM MCR is more homogenous than the national average. With a white population of 73%, Colorado has the most diverse population, as shown in the table below, taken from the Kaiser State Health Facts⁶⁶ web site and based on the Census Bureau's March 2008 and 2009 Current Population Survey. The other states in the NN/LM MCR have white populations that range from 80-89% of the state's overall population. The United States, on the whole, is much more diverse with a white population of 65%.

	White	Black	Hispanic	Other
Colorado	73.40%	3.79%	18.50%	4.32%
Kansas	80.34%	5.73%	8.50%	5.43%
Missouri	81.78%	11.25%	3.12%	3.85%
Nebraska	83.98%	4.37%	8.15%	3.50%
Utah	83.26%	1.06%	11.58%	4.10%
Wyoming	87.82%	NSD	7.93%	3.24%
United States	65.00%	12.13%	15.77%	6.71%

Table 10. Population Distribution by Race/Ethnicity⁶⁷

The NN/LM MCR is becoming more diverse and with that growth in diversity come challenges to our region. Examples of such challenges include towns in Nebraska that operate meat packing plants which rely heavily on immigrant workers. One such town is Lexington, Nebraska. "In April 1990 the U.S. Census counted 6,601 people in Lexington (Loughry, 1991a). It classified 7.3% of Lexington's population as minority; 4.9% of the population was reported to be Hispanic." After the meatpacking plant opened, "the 1990 Census, county officials requested a recount, which was conducted on February 24, 1993. This special census enumerated 8,544 persons in Lexington — an increase of 1,943, or 29.6% (U.S. Bureau of Census 1993). Hispanics, virtually all of them new immigrants, increased to 24% of the population."⁶⁸ In looking at the Census 2000 Demographic profile of Lexington Nebraska, the population of the city is now

⁶⁵ National Library of Medicine Strategic Plan for Addressing Health Disparities 2004-2008 [Internet] [cited 2010 April 1] Available from http://www.nlm.nih.gov/pubs/plan/nlm_health_disp_2004_2008.html

⁶⁶ The Kaiser Family Foundation, statehealthfacts.org. Data Source: 50 State Comparisons. [Internet]. Menlo Park, CA: Kaiser Family Foundation; [cited 2010 March 23] Available from <http://www.statehealthfacts.org/>

⁶⁷ Kaiser State Health Facts "Population Distribution by Race/Ethnicity, states (2007-2008)", U.S. (2008) [Internet]. Menlo Park, CA: Kaiser Family Foundation; [cited 2010 March 30] Available from <http://www.statehealthfacts.org/comparetable.jsp?typ=2&ind=6&cat=1&sub=1>

⁶⁸ Gouveia L, Donald DS. Latino Immigrants, Meatpacking, and Rural Communities: A Case Study of Lexington, Nebraska, East Lansing, Michigan: The Julian Samora Research Institute, Michigan State University; 1997. 22p. JSRI Research Report #26.

10,011, with 51.2% of that population listed as Hispanic or Latino, and the white population listed as 64.2%. This example of rapid and ongoing growth in diversity in rural regions of the MCR being attributed to immigrant populations is typical of all our states. Outreach to this scattered minority population in the NN/LM MCR is done by working with community groups as trusted gatekeepers who already have the ability to reach this audience.

An outreach matrix has been described in the literature on levels of collaboration, beginning with simple exchanges of information and extending to full partnerships and collaboration efforts. **The outreach matrix is a planning and professional development tool for the MCR. It is important for staff to understand the value of outreach at each level, allowing us to assess next steps in our outreach efforts. We begin getting to know organizations by networking through exhibits, presenting at conferences, etc. The next level of outreach involves more time and trust. Using the matrix allows us to evaluate which groups are ready to move onto the next steps of working more collaboratively. The outreach matrix serves as a foundation as we carry out our outreach endeavors. We also utilize the matrix as a teaching tool for our members. The “Navigating Collaboration” webinar series referred to the matrix in one of the episodes. (See “Outreach Levels Matrix” below).**

The NN/LM MCR coordinators move through all the levels of outreach, bringing awareness of NLM and NN/LM resources to local and state groups through visits and presentations that have information exchange as the main outcome.

Coordinators build on those information exchanges over time, developing deeper relationships with organizations as they coordinate activities, cooperate and share resources, and finally collaborate fully through shared activities and resources. In addition to coordinators participating in these levels of outreach, tools and resources are created for Network members to find opportunities to step outside their libraries. Such outreach activities allow them to move from awareness activities to development of collaborative efforts, working side by side with community groups in their institution’s neighborhood to provide/improve health information access.

	Networking	Coordinating	Cooperating	Collaborating
Definition	Exchanging information for mutual benefit	Exchanging information for mutual benefit, and altering activities to achieve a common purpose	Exchanging information for mutual benefit, and altering activities and sharing resources to achieve a common purpose	Exchanging information for mutual benefit, and altering activities, sharing resources, and enhancing the capacity of another to achieve a common purpose
Relationship	Informal	Formal	Formal	Formal
Characteristics	Minimal time commitments, limited levels of trust, and no necessity to share turf ; information exchange is the primary focus	Moderate time commitments, moderate levels of trust, and no necessity to share turf; making access to services or resources more user-friendly is the primary focus	Substantial time commitments, high levels of trust, and significant access to each other's turf; sharing of resources to achieve a common purpose is the primary focus	Extensive time commitments, very high levels of trust and extensive areas of common turf; enhancing each other's capacity to achieve a common purpose is the primary focus
Resources	No mutual sharing of resources necessary	No or minimal mutual sharing of resources necessary	Moderate to extensive mutual sharing of resources and some sharing of risks, responsibilities, and rewards	Full sharing of resources, and full sharing of risks, responsibilities, and rewards

Figure 13. Outreach Levels Matrix⁶⁹

⁶⁹ Himmelman AT. Collaboration for a Change: Definitions, Decision-making models, Roles and Collaboration Process Guide [Internet]. Minneapolis, MN: Himmelman Consulting 23p. [cited 2010 April 14] Available from http://www.partneringintelligence.com/documents/5.02_Collaboration%20for%20a%20Change.doc

Approach & Methodology:

B2a: Develop programs that reach special populations (e.g. minorities, seniors, teens, veterans' groups, low income populations, etc.), focus on special topics (e.g. health disparities, health information literacy, HIV/AIDS, public health, culturally and linguistically appropriate information, personal health records, emergency preparedness, etc.), and promote NLM resources to consumers access to electronic consumer health information at the local, state, and regional levels

Objective:

- The NN/LM MCR increases the public's awareness of and access to health information

Outcome: - Network members and other organizations are better able to support access to health information resources

The Health Information Literacy project area is responsible for coordinating health information literacy in the Region. Our health information literacy program will advance the identification of and access to health information resources; improve the ability of information providers and users to evaluate, analyze and understand the content; and increase the use the health information to make informed decisions. The Health Information Literacy Coordinators will work with the Consumer Health Coordinators from the other NN/LM regions to identify common needs and share the responsibility of developing the resources (e.g., educational materials, workshops, promotional materials) to meet those needs. The NN/LM MCR will continue to expand consumer health information outreach beyond the public library and into community and faith based organizations through the following programs.

Public Library Outreach

Public libraries continue to be an excellent conduit for transferring health information to community members because there is one in almost every community, no matter how small. Public library outreach is especially important for meeting the digital divide gap as they provide access to computers and technology for those in the US with low or no online access. The NN/LM MCR will continue to work with public libraries to improve access to consumer health information in the region's communities. In the current contract, we conducted 133 activities that included demonstrations and training sessions to 1179 public librarians. This number does not include the librarians we talked to at state library association meetings. During these outreach activities we have introduced public librarians to MedlinePlus and other appropriate NLM consumer resources. Introducing and training public librarians on the use of NLM consumer health information resources will continue to be a foundation of our program. Outreach to public libraries falls in the "Coordinating" and "Cooperating" levels of the Outreach Matrix; hands on training often takes place at the public library, and in coordination with staff who organize and sometimes co-present with coordinators.

The NN/LM MCR has had success in the current contract in offering online sessions on “Emergency Preparedness for Public Librarians.” The webinar classes, using Adobe Connect, were scheduled early in the day, so public librarians would be free to attend before the library was open to the public. The sessions focused on resources that were freely available to the public and assisted public librarians in answering questions about public emergencies relevant to the region, such as flooding and tornados. Online sessions will be offered in the next contract on health information literacy, emergency preparedness, and other topics requested by public librarians in the region. State coordinators will continue to exhibit and present at state library association meetings.

State coordinators all work closely with their state library. Many success stories have come out of this outreach.

- The Missouri Coordinator has traveled the state with the Adult Services Coordinator for the Missouri State Library, teaching classes on senior health and health information literacy which were sponsored by the Missouri State Library
- The Nebraska Coordinator, Health Information Literacy Coordinator, and the Colorado Coordinator have been written into the State Library’s application for ARRA funding in the Broadband Technology Opportunity Program (BTOP) section, with health information access highlighted in the applications. (See Nebraska: *Library Broadband Builds Nebraska Communities* (<http://www.nlc.state.ne.us/lbbnc/>); Colorado: *Bridging Colorado’s Digital Divide* (<http://www.cde.state.co.us/cdelib/BTOP/>))
- The Wyoming State Librarian will be the keynote speaker at the annual Wyoming Symposium 2010

Bringing Health Information to the Community Blog

The Health Information Literacy Coordinator maintains the “Bringing Health Information to the Community” (BHIC) blog (<http://nnlm.gov/mcr/bhic/>). BHIC blog readers are members of community organizations, public health departments, health sciences and public libraries, and others who work with underserved and minority groups. The BHIC blog is used as an intermediary communication tool, providing readers with health information resources that they in turn provide to the consumers they serve. Posts to the blog fall into the following categories: articles, conferences, environmental health, HIV/AIDS, inner city, minority health concerns, public library, public health, regional information, rural, and scholarships/grants. The blog has garnered national recognition over the years, and periodic questionnaires of readers indicate that the blog makes an impact in their daily workflow. Beginning May 1, 2011, the BHIC blog will become a national communication tool, with collaborative authors from four additional NN/LM regions, the Greater Midwest Region, the Southeastern/Atlantic Region, the Pacific Northwest Region and the South Central Region.

Evaluations conducted by the NN/LM MCR in 2005 and 2009 have confirmed that the BHIC blog makes a difference in the work of its readers. The 2009 evaluation confirmed that readers are using the blog postings by sharing them with colleagues, developing and maintaining projects,

locating and applying for funding and more. The BHIC blog remains a useful tool that has the ability to impact high numbers of readers, assisting them as they work directly with consumers.

As web 2.0 technology emerges, the ability of the NN/LM MCR to reach additional readers has grown. The BHIC blog now feeds into a twitter account, shows up on the NN/LM MCR Facebook page, and has been used by Network members as a feed onto pages such as the Missouri WebJunction's Health Literacy section (<http://mo.webjunction.org/mohealth>). The NN/LM MCR will continue to find ways to expand the reach of the BHIC blog through the use of social networking tools.

With the blog becoming a national resource, it is important to continue to measure the impact and use of the blog. The NN/LM MCR will continue to send questionnaires to BHIC blog readers to determine how postings are used by readers in their work, and to determine what impact the change to a collaborative authorship has made. In addition, the use of social networking sites will be evaluated. It is possible to see what items on Twitter have been "retweeted" for example. An overview of the comments and re-postings of BHIC blog items will be undertaken in Years 2 and 4.

Coordinator Collaboration

NN/LM MCR state coordinators are also involved in community and public health organizations that serve special populations in the region. All outreach coordinators joined a local group at the board or committee level, and worked on providing hands-on training to the groups. The groups joined are:

- Colorado:
 - Colorado Public Health Association, Professional Education
- Kansas:
 - Mother and Child Health Coalition, Adolescent Health Committee
- Missouri:
 - Health Literacy Missouri, Resource Inventory Committee
 - Health Literacy Missouri, Librarian Expert Group
 - Public Health Practice Research Network of the Missouri Institute for Community Health
- Nebraska:
 - HELP Adult Services, Board of Directors
 - Rural Health Education Network
 - Lincoln Metropolitan Medical Response System
- Utah:
 - Utah Multicultural Health Network, Conference Planning Committee
 - Utah Library Association Multicultural Services Roundtable
- Wyoming:
 - Wyoming Comprehensive Cancer Control Consortium, Cancer & Environment Working Group

NN/LM MCR coordinators become involved in organizations at the “Cooperative” and “Collaborative” Level of the Outreach Matrix. In this way, the coordinators are able to learn more about community needs, provide a service (e.g. promoting/training on NLM resources and services) to meet those needs, and gain hands-on experiences in identifying how to effectively incorporate health information access into an organization’s operations.

In Year 5 of the current contract, an evaluation of the impact of this immersion project will be conducted to capture effective practices to better carry on this collaborative work. Coordinators will be asked if they wish to continue their relationship with their current community group, or if they have identified a new organization they wish to pursue.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Offer online training to public librarians on health information literacy, emergency preparedness, and other topics identified during the contract as relevant to needs of the region	X	X	X	X	X
Continue to post health information tools and resources to the BHIC blog	X	X	X	X	X
Continue to explore social networking and other technology tools to expand the outreach of the BHIC blog	X	X	X	X	X
Evaluate impact of the change in authorship of the BHIC blog to a national resource; Provide overview of spread of BHIC blog postings through social networking tools		X			
Evaluate use of the BHIC blog by readers; Provide overview of spread of BHIC blog postings through social networking tools				X	
Develop a plan of action based on Year 5 evaluation to continue collaborative partnerships for MCR coordinators	X				
Coordinators remain involved and active in community and public health organizations		X	X	X	X
Evaluate collaborative activities and make changes based on results of evaluation				X	
Work with Nebraska and Colorado State Libraries to follow up on ARRA projects	X	X	X	X	X

B2b: Foster collaborations and encourage outreach partnerships among Network members, community, faith-based, and volunteer organizations including those serving minority and underserved populations, and other types of organizations, to improve access to electronic consumer health information at the local, state, and regional levels

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

Outcome: - Network members have the necessary skills to develop projects and programs

The NN/LM MCR has a strong foundation in fostering collaborations and encouraging outreach partnerships. Many of these programs will be continued and expanded on in the next contract.

Health Information Literacy

Health information literacy advances the identification of and access to health information resources; the ability to evaluate, analyze and understand the content; and the ability to use the health information to make informed decisions. In the current contract, the NN/LM MCR held *Café to Go* sessions in each state to bring together Network members and staff from public health and community organizations to network and develop projects together. The *Café to Go* sessions were held to promote the Continuity of Health Information Award as a way to fund collaborative projects. The NN/LM MCR will continue to hold collaborative meetings in the next contract around the topic of health information literacy. Health Literacy Missouri has assisted several states in the past two years organizing and running summits in health literacy, including New Jersey, Arkansas, and Kentucky. The NN/LM MCR and Health Literacy Missouri will co-sponsor a Health Literacy Summit that includes a health information literacy tract. The objective of the Health Literacy Summit is to establish a coalition of stakeholders that will work together to build health literacy skills. The objective of the health information literacy tract will be to identify the roles librarians can play in health literacy projects and within their institutions.

Participation at the summit will come from each state in the region. The NN/LM MCR will invite Network members, Regional Advisory Board members, and health care providers concerned with health information literacy to attend the summit, and specifically to attend the sessions developed for the health information literacy tract. Time will be set aside during the summit for this group to meet, network, and brainstorm on ways they can facilitate collaboration when they return to their home states. The attendees will be contacted in Year 3 to determine what activities were developed after attending the summit; appropriate entries will be added to the Library Success Wiki. The Library Success Wiki (<http://www.libsuccess.org/>) is a resource for librarians to share and to find ideas and information on effective practices occurring in all types

of libraries. In addition, selected attendees will be asked to share their experiences and knowledge gained from the summit through presentations to the Region and articles in *Plains to Peaks Post*.

In the first quarter of Year 4, a core group of health information experts in the MCR will be identified and brought together to assist the NN/LM MCR in developing a strategic plan for health information literacy outreach in the next 5-10 years. We expect that participants inspired by the Health Literacy Summit will comprise a portion of this group. The NN/LM MCR will draw on their experiences and expertise in the field to identify future opportunities, current challenges, and assets within the Region that are not being tapped.

Public Library/Public Health Department Award

NN/LM MCR coordinators have attempted to facilitate collaborations between public health departments/workforce and NN/LM MCR member public libraries with little success. In an effort to bring to the forefront successful collaborations that have occurred in the Region, and to identify models that public libraries and public health institutions can emulate, the NN/LM MCR recognizes public library/public health department collaborations through the “Outstanding Public Library/Public Health Partnership Awards.” In Year 4 of the current contract, four awards were given to collaborations and the awards will be offered again in Year 5. This program will be carried over into the next contract with six awards offered each year, one per state. In the next contract, the award will be co-sponsored by the public health departments and state libraries in the region, with the award being acknowledged at state public health meetings and state library association meetings each year. The NN/LM MCR will identify partnership models from the applications submitted for this award. These models will be promoted and similar partnerships encouraged by the coordinators through activities for health departments and public libraries.

Community Outreach Working Group

In the current contract the NN/LM MCR developed tools for Network members to develop and maintain collaborative efforts and partnerships with community organizations. The “Navigating Collaboration Toolkit” (<http://nnlm.gov/mcr/resources/community/collaboration.html>) was developed by the Community Outreach Working Group, a collaborative group of medical and public librarians and staff of community based organizations. The working group will develop a social networking tool in Year 5 of the current contract. The purpose of the tool is to provide a collaborative environment where Network members can share effective practices, identify tools and resources available for outreach, and network with each other. As a result of this online collaboration, Network members will gain confidence and skills with a support group to call on as they develop outreach programs with community groups. The potential audience for the social networking tool includes MCR Network members who have:

- Taken the NN/LM OERC classes or used the Planning and Evaluating Evaluation Guides
- Responded to the MCR Network Member Questionnaire as conducting outreach
- Received outreach subcontracts from the NN/LM MCR

- Indicated interest in outreach by responding to promotions from the MCR news and BHIC blog

In Year 1, the NN/LM MCR will measure the impact of this collaborative space on members. Success will be measured using metrics such as the number of visits to a site, the time spent on the site, the number of discussions held in forums, the types of members on the networking site (public librarians, solo librarians, etc), the number of overt “aha” moments posted by members, etc. In addition to this quantitative data, it is also important to analyze the type of content being added to the space, the trails that outline the development of projects with input from members and the tool’s impact. The purpose for creating the social networking tool is to provide Network members with skills and knowledge they can use to increase access to health information for populations outside their institutions. The results of the evaluation will be used to make modifications to make the tool more valuable.

The Community Outreach Working Group is an active and forward thinking group of individuals. In Year 4 of the current contract, the group held an in-person meeting and developed a strategic plan. The group will hold additional in-person meetings in Years 1 and 3. These face-to-face meetings will provide brainstorming time for strategizing next steps for the group, as well as providing support for the group members in the outreach and collaborative work they are doing. The Community Outreach Working Group will also use this time to evaluate the collaboration of the group itself. It is vital to the success of the group to evaluate its effectiveness and determine its value to the members and to the supporting organization, in this case, the NN/LM MCR. Possible outcomes of the evaluation include the dissolution of this specific working group to be replaced by a new group, refocusing of the group in other areas, or maintenance and growth of ongoing projects.

Continuity of Health Information Award: Health Information Literacy

In the current contract, the NN/LM MCR offered the Continuity of Health Information Award to Network members in Years 3 and 4. The award was divided into three categories, Health Information Literacy, Library Advocacy, and Emergency Preparedness. During the current contract, seven Continuity of Health Information projects were funded, including five in the area of Health Information Literacy. The NN/LM MCR will offer the Continuity of Health Information Award in the next contract, and the focus will remain on Health Information Literacy. During the 2011-2016 contract period, RFPs will be announced to Network members and will fund projects up to \$15,000 each. Health Information Literacy projects receiving funding will be designed to provide a new service within an institution or develop partnerships outside the institution that enhance access to health information for consumers with low health literacy and/or for health care providers providing health information to consumers with low health literacy. Promotion of the awards is done via the NN/LM MCR web site, the RML News blog, and the MCMLA listserv.

The NN/LM MCR has adapted the Library Success Wiki (<http://www.libsuccess.org/>) by adding the category “Services for Health Information Consumers” (http://www.libsuccess.org/index.php?title=Services_for_Health_Information_Consumers).

Network members who receive outreach awards from the NN/LM MCR are required to make entries to the Library Success Wiki. This growing database of successful library outreach practices will provide Network members with successful tools and ideas and potentially reduce duplication of effort. The activities that develop from funded outreach projects will continue to be added to the Library Success Wiki.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Hold Health Information Literacy Summit		X			
Follow up with an evaluation on collaborations generated by attendees; entries added to Library Success Wiki			X		
Health Information Literacy Strategic Planning Meeting will be held				X	
Offer the Public Health/Public Library Partnership Award	X	X	X	X	X
Hold Community Outreach Working Group Evaluation and Strategy Meeting	X				
Develop and apply out success metrics measurement tool for collaboration social networking site; adapt networking tool based on results of assessment	X		X		
Maintain and develop collaboration social networking site	X	X	X	X	X
Announce, review, award, and manage Continuity of Health Information Awards	X	X	X	X	
Add entries from projects funded by the Continuity of Health Information Awards to the Library Success Wiki	X	X	X	X	X

B2c: Provide consultation for Network members in project planning, preparation, writing and evaluation

Objective:

- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

Outcome: - Network members have the necessary skills to develop projects and programs

Project planning and evaluation are important to librarians in managing their libraries and demonstrating the impact of their services. Both advocacy and outreach activities are enhanced when librarians have the skills to articulate the goals and objectives of the project and show key stakeholders how their efforts have been successful.

Logic models are a tool for developing a project plan. The model guides the project planners through the process of articulating goals and objectives, selecting activities, identifying necessary resources, stating desired outcomes and developing an evaluation plan that defines how success and impact will be measured. Because logic models have been used successfully for over eight years for organizing NN/LM MCR work, coordinators are well qualified to advise Network members on project planning, evaluation, and the use of logic models. NN/LM MCR will offer classes in project planning and evaluation both online and face-to-face and will promote the consultation service to Network members. The messages will convey our willingness to consult with members and other organizations considering project funding or project design.

The NN/LM MCR has been a leader in training librarians in project planning and evaluation. Co-developed in 2004 by the Assessment and Evaluation Coordinator, “Measuring Your Impact: Using evaluation for library advocacy,” has been taught more than nine times in the region, reaching 149 librarians and more than forty times in the U.S. and Canada, reaching nearly 600 librarians. The class introduces students to environmental assessment, goal setting, articulating desired outcomes through the development of a logic model and the importance of planning for evaluation from the beginning of any proposed project. “Measuring Your Impact” will be held at least two more times in Year 5 of the current contract – at MLA 2010 and in St Louis. The class continues to be relevant and well received and will continue to be offered in the MCR during the contract period. An online curriculum will be developed offering the class in one hour segments over six weeks. In addition, online sessions discussing evaluation tools, including the online calculators for determining library value and institutional return on investment from library services (<http://nnlm.gov/mcr/evaluation/tools.html>) will be held periodically.

The NN/LM Outreach Evaluation Resource Center(OERC) developed a series of three and four hour classes which, as a whole, address community assessment, project development and planning, data collection and data analysis and reporting. These complement the six hour “Measuring Your Impact” class, enabling students to spend more time on each concept than is available during the longer class. Two of the classes, “Answering the Right Questions: Data Collection for Health Information Outreach” and “Finding Information in Numbers and Words: Data Analysis for Health Information Outreach” will be offered in the MCR during the contract. Students in the “Measuring Your Impact” class regularly comment on the need for and the difficulty of doing data collection and analysis. These classes will offer NN/LM MCR librarians another source of training in this vital area.

The Assessment and Evaluation Coordinator will co-teach the first time the OERC classes are offered and then will be able to teach alone or with OERC staff in the future. The workshops will

be offered in person and also using distance education technology, if the NN/LM Outreach Evaluation Resource Center has developed the necessary materials and curricula for teaching online. In order to determine whether Network members have acquired needed skills we will include a question in the post-class evaluation for all classes asking if Network members feel that they are more proficient in project planning and evaluation. We will also follow up with students six months and one year after the class to find out how the students have used their planning and evaluation skills.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Offer “Measuring Your Impact” at two sites in the MCR	X		X		
Develop online curriculum for “Measuring Your Impact” that will introduce members to creating logic models and developing evaluation plans	X	X			
Offer “Measuring Your Impact” online in one hour segments per week for six weeks		X		X	
Offer online or face-to-face OERC “Answering the Right Questions: Data Collection for Health Information Outreach” and “Finding Information in Numbers and Words: Data Analysis for Health Information Outreach”		X		X	
Collect data from students in the OERC classes to understand the impact of the classes on their planning and evaluation activities			X		
Promote the consultation service provided by RML staff regularly using all NN/LM MCR communication tools	X	X	X	X	X

B2d: Develop culturally and linguistically appropriate resources and provide training in the effective use of electronic health information resources. Before developing any training materials, the NLM Training Center and MLA Educational Clearinghouse will be checked to avoid duplication. Copies of all training materials developed will be registered with the MLA Educational Clearinghouse. Training should include, but not be limited to: PubMed, MedlinePlus, and other NLM resources

Objective:

- The NN/LM MCR increases the public's awareness of and access to health information

Outcome: - Network members and other organizations are better able to support access to health information resources

Increasing Awareness

Each NN/LM MCR coordinator presents multiple times each year to a variety of audiences. Given the increased culturally diverse populations in each of our respective states, each NN/LM MCR coordinator will be tasked with adding at least one slide, or comment, regarding the availability of “culturally and linguistically appropriate resources” that exist in our states, where it is appropriate. That slide or comment will promote the state page that is applicable for that audience. Coordinators will highlight the Spanish and Multiple Language resources available on MedlinePlus.

While the NN/LM MCR coordinators will not seek to create multiple language resources, every effort will be made to educate those that do of where these language resources can be deposited and shared with others who work with similar populations. Coordinators will inform refugee organizations as referenced in our response to SOW section B1 and particularly Refugee Health Coordinators from the Office of Refugee Resettlement for the six states located in the MCR region.

NN/LM MCR coordinators and people from organizations that are creating multiple language health materials, will be encouraged to check the MLA Continuing Education Clearinghouse and the MedlinePlus Multiple Language resources, first, so that there will be no duplication of effort in creating these materials.

Those seeking to suggest multiple language links for MedlinePlus, will be referred to MedlinePlus Quality Guidelines for Health Information in Multiple Languages (<http://www.nlm.nih.gov/medlineplus/languages/criteria.html>), and given the “Contact Us” information to submit such links to MedlinePlus. (<http://apps.nlm.nih.gov/medlineplus/contact/index.cfm?lang=en>)

Web Pages

The NN/LM MCR maintains state web pages for each of the six states in the region. Since the second most predominant language spoken in our region is Spanish, the coordinators will, as before, provide “Información en Español,” a section on each of those six state pages delineating state resources in the Spanish language for that particular state. This will include such information as United Way and HIV/AIDS information. The descriptive information about the links on these pages will be translated into Spanish. NN/LM MCR coordinators will continue to scan for Spanish language health resources available in their respective states and add them to NN/LM MCR web pages as they become available.

The NN/LM MCR web site also includes a section on minority health concerns (<http://nmlm.gov/mcr/resources/community/minority.htm>). This section includes content devoted to health information on race and ethnicity, online materials in multiple languages, and a cultural competency section. This web page was viewed 290 times in a three month period between Jan. 1, 2010 and April 1, 2010. The section will be maintained in the next contract.

Training

Classes Developed by MCR Coordinators:

- The NN/LM MCR will continue to update and maintain the MLA CE “Getting Started with Information Outreach in Minority Communities” (<http://nmlm.gov/training/minorities/>)
- The South Central Region was approached by a member to develop an American Indian Health resources class; the SCR invited the NN/LM MCR to assist in developing the class. It will include culturally appropriate resources, as well as a section that focuses on cultural competence when working with American Indian communities.

The NN/LM MCR coordinators have offered the MLA CE “¿No Comprende? Spanish Health Information Resources for English Speaking Librarians” class at least once or twice each year and will continue to do so.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Include a slide or comment in each presentation, when appropriate regarding NN/LM MCR state web pages which include the section “ Información en Español.” Also include information on Spanish and Multiple Language resources available on MedlinePlus.	X	X	X	X	X
Verify and update “Información en Español” sections on each of the six state pages on the NN/LM MCR Web site and the Minority Health Section	X	X	X	X	X
Continue to offer MLA CE courses with cultural and diversity topics	X	X	X	X	X
Translate into Spanish the descriptive information for web sites included on the MCR state pages in the “Información en Español” section	X	X	X	X	
Develop American Indian Health class with NN/LM SCR	X				

	Year 1	Year 2	Year 3	Year 4	Year 5
Contact the Refugee Health Coordinators in each state to verify that they have information on the Spanish Languages resources found on the NN/LM MCR web pages, as well as information about MedlinePlus in Spanish and the Multiple Language resources on MedlinePlus		X			

B2e: Develop pilot projects to identify and promote the roles of libraries in institutions that have received or are seeking NIH Clinical and Translational Science Awards (CTSA) with a focus on community engagement

Objective:

- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

Outcome: -Network members, especially hospital librarians, participate in emerging practices to promote evidence based health information in the institution

Librarians can play a pivotal role with their local CTSA awardees through their natural ability to organize information, collaborate with many groups, and make connections as neutral and central agencies within university settings. Three of the NN/LM MCR’s Resource Libraries have received CTSA awards and several others are applying for such funding and recognition.

During Year 5 of the current contract, three small demonstration project awards were granted to the University of Colorado, Washington University, and the University of Utah to illustrate how librarians can partner with CTSA units and promote the translation of university research to their communities. The projects focus on three different populations providing a well-rounded approach to encouraging other regional and national Network members to adopt these projects for local application. The Washington University project will emphasize positive engagement of their public community with research being conducted at the University through their librarians working with public librarians to promote research efforts. The University of Colorado is developing a portal and collaborative space/repository for health sciences librarians who are supporting CTSA awardees as well as other researchers to share best practices, lessons learned, projects, created tools, etc. This was a need expressed at a recent Scholarly Communication/CTSA conference held at the University of New Mexico and funded by the National Library of Medicine. The University of Utah is creating MyRA (My Research Assistant), a virtual one-stop-shop that outlines the research process with attached needed forms, instructions, information sources, expertise databases, University agencies, etc. that are relevant to each step of the process. An open source template will be created for

others to use to be able to plug-and-play their own institutional information into the template. The template includes a community engagement component.

The NN/LM MCR will monitor the impact of the Year 5 projects in addressing CTSA goals by monitoring:

- Uptake of the use of the University of Utah template tool by others
- Increase in volume of content added to the librarian repository developed by the University of Colorado
- The reliance on Washington University's promotional program for sharing institutional research with communities by Network members

The NN/LM MCR will release an RFP for the New Collaborations for Health Sciences Libraries Award and the Continuity of Health Information Award. Demonstration project awards will be granted through a competitive process to regional Network members. Proposals are expected to explore and demonstrate the active role that librarians can assume with their CTSA units. Members from CTSA institutions can apply for funding for projects focused on community engagement. Those applying for the New Collaborations Award will be funded for up to \$60,000 for a two-year project. Those applying for the Continuity of Health Information award will be funded for up to \$15,000 for a one-to-two-year project.

Project outcomes include the development of models that can be easily replicated by other regional members as well as national Network members. These models will be included in the health sciences librarian repository developed by the University of Colorado in Year 5 of the current contract and will also be deposited in the MLA Core Database as well as shared with CTSA national and regional consortia. Award recipients will be required to share their project progress and results with the region through news articles, social media venues, "Breezing Along with the RML" sessions, conference posters and presentations, and professional publications.

Acceptance by CTSA personnel as research partners and as developers of collaborative tools will be one success outcome for librarians working with CTSA's. Another will be the expressed interest, adoption, contributions to and use of the developed tools and spaces (and associated services). Usage figures of the portal, MyRA and the librarian repository will be collected and analyzed for trends; increased use over time will indicate success. Feedback will be received from CTSA personnel and librarians and incorporated as these tools are developed.

The Offeror will share information gained as a result of the two CTSA initiatives funded in Year 5 of the current contract period with the RMLs. Ms. Shipman will present such information at the RML Directors Meeting in May. Library directors managing the two projects already shared information at the November AAHSL meeting and have had individual conversations with several directors post that event. An MLA presentation abstract was submitted by University of Utah, but it was not accepted for the 2011 meeting program. In

addition to sharing with the RMLs, per the two written proposals, additional means for disseminating results (that will also be available to RML staff and constituents) will be employed including:

University of Colorado:

The methodology for developing and marketing the proposed online community resource is intimately tied to a strong communications outreach approach. At a number of key junctures input will be sought from the community of practice, from the constituencies served by the MidContinental Region, and from the community of practice of CTSA information workers. The resource will necessarily be registered with Internet search engines, will be recommended to the national CTSA web site [see: <http://www.ctsaweb.org/>], will be promoted to the MLA Molecular Biology and Genomics Special Interest Group membership and via listservs such as the MEDLIB-L, AAHSL memberclicks list, and those serving bioinformatics communities of interest.

University of Utah:

Project progress and results will be shared through news articles, social media venues, Breezing Along sessions, conference posters and presentations, and professional publications. The template will be included in the health sciences librarian repository developed by the University of Colorado in Year 5 of the MCRML contract and will also be deposited in the MLA Core Database as well as shared with CTSA national and regional consortia.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Award New Collaboration for Health Sciences Librarians projects (includes CTSA projects)		X	X		
Award Continuity of Health Information projects (includes CTSA projects)	X	X	X	X	
Evaluate the impact of the five projects funded in support of CTSA initiatives					X

B3 – Exhibits and Presentations at Meetings

Statement of Work

The contractor shall promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent consumers. NLM will provide each RML with an exhibit backdrop to be used at national exhibits. The national exhibit schedule will be set for October-September. Responsibilities shall include the following:

- a. Provide full support for a minimum of eight meetings (four national and four regional, state, or local) for an exhibit, program presentation, or course offering, including making all arrangements (scheduling, fees, shipping, logistics, equipment and publications), in consultation with the NN/LM National Network Office. Coordination of course offerings, program presentations and other offerings at meetings should be appropriate with national initiatives and promotional activities identified by NLM;
- b. Designate an RML staff member who is responsible for identifying health professional and consumer focused meetings, reporting exhibits and other RML activities at all national, regional, state and local meetings;
- c. Attend state library association meetings and exhibit or make presentations to promote NLM and NN/LM programs and services;
- d. Enlist the assistance of Network members in exhibiting at national, regional, state, and local meetings.

Applicable NN/LM Goal

Promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to the Healthy People 2020

Objective & Rationale:

Objectives:

- Librarians, health care providers and consumers receive information from the NN/LM MCR and provide feedback about health information resources, services and programs
- Librarians in the NN/LM MCR provide programs and services that improve the transfer of health care and biomedical information

Exhibits and presentations at meetings continue to be one of the most visible ways that coordinators interface with librarians, health professionals, and consumers. Because the National Library of Medicine provides valuable health information and resources for each of these populations, exhibits and presentations will continue to be an effective way to reach large numbers of these populations and offer opportunities to demonstrate and instruct attendees. In addition, NN/LM MCR coordinators can ascertain health information needs, obtain feedback on resources and services, and explore new arenas for further training opportunities.

Approach & Methodology:

Promoting NLM and NN/LM programs and services is a shared responsibility among the MCR coordinators. With the distributed model, the coordinators are in an excellent position to identify and exhibit at local meetings. Each coordinator has purchased and maintains either a table top exhibit or banner display with graphics featuring the National Library of Medicine, as well as MedlinePlus and PubMed. The exhibits are easily transportable, durable, and successful in conveying information in a timely manner. Each NN/LM MCR coordinator exhibits at four to six local or regional conferences per year. In the current contract, NN/LM MCR coordinators exhibited at 152 local or regional conferences.

B3a: Provide full support for a minimum of eight meetings (four national and four regional, state, or local) for an exhibit, program presentation, or course offering, including making all arrangements (scheduling, fees, shipping, logistics, equipment and publications), in consultation with the NN/LM National Network Office. Coordination of course offerings, program presentations and other offerings at meetings should be appropriate with national initiatives and promotional activities identified by NLM

Objective:

- Librarians, health care providers and consumers receive information from the NN/LM MCR and provide feedback about health information resources, services and programs

Outcome: -Librarians, health care providers and consumers in the NN/LM MCR are more aware of health information resources, services and programs

MCR coordinators will exhibit at four national meetings as determined by the National Network Office and assigned to individual MCR coordinators by the Associate Director. The NN/LM MCR coordinators assigned to the national exhibit will contact the organization suggesting presentations for the program of the conference. For example, the Consumer Health Coordinator was assigned to the following conferences in Year 4 of the current contract, where she exhibited, as well as presented;

- United States Public Health Service Scientific and Training Symposium, San Diego, CA - 2010
- National Association for Rural Mental Health, Denver, CO - 2010
- American School Health Association Annual Conference, Denver, CO - 2009
- Indian Health Summit, Denver, CO - 2009

Arrangements will be made so the equipment and materials necessary to represent the products and services of the National Library of Medicine are available. In the exhibit report, NN/LM MCR coordinators will evaluate the meeting on the basis of such factors as attendance,

receptiveness of audience, and cost to recommend whether NLM should continue to include the meeting on the national exhibit schedule.

Local meetings and health fairs are an excellent way for coordinators to make contacts for training opportunities, partnerships, and to identify representatives of organizations who have a mission similar to the NN/LM. For example, the Nebraska Coordinator exhibits at the annual Black Family Wellness conference. As a result of a contact made at this meeting, she was invited to participate in a community group providing family planning information to a local clinic. This in turn led to multiple contacts when she became part of the community group.

NN/LM MCR coordinators have prioritized meetings that they will attend in the next contract. MCR coordinators will annually exhibit meetings of:

- State library associations
- State minority health organizations
- State public health organizations
- State physician assistant associations

Coordinators are also expected to submit presentations for each of these conferences.

Coordinators will exhibit at four to six local and regional conferences throughout each contract year. Meetings for organizations not stated above will be selected by the NN/LM MCR coordinator in response to invitations or initiatives they want to pursue.

B3b: Designate an RML staff member who is responsible for identifying health professional and consumer focused meetings, reporting exhibits and other RML activities at all national, regional, state and local meetings

Objective:

- Librarians, health care providers and consumers receive information from the NN/LM MCR and provide feedback about health information resources, services and programs

Outcome: -Librarians, health care providers and consumers in the MCR are more aware of health information resources, services and programs

The NN/LM MCR Project Coordinator will coordinate meeting suggestions from staff for national meetings and for ensure that national reports written by coordinators are filed in a timely manner. NN/LM MCR coordinators will add reports of exhibits to the NLM External Exhibit Report System. In addition, NN/LM MCR coordinators will file detailed reports on exhibits in the NN/LM MCR Activity Reporting System (ARS).

B3c: Attend state library association meetings and exhibit or make presentations to promote NLM and NN/LM programs and services

Objective:

- Librarians, health care providers and consumers receive information from the NN/LM MCR and provide feedback about health information resources, services and programs

Outcome: -Librarians, health care providers and consumers in the MCR are more aware of health information resources, services and programs

State library association meetings in the six-state area provide an especially important audience and annual meetings of this group are a highlight. NN/LM MCR coordinators will exhibit and submit proposals to do presentations at these annual meetings. In the current contract, state coordinators exhibited and presented at their respective state library association meetings. Topics ranged from health resources for seniors, to those for children, to emergency preparedness.

B3d: Enlist the assistance of Network members in exhibiting at national, regional, state, and local meetings.

Objective:

- Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information

Outcome: - Network members and other organizations are better able to support access to health information resources

The NN/LM MCR coordinators regularly invite Network members to join us in the exhibit booth when we exhibit at local and national meetings. They may work for a few hours or up to a day. In the past, when an NN/LM MCR coordinator has had a conflict and could not exhibit at a local meeting, a librarian or staff member from their Resource Library filled in. In the current contract, this practice will be taken to the next level. The NN/LM MCR coordinator will train the Network member in the exhibit booth on protocol and NLM resources and services and the Network member will review the NN/LM Exhibit Manual. Once a coordinator deems that the librarian is qualified to exhibit, the librarian is issued a certificate and can volunteer to staff a local exhibit as the primary exhibitor or partner with an NN/LM MCR coordinator at a national exhibit. This gives librarians the opportunity to work beyond the walls of their libraries as well as to interact with health professionals in a different setting. Recruitment and training will take place throughout the contract. We will also offer an award, the Training Health Professionals Award, to librarians who want to be responsible for exhibiting and presenting at a local meeting.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
National exhibits will be assigned to coordinators who will submit proposals to present	X	X	X	X	X
Each NN/LM MCR coordinator will exhibit at four to six conferences and submit proposals to present at those meetings	X	X	X	X	X
NN/LM MCR reports for local, regional and national meetings are filed in a timely manner	X	X	X	X	X
NN/LM MCR coordinators will attend respective state library association conferences and submit program proposals to present	X	X	X	X	X
NN/LM MCR coordinators regularly invite Network members to join us in the exhibit booth when we exhibit at local and national meetings	X	X	X	X	X
Offer Training Health Professionals Award	X	X	X	X	X

B4 – Information Technology and Policy Awareness**Statement of Work**

The contractor shall develop an information technology and policy awareness program which includes:

- a. Regional forums that focus on e-science initiatives, e.g., the use of information technology to manage large stores of scientific and/or clinical data (as in clinical data warehouses), approaches to integrating data with other types of information, involvement of libraries in teaching e-science research methods, and policy issues affecting production, distribution, and access to data and information; and
- b. Monitoring current technological and policy developments and trends to identify those that will improve access to biomedical information.

Applicable NN/LM Goal

To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- The NN/LM MCR information technology and policy awareness program improves access to biomedical information

E-Science

The National E-Science Centre in the United Kingdom defines e-science as, “the large scale science that will increasingly be carried out through distributed global collaborations enabled by the Internet. Typically, a feature of such collaborative scientific enterprises is that they will require access to very large data collections and very large scale computing resources.”⁷⁰

For the purposes of NN/LM MCR program planning, we will operate under a broader definition of e-science; we will use e-science to refer to collaborative scientific activities carried out via the Internet. E-Science includes the collection, organization, validation, and preservation of data. Examples of e-science activities include:

- Collaboration wikis and other web services designed for scientists to share data and information during the research process; for example, UsefulChem (<http://usefulchem.wikispaces.com/>);
- Sharing data sets over the network; for example, GenBank (<http://www.ncbi.nlm.nih.gov/genbank/>);
- Utilizing a distributed network to carry out computationally intensive research; for example, the Enabling Grids for E-science (EGEE) computing project (<http://www.eu-egee.org/>) which provides a computing support infrastructure for over 13,000 researchers in a wide variety of disciplines.

E-Science initiatives face both technological and policy challenges. Data structures and tools to access data may not be inter-operable. Data sets can be so large that the available server space to house one data set becomes extremely expensive. Distributed computing, or “cloud” computing, may be a solution.

Scientists are also concerned about open access policy issues. A group of U.K. scientists from the Open Knowledge Foundation Working Group on Open Data in Science published the Panton Principles, which states “data related to published science should be explicitly placed in the public domain.”⁷¹ Not all scientists are in agreement with the Panton Principles. Librarians need to understand these challenges in order to participate in e-science projects.

⁷⁰ NeSC: Defining e-Science [Internet]. United Kingdom: National E-Science Centre; [updated 2010 May 18; cited 2010 May 20]. Available from: <http://www.nesc.ac.uk/nesc/define.html>.

⁷¹ Panton Principles [Internet]. Cambridge, UK: Open Knowledge Foundation Working Group on Open Data in Science; [cited 2010 May 5]. Available from: <http://pantonprinciples.org/>.

The Association of Research Libraries (ARL) E-Science Working Group conducted a survey of their member libraries, in 2009, to discover the level of library involvement with e-science activities.⁷² Out of 123 ARL libraries that responded to the survey, sixty-one reported an e-science program, of some kind, at their institution. Seventy-three percent of the institutions reported that their libraries were involved with e-science initiatives. Library involvement in e-science projects covered a wide range of support activities, including offering web sites with e-science information, data management training, and policy issue support.

E-Science information technology and policies are in a very early stage of development within academic health sciences libraries in our region. This presents an opportunity for academic health sciences librarians to assume new roles by participating in e-science initiatives within their institutions. Roles for librarians include:

- Designing a data management web site
- Teaching classes about managing research data
- Assisting researchers with developing open access policies
- Working with researchers to add data to an institutional repository
- Assigning metadata to data sets
- Creating and maintaining specialized digital repositories
- Teaching social networking tools that can be used to share scientific data and discoveries

Technology Trends and Policy

Staying abreast of new technology developments, understanding, and visioning the implications for technology are areas of critical importance for health sciences librarians. Learning about new trends in technology, as these trends occur, gives Network members the opportunity to proactively adopt new technologies that will improve access to biomedical information and services. Providing these programs will allow Network members to:

- Be seen as valued professionals in their institutional settings
- Increase the efficiency and effectiveness of the services they offer
- Train their constituents on how to take advantage of new biomedical information resources
- Assume new roles for the profession, such as involvement in e-science projects or electronic health record and personal health record implementations

⁷² ALA:2009 E-Science Survey Resource Page [Internet]. Washington, DC: Association of Research Libraries: Transforming Research Libraries; [cited 2010 April 4].
<http://www.arl.org/rtl/eresearch/escien/esciensurvey/surveyresearch.shtml>.

Approach & Methodology:

B4a: Regional forums that focus on e-science initiatives, e.g., the use of information technology to manage large stores of scientific and/or clinical data (as in clinical data warehouses), approaches to integrating data with other types of information, involvement of libraries in teaching e-science research methods, and policy issues affecting production, distribution, and access to data and information

Outcome: -Health sciences librarians are integrated in the conduct of e-science

Inter-Regional E-Science Forum

In Year 2, we will participate in an inter-regional e-science forum with the Pacific Northwest Region (PNR). The forum will focus on defining e-science and the librarian's roles in e-science initiatives. The forum will be held using dedicated videoconferencing facilities at University of Utah, University of Washington, and perhaps one other site in each region. The sites will connect to the Utah Education Network (UEN) multi-site videoconferencing bridge, which is available to NN/LM MCR at no cost.

Local participants will gather at the videoconferencing facility at each location. The videoconferencing facilities feature high quality audio and video. Local participants will be able to have nearly natural interactions with remote participants, as if they were in the same room. To put each site on an equal status, in-person speakers will be available in each region. Both regions will have in-person presentations and distance presentations. A computer projection system will broadcast PowerPoint or web demonstrations to all the locations. The event will be recorded and archived for later access by the regions. The event will be captioned in order to ensure Section 508 compliance.

We will model the forum on the annual E-Science Symposium (http://library.umassmed.edu/escience_symposium09.cfm) hosted by the University of Massachusetts and sponsored by the NN/LM New England Region (NER). The keynote speakers will focus on e-science initiatives and new roles for health sciences librarians in e-science.

Following the keynote speakers, forum participants will move into break-out rooms to discuss individual topics in more detail.

At the end of the day, attendees will offer feedback on what they believe are the next steps the RMLs should take to assist librarians with e-science initiatives within the regions. The success of the forum will be assessed through an evaluation form distributed to all attendees to gain feedback about the meeting content, the format of the interactive session and the use of the technology. We will use this feedback in planning additional forums and gain ideas on how we can promote e-science among members. The NN/LM MCR will also evaluate the impact of this program on new roles for librarians, as described in SOW section A14.

E-Science Training

The NN/LM MCR will create a series of training opportunities throughout the year to educate academic health sciences librarians about technical aspects of e-science. The workshops will be taught via Adobe Connect. The topics of the workshops are:

- *Introduction to Data Management*: MIT teaches a one-hour workshop entitled “Managing Research Data 101” (<http://libraries.mit.edu/guides/subjects/data/training/workshops.html>). MCR will ask the MIT instructor if they would be willing to present this workshop to MCR staff via Adobe Connect. MCR staff will adapt the workshop for presentation to Network members. The workshop covers data security, file formats, directory structures, and metadata.
- *Web 2.0 Technologies in E-Science*: this 4-hour workshop, held in four one-hour sessions, will focus on the use of wikis and professional social networking services for sharing scientific results. NN/LM MCR staff members will develop and teach this workshop.
- *Principles of Metadata and Archiving for E-Science*: this 4-hour workshop, held in four one-hour sessions, will focus on metadata and archiving issues related to e-science, including metadata assignment and terminology, digital preservation, institutional repositories, the use of Dublin Core, and the semantic web. The NN/LM MCR will seek experts in this field to teach this workshop.

These courses are not currently offered in library schools. We will continue to monitor library school curricula for new classes related to e-science.

Each workshop will conclude with a link to an evaluation form to determine if the workshop met the stated objectives.

E-Science Web Pages

The NN/LM MCR will develop a web page with links to e-science resources, the forum archives, and links to other education offerings about e-science. The web page will also link to the New England Region e-science portal, which will feature a definition of e-science and the relevance to librarians; educational tutorials; current practices and projects links; and a virtual community with question and answer and discussion opportunities.

The NN/LM MCR will add a question to the annual technology assessment questionnaire to determine if the e-science web pages are useful to members in their work.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Create the e-science web pages	X				
Hold the inter-regional e-science forum		X	X	X	X
Offer three e-science workshops each year	X	X	X	X	X
Maintain the e-science web pages	X	X	X	X	X

B4b: Monitoring current technological and policy developments and trends to identify those that will improve access to biomedical information

Outcome: -Network members adopt new technologies to increase access to biomedical information

The NN/LM MCR staff will monitor developments in the following technology policy areas:

- Open access and public access policies
- Network access restrictions within institutions, which may restrict access to biomedical information resources and social networking services
- Access to broadband Internet by our members and the public
- Adoption of mobile technologies by our members and the public
- Electronic health record and personal health records standards, funding, and definitions for meaningful use
- Accessibility issues and compliance with Section 508 requirements

Much of this information is published on the web sites of government organizations, professional organizations, and private foundations. In order to ensure timely notification of this information, the NN/LM MCR staff will use the following methods:

- Subscribing to and reviewing relevant RSS news feeds
- Following organizations and individual experts on Twitter
- Reviewing research studies and white papers
- Attending webinars and conferences related to these issues

We will post information on the NN/LM MCR web site about the sources we used to gather this information.

The information will be disseminated to our members using the communication mechanisms described in our response to SOW section A7i, which include:

- RML News postings (available through an RSS feed and direct access on our web site, as well as sent to the MCMLA listserv weekly in an e-mail)
- Postings on the NN/LM MCR Twitter page
- Postings on the NN/LM MCR Facebook page
- Links sent to the NN/LM MCR Delicious social bookmarks list
- Articles in the *Plains to Peaks Post* newsletter
- Presentations at the monthly Breezing Along with the RML sessions using Adobe Connect
- Presentations at conferences

Adopting New Technologies

Technology services and resources continue to advance at a rapid pace. The last few years have seen significant adoption of a number of technologies that were barely on the radar screen in 2006. Although it is impossible to predict the “next big thing,” we expect growth related to the following trends and technologies:

- Increased use of social networking services for both professional and personal use. Currently, these take the form of services like Facebook, Twitter, and professional social networks such as Nature Network, BiomedExperts, Academia.edu, and LinkedIn, but these services continue to evolve and may expand in other ways not imagined yet. We will also monitor research collaboration tools such as Mendeley or 2collab.
- Use of mobile devices for information access and social networking, whether they are in the form of “smart” cell phones or new devices like Apple’s iPad
- Location aware services, including “augmented reality,” which blends information in new ways
- Continued advancement in the speed, quality and usability of videos and multimedia information over the web and on mobile devices, perhaps through the use of new standards such as HTML5
- Continued advancement of video collaboration tools for meetings and classes

The NN/LM MCR staff will keep up to date with new technologies by monitoring RSS feeds, Twitter lists, and recommendations from colleagues.

We will test new technologies to determine if they can be useful to our members. In some cases, we may decide to “wait and see” or place a technology on a back burner before disseminating information about it to our members. In other cases we will immediately alert our members to the technology and its possible uses through the NN/LM MCR communication mechanisms. We will continue to develop classes for those technologies that are worthy of deeper consideration by our members.

Development of a “Technology Sandbox”

We believe it will be critical for NN/LM MCR staff not only to keep up to date and be knowledgeable about the new technologies as they become available, but also to provide a mechanism for members to experiment with them. We will develop a “Technology Sandbox” where members can “play” with new technologies under the guidance of a technology mentor.

The “Technology Sandbox” idea is a virtual version of a session at the Technology Symposium sponsored by the Medical Library Group of Southern California and Arizona (MLGSCA) and the NN/LM Pacific Southwest Region. The session was called “Technology Sherpas” where participants met one-on-one in a computer lab with experts of particular Web 2.0 technologies. For instance, there was a Sherpa available for wikis who was at a computer to meet with a participant who wanted to learn about wikis. The Sherpa answered questions or demonstrated parts of the technology of interest to the member.

The NN/LM MCR “Technology Sandbox” sessions will allow members to join our technology mentor in an Adobe Connect room at a certain time to “play” with a new technology. We will use Adobe Connect breakout rooms to match the mentor with the participant. The technology mentor will provide guidance during the sandbox times and will encourage hands-on experimentation by the participant. Screen control will be given to the participant so they can feel free to “play” and gain hands on experience with the technology. We expect that members may elect to continue communication with their mentors after the sandbox sessions.

NN/LM MCR technology staff or other experts in a particular technology would assume the mentor role. We will also solicit members of the NN/LM MCR Technology Work Group to serve as mentors for sandbox sessions to assist members. We will follow up with members who use the sandbox to determine if they decided to adopt the new technology into their work and to obtain feedback on their “playtime” in the sandbox.

Training in New Technologies

To help members become technology leaders in their institutions, the technology coordinators offered classes and technology updates throughout the current contract period.

The NN/LM MCR has gained years of experience with distance education technologies. Our synchronous classes are taught using Adobe Connect. The advantages include: class members only need a Flash-enabled browser to participate; access to a variety of tools within Adobe Connect, such as a whiteboard, chat, polling, and screen sharing; class members can see and hear the instructor through the use of audio and video; and the class can be recorded so that it can be viewed at a later date.

In the last year, the technology coordinators also began teaching “blended” distance education classes. These classes use Adobe Connect for live, synchronous instruction in combination with an asynchronous course management system called Moodle. Within Moodle, students can ask questions of the instructor and of each other and post the results of their class assignments.

The NN/LM MCR has a repertoire of technology distance education classes that it currently offers using both Adobe Connect and Moodle. The workshops are:

- “13 Things” self-discovery class, a 10-week asynchronous class about Web 2.0 technologies using Moodle; participants are eligible for 20 hours of MLA CE credit
- “Podcasting for Advocacy,” a 4-hour MLA CE credit class using a blended approach (synchronous sessions with Adobe Connect and asynchronous exercises with Moodle)
- “Introduction to Screencasting,” a 4-hour MLA CE credit class using a blended approach (synchronous sessions with Adobe Connect and asynchronous exercises with Moodle)
- “Introduction to Blogs and Wikis,” a 4 hour MLA CE credit class taught using Adobe Connect
- “Social Bookmarking,” a 1 hour class taught using Adobe Connect
- “Using Twitter for Information Discovery,” a 1 hour class taught using Adobe Connect
- “Introduction to RSS,” a 1 hour class taught using Adobe Connect
- “Personalized Web sites with iGoogle,” a 1 hour class taught using Adobe Connect

New workshops will be developed for the next contract as new technologies become available.

In Year 3 of the current contract, the NN/LM MCR released a questionnaire to members asking if they adopted new technologies in their work due to the activities of the coordinators. Fifty two percent of the respondents said they had adopted a new technology. We will continue to ask our members this question to determine whether NN/LM MCR staff has been effective in our promotion of and training to implement new technologies.

Technology Groups

In Year 3 of the current contract, we convened a workgroup with four NN/LM MCR members to assist us in building a social bookmarking resource using Delicious (<http://www.delicious.com/>). Delicious is an online service that allows users to store and share bookmarked resources on the web. To date, work group members have tagged 158 resources that are published on NN/LM MCR’s social bookmarking page (<http://nnlm.gov/mcr/technology/>).

As more of our members become active with social networking technologies and adoption of other new technologies, we will call on them to share experiences with other members or assist with testing and troubleshooting new technologies. Work group members may become “technology mentors” to other members and participate in guiding members in the technology sandbox that we plan to create. We expect that our work group members will continue to identify, evaluate, and monitor the best authoritative technology resources to be listed on the NN/LM MCR social bookmarking site.

In addition to the technology work group, the technology coordinators will work with two additional groups:

1. A new advisory group consisting of librarians and information technology (IT) colleagues will help us with the IT issues faced by hospital librarians (see Response to SOW section B5).
2. In Year 4 of the current contract, we formed an informatics advisory group consisting of librarians in the MidContinental and Pacific Southwest Regions who previously attended the Woods Hole Bioinformatics course sponsored by NLM. The group is planning webinars and a web page of resources related to the librarian's roles in electronic health records and personal health records in Year 5 of the current contract. The group will continue this work in the new contract.

The technology groups will assist the NN/LM MCR in recognizing new technologies and resolving technology issues in the region. Our colleagues in the other NN/LM regions will also play this role for us. Both technology coordinators will continue to be members of the NN/LM Web Developer's group, attend the monthly Web-STOC conference calls, and participate in daily discussions with the group through Skype group instant messaging.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Regularly monitor technology policies and trends	X	X	X	X	X
Disseminate information related to technology policy and trends using the MCR communication mechanisms	X	X	X	X	X
Offer monthly Technology Sandbox sessions using Adobe Connect so that members can experiment with new technologies	X	X	X	X	X
Participate in NN/LM Web Developer's group and Technology Coordinator and Web Developer Skype group chats	X	X	X	X	X
Attend monthly Web-STOC updates	X	X	X	X	X
Form the Technology Work Group, which may include new members annually, who will continue to add new resources to the MCR social bookmarking page as well as serving in the new MCR Technology Sandbox	X	X	X	X	X
Form and meet with the Technology Advisory Group for IT issues	X	X	X	X	X

	Year 1	Year 2	Year 3	Year 4	Year 5
Meet with the Woods Hole Bioinformatics Course alumni group to plan activities related to informatics	X	X	X	X	X
Offer webinars and web page resources related to librarian’s roles in electronic health records and personal health records	X	X	X	X	X
Offer 12 technology classes or workshops per year	X	X	X	X	X
Poll our members each year on their adoption of new technology as a result of our activities	X	X	X	X	X

B5 – Technology Improvement

Statement of Work

The contractor shall develop and implement an NN/LM technology improvement program, if needed, to encourage high quality health information access and delivery to Network members, health professionals and consumers in the Region. Emphasis should be on the “underconnected,” particularly in inner city and rural health organizations, to upgrade and maintain technology access. If no program is proposed, the contractor shall provide an explanation of why the program is not needed. Site selection requirements are found in (Appendix 5).

- a. Identify current or potential Network members that do not have onsite access to NLM resources, do not participate in Resource Sharing, and meet the minimum criteria; and
- b. Improve information services delivered to staff and consumers.

Applicable NN/LM Goal

Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public.

Objective & Rationale:

Objective:

- The NN/LM MCR information technology and policy awareness program improves access to biomedical information

Internet Connectivity

The NN/LM MCR has made videoconferencing and other streaming media video broadcasting technologies an integral method for communicating with Network members regarding health information resources, instruction, and services. Our current definition of connectivity for Network and health care organizations is a minimum of a DSL or cable connection. This permits access to the graphics and multi-media available from MedlinePlus, and other NLM resources, and allows members to participate in regional activities. Much of the MCR's communication with the region and the educational opportunities that we have and will continue to offer during the proposed contract period will use videoconferencing, video broadcasting, and collaboration applications, such as Adobe Connect Pro.

In 2002, the NN/LM MCR sent a Network Member Questionnaire to 216 Network members in the region. The questionnaire asked our members about their Internet connectivity. All members but one reported that they had at least one computer that was connected to the Internet. Furthermore, we queried all members about the level of their connectivity; asking the question: "What is the speed of your Internet connection?" 120 institutions answered the question as shown in Table 11:⁷³

	Libraries Responding to the Survey	Libraries Responding to the Question	28.8 K	56.6 K	High Speed (Cable, DSL, or ISDN)	T-1 or Faster	Don't Know
Colorado	33	32	1	3	6	18	6
Kansas	19	18	0	0	5	9	4
Missouri	40	40	1	1	10	23	7
Nebraska	8	8	0	0	3	4	1
Utah	13	13	0	2	4	9	0
Wyoming	9	9	0	2	1	4	1
Totals	122	120	2	8	29	67	19

Table 11. Network Member Internet Connectivity (2002)

We learned from this report that there were still a few members who were using a slow, dial-up connection, but most of our members were well connected and capable of accessing NN/LM MCR programs and NLM resources. We speculate that since 2002, even more of our members have high speed Internet connections.

⁷³ MidContinental Regional Medical Library Network: Member Survey Fall 2002; Connectivity [Internet]. Salt Lake City: National Network of Libraries of Medicine [cited 2010 May 17]. Available from: <http://medweb.wustl.edu/becker/rml/connect1.asp>

Underconnected

The information displayed in Table 11 has led the NN/LM MCR to expand its definition of underconnected. We are adding the ability to access new communication technologies such as social networking sites (e.g. Facebook, Twitter). Our individual experiences and communications with hospital libraries over the 2006-2011 contract period regarding web-based tools, social networking sites and services, has revealed that having a high bandwidth connection is not the reason our members are underconnected. Their connectivity issues appear to be caused by other factors, such as firewalls that block social networking sites, or institutional policies that restrict the installation of streaming media players (e.g. RealPlayer, QuickTime, or Windows Media Player) or the opening of ports that are required for videoconferencing.

In 2008, the NN/LM MCR sent another Network Member Questionnaire to 204 Network members in the region. We asked, "Are any library staff PREVENTED from using social networking sites such as Facebook, Delicious and the Bringing Health Information to the Community (BHIC) blog due to institutional policies?" We asked this question, because use of participatory, social networks to access and share information is growing. The NN/LM MCR uses Facebook, Twitter, Delicious, RSS, the NN/LM MCR blog, the BHIC blog, and wikis to disseminate health information to the region. In addition, the NLM has a Facebook and Twitter presence, and offers RSS feeds (<http://www.nlm.nih.gov/socialmedia/index.html>) and the Department of Health and Human Services has a Twitter presence as well (<http://www.hhsweets.com/>).

One hundred twenty eight of the 204 Network member institutions who replied to the questionnaire responded to the above question. Table 12⁷⁴ shows that approximately half of the hospital libraries reported they are prevented from using social networking sites and services. On the other hand, only a very small number of academic and other libraries reported policies that prevent use of any of the listed tools and services. We can infer from this study that hospital libraries bear the brunt of their institutions restrictive access policies, as compared to academic libraries.

⁷⁴ Network Member Questionnaire 2008, pg. 12

Web-Based Tools and Services	Are any library staff PREVENTED from using any of the following due to institutional policies?			
	Academic or Other Libraries		Hospital Libraries	
	Yes	No	Yes	No
Social networking sites (e.g., Facebook, LinkedIn, Second Life)	5	33	41	17
Wikis	1	36	14	43
Blogs	1	38	18	42
RSS feeds	2	36	7	45
Chat and instant messaging	3	35	28	22
Videoconferencing such as Adobe Connect	1	34	5	57
Broadcasts, podcasts and streaming video (including YouTube)	5	35	27	38

Table 12. Member access to Web-Based Tools and Services (2008)

Health Information Literacy for Consumers

The NN/LM MCR is currently addressing health information literacy for consumers, healthcare organizations and community-based organizations (CBO) that serve low income populations, the uninsured, those with limited English proficiency (LEP), migrant and seasonal farm workers, individuals and families experiencing homelessness, by funding projects that allow CBOs to extend their outreach efforts beyond the clinic setting. The NN/LM MCR has funded over 10 health information literacy outreach projects during the current contract.

One example of such funding includes the Información de Salud para Promotoras (Health Information for Lay Health Advisors) project in Kansas. This project is a collaboration between the Kansas City, KS Public Library, Dykes Health Sciences Library at the University of Kansas Medical Center, and El Centro, a community based organization whose mission is to create and sustain opportunities that empower Hispanic families. The project provides laptops and instruction to lay health advisors (Promotoras) on how to find reliable health information online in Spanish. Once trained, the Promotoras will go out into their community (health fairs and community events) and assist others with locating health reliable information. The NN/LM MCR will continue to work with and offer funding to organizations whose populations have limited Internet access or face language barriers when searching for reliable health information.

Approach and Methodology:

Outcome: - Network members and other organizations are better able to support access to health information resources

B5a: Identify current or potential Network members that do not have onsite access to NLM resources, do not participate in Resource Sharing, and meet the minimum criteria.

Internet Connectivity

Based on the findings reported above in Tables 11 and 12, we know that our members have fast Internet connections, and that many have firewall issues, but that does not impede them from serving their population. In Year 2, the NN/LM MCR will conduct another Network Member Questionnaire (three years from now), which will allow us to review our member's need for access to Web 2.0 tools and tools unknown at this time. In three years time, institutional policies may change for some of our members, but for those who are still unable to access these tools, we will use our competitive award process to fund projects that increase access to blocked resources.

Since each Network member faces unique challenges, the NN/LM MCR works closely with individual members facing access barriers. For example, The NN/LM MCR is currently working with Via Christi Library of Via Christi Hospitals in Wichita, Kansas to provide a 3G wireless broadband modem card for an Internet connection, outside of their institution's network, that will enable them to access Web 2.0 communication tools that are currently blocked at their institution. The NN/LM MCR will continue to review barriers to health information encountered by Network members on an annual basis, reporting the results to the region and to the NLM. The NN/LM MCR will continue to be available to consult with Network members to help them find solutions to connect to health information.

Technology Classes

Even though many of our Network members cannot access certain web-based tools, the MCR will continue to offer classes to help our members remain current with new technologies for accessing and sharing health information (See our response to SOW section B4 for details). By offering classes, our members will be prepared, if and when their institutions remove restrictions to these tools. This also provides those members with a strong justification for their need to be able to access those tools by demonstrating that others in the profession are using them for continuing education in the field.

Technology Advisory Group

During the proposed contract period, the MCR will form a Technology Advisory Group, which will include Network Members and Information Technology professionals from the region. We hope that by working with professionals who have firsthand knowledge of network and security issues, we will gain insight into the unique issues that some of our members encounter within

their institutions. As we learn from our Advisory Group, the MCR will share information with its members via videoconference presentations, articles, and blog posts.

B5b: Improve information services delivered to staff and consumers

The NN/LM MCR staff and its Network members will be polled to determine if they are working with any underconnected organizations, with an emphasis on organizations that are located in inner city and rural parts of the region. During the proposed contract, the NN/LM MCR will conduct informal needs assessments of the targeted organizations to determine if they are familiar with NLM resources, whether or not they are connected to the Internet or if they are underconnected and meet the site requirements specified in Appendix 5 of the RFP. The NN/LM MCR will work with Network members and organizations that are interested in participating in the Health Information Literacy Connections project that will provide hardware, a 3G wireless broadband modem card for Internet access, and training on NLM resources (including multi-language resources). This effort is meant to assist the organizations to improve their connectivity, increase health information literacy and extend their outreach efforts beyond the clinic setting. For example, the funded organizations could take the laptops to health events at faith-based or other community sites, and provide instruction and assistance in finding reliable health information. We intend to fund a total of six projects during Years 1 and 2, and an additional six projects during Years 3 to 5. Each organization will be funded for a 12-month period. Beyond the funding period, the community organization will be responsible for on-going financial maintenance of the Internet connection (approximately \$50 a month). Each state coordinator will follow up to evaluate whether the project improved connectivity to biomedical information and what impact it has had on patient health information literacy and information access for the health care providers.

The NN/LM MCR will report on the process and results of working with Network members and community organizations by submitting articles for publication and proposals for meeting presentations. The funded organizations will be asked to contribute to and review articles and presentations. NLM will be kept informed of our progress through our quarterly reports.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Review barriers to health information by Network members	X	X	X	X	X
Assemble a Technology Advisory group that includes Network member and IT professionals for a two year term	X		X		X
Provide consultations and assist Network members in gaining access to blocked resources to improve their connectivity to biomedical health information resources	X	X	X	X	X
Provide NLM with reports on the results of working with Network Members to improve their connection to health information	X	X	X	X	X
Conduct informal needs assessment of targeted organizations. Fund identified organizations for the Health Information Literacy Connections Award	X	X	X	X	X
Report on the process and results of working with community organizations to improve connectivity and access to reliable biomedical health information resources	X	X	X	X	X
Provide training on NLM resources to identified organizations	X	X	X	X	X
Collect data from connectivity pilot projects to understand the impact outreach projects have on their institutions and target populations	X	X	X	X	X
Submit articles for publication and proposals for meeting presentations to report progress of connectivity pilot projects	X	X	X	X	X

B6 – Project Funding and Administration

Statement of Work

The RML is responsible for creating records in NLM's outreach applications database for all projects sponsored by the RML, including identifying an RML staff member who is responsible for creating and maintaining project records. All quarterly and final reports of projects will be submitted electronically using NLM's Web-based reporting tool to be developed and deployed during the first year of the 2011-2016 contract. The following funding categories are not comprehensive, but illustrate the variety of projects an RML may fund:

- Community awards (Ready America awards) to fund projects that (1) assist Network members in becoming active partners in their communities' emergency preparedness, response and recovery planning and (2) encourage emergency preparedness collaborations among Network members, community based organizations, first responders, public health workforce and other organizations.
- Exhibit awards support Network members' representing NLM and the RML at a regional, state or local meeting.
- Express awards. Support a wide range of small outreach projects that target health professionals, librarians and/or consumers.
- Information technology and policy awareness conferences may be conducted by a Network member with sponsorship by an RML to highlight the use of information technology to improve access to health information for health professionals and consumers.
- Outreach awards provide support for health information outreach to health professionals, public health workforce, and/or consumers.
- Technology improvement awards include funding to support (1) enhancement of equipment for access to and delivery of health information and for Network members, health professionals and consumers and (2) communication of the contributions of library services for the larger organization.

Applicable NN/LM Goal

To promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to Healthy People 2020 (<http://www.healthypeople.gov/HP2020/>)

Objective & Rationale:

Objective:

- NN/LM MCR funding opportunities improve access to biomedical information

The NN/LM MidContinental Region (MCR) will continue its rich tradition of providing funding for projects for Network members who have demonstrated their ability to execute programs to make their work more visible within their institutions and their communities. This funding

provides opportunities for members to offer a service or conduct research that may be beyond the capabilities of local budgets. Equally important, pursuing funding is an excellent advocacy strategy, as bringing in outside funding increases the perceived value of librarians to their institutions. The NN/LM MCR has been successful in awarding collaborative projects involving public libraries and community-based organizations with the purpose of promoting biomedical resources to a wider audience from trusted community organizations. The intended result is for health professionals, patients, and consumers to benefit from increased access to health and biomedical information resources.

During the current contract period, the NN/LM MCR funded twelve innovative projects with its award program for a total of more than \$145,500. Recipients of awards included Network members from community based organizations, hospital, health sciences, and public libraries. A few examples of projects funded in the current contract:

1. *Integrating the Medical Library Into Hospital Emergency Planning* is a project conducted by a hospital librarian. The project provides for the coordination of access to health information during an emergency and formally incorporates information access into the emergency operations plan for the hospital. Information services and resources of the medical library will be available to the clinical team when the emergency plan is activated.
2. *Información de Salud para Promotoras* is a partnership between a health sciences library, a community based organization and a local public library. The partnership provides training to Promotoras (lay-health advisors) who do not speak fluent English and have low computer and health literacy skills. The objective is for Promotoras to know where and how to locate reliable health information in Spanish on the Internet. The Promotoras then become advisors for access to health information and resources in the local Latino community.
3. *St. Luke's Hospital Library Advocacy*, a project, managed by a hospital's medical librarian, focused on the information needs of physicians and other clinical personnel such as nutritionists, respiratory therapists, and pharmacists. The objective is to identify library users and their information needs by using the data from several surveys and focus groups in the hospital, and to create a plan that will provide exemplary information services in the hospital.

It is clear that Network members have an interest in funding opportunities and we will continue to offer competitive funding in the 2011-2016 Contract.

Librarians play an important role as hospitals, universities and other institutions focus on new programming brought about by the American Recovery and Reinvestment Act and health care reform. Librarians have the ability to organize information, collaborate with many groups, and make connections as neutral clearinghouses and central agencies. Three institutions in the MidContinental Region received Clinical and Translational Science Awards (CTSA) funding. The NN/LM MCR is funding small demonstration projects at the libraries of these institutions during

Year 5 of the current contract. Health sciences librarians will be encouraged to develop new roles and to develop the skills and competencies to support CTSA and e-science projects.

Due to a need for more work in the area of connectivity, the NN/LM MCR will identify, with the help of Network members, inner-city, and rural-health organizations that are under-connected to high quality health information and will fund pilot projects to improve that connectivity.

Likewise, the NN/LM MCR will offer an award to Network members who will assist with promoting NLM resources to health professionals and training them to use the resources effectively.

Approach & Methodology:

Outcome: - Projects funded by the NN/LM MCR demonstrate ways to improve access to health information

Continuity of Health Information Awards

The NN/LM MCR will offer the Continuity of Health Information Award in the next contract, with the focus on health information literacy, hospital library advocacy and emergency preparedness. The awards will be promoted via the NN/LM MCR web site, the RML News blog and the MCMLA listserv. Requests for proposals (RFPs) will be announced in Years 1-4 and the NN/LM MCR will fund projects up to \$ 15,000 each.

Health information literacy projects receiving funding will be required to provide a new service within an institution or develop partnerships outside the institution that enhance access to health information for consumers with low health literacy and/or to enhance access for health care professionals providing health information to consumers with low health literacy.

Hospital library advocacy projects will be required to strengthen the position of the library within the institution and/or community, to create institutional or public awareness about the library, to convey a message about what the library has to offer, particularly with regard to health information and why it matters to everyone in the institution/community.

Emergency preparedness projects will be required to develop partnerships that enhance access to health information in preparation for, during, and immediately following emergencies.

Health Information Literacy Connectivity Award

Outcome: - Staff and consumers at inner-city and rural health organizations will have increased access to biomedical information

The NN/LM MCR will fund Health Information Literacy Connectivity Award to help healthcare organizations provide health information to under connected health consumers. NN/LM MCR coordinators will work with organizations that serve an under-connected population in rural or

inner city areas. This award focuses on organizations that work out in the community and need mobile access to health information. Staff of community organizations will be trained on NLM resources and will take laptops into the field (health fairs, faith-based health group meetings, etc.) to provide health information. The award will provide hardware and mobile Internet connectivity for up to \$2,025. Funding will be awarded in Years 1-5. (See our response to SOW section B5b for more information)

Training Health Professionals Award

The Training Health Professionals Award will be available to Network members who are certified, as NN/LM MCR representatives, to present and exhibit at regional conferences and meetings of health professionals and to provide training sessions. Certified members will need to have a working knowledge of NLM databases and services. The award will include funding for travel, exhibit registration, and materials for up to \$1,000. Awards will be made in each state. State coordinators will assist with promoting the awards in their states. The health professional audience will vary, in each state, depending on the type of conference where the MCR is exhibiting/presenting. Funding will be awarded in Years 1-5. (See our response to SOW section B1a for more information on this outreach effort).

New Collaborations for Health Sciences Librarians Award

The NN/LM MCR will offer the New Collaborations for Health Sciences Librarians Award to fund large projects that are meant to have a greater impact than the smaller awards. These awards are intended to attract Network members who can design projects that can be adopted for national application. Funds for up to \$60,000 will be granted to institutions for programs that may address any of several areas including patient safety, e-science, health information literacy, CTSA or clinical information systems. The RML expects that the results of these projects will be published in peer-reviewed professional journals. Funding will be awarded in Years 2 and 3.

The NN/LM MCR realizes the proposal writing process can be very complex and perplexing for applicants and that they must take care to include all the details needed before submission. NN/LM MCR coordinators have been and will be available to consult with applicants so that quality proposals will be received. As part of our consultation service, we discuss the feasibility of the project, help develop an idea, recommend funding sources, review proposals before submission, and when appropriate, write a letter of support. Our service is very effective when Network members take advantage of it. We will continue to provide technical sessions for all of our awards to help members understand the RFPs. We will promote these services to our members on the NN/LM MCR blog, NN/LM MCR web site and through other communication tools. (Our consultation service is described in our response to SOW section A12).

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Offer Health Information Connectivity Awards	✗	X	X	X	X
Offer Continuity of Health Information Awards	✗	X	X	X	
Offer Training Health Professionals Award	X	X	X	X	X
Offer New Collaborations for Health Sciences Librarians Award		X	X		

B7 – Enhancements**Statement of Work**

Throughout the five-year contract period, the Regional Medical Libraries are encouraged to submit proposals to conduct special projects designed to improve or enhance Network programs and services to health professionals, libraries, and the general public. These projects will be within the scope of work of the contract. In addition to regional programs, RMLs may propose joint projects with other Regions as well as programs that are national in scope. Enhancements may also be proposed by other Network libraries under subcontract to the RML.

Applicable NN/LM Goal

To develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public

Objective & Rationale:

Objective:

- NN/LM MCR funding opportunities improve access to biomedical information

The NN/LM MCR held many discussions, received input from its Regional Advisory Board, reviewed the results of its assessment and evaluation tools, and searched the literature for trends that would affect health information access in the future in preparation for the NN/LM RFP. However, two years occurs from the time that the proposal is written before implementation of the programming begins. Six years occurs from the time that the proposal is written until the end of the new contract. Change happens at such an astronomical speed that

it is impossible to design a program that completely addresses the unknown future. The programming and interventions that are described in this proposal based on current knowledge may not be suitable when the future becomes today. Appropriate projects that would greatly improve access to health information may be conceived by the MCR staff, by our Network members, or by a collaboration of Regional Medical Libraries.

Approach & Methodology

Outcome: -Projects funded by the MCR demonstrate ways to improve access to health information

The NN/LM MCR is aware of initiatives led by health sciences librarians that may need funding in the future. An example is Outreach Connections: Native Health Information. This is a project that resulted from a national meeting held in Albuquerque, New Mexico in 2006. The result of this meeting was the establishment of a volunteer steering committee to develop a collaborative space for anyone involved and interested in health information outreach to Native communities (i.e., American Indian, Alaska Natives, Hawaiian). The steering committee for this initiative is made up of librarians and others involved in health care. They are working to increase the number of activities that are contributed to the wiki to make it more useful for others involved in outreach to this population. In a few years they may reach a point where they will want to expand their space to include health information outreach to other populations or improve the usability of their collaboration space, each of these activities requires funding. The NN/LM South Central Region and the NN/LM MidContinental Region are both interested in supporting Outreach Connections: Native Health Information and would collaborate on applying for funding from the National Library of Medicine to sponsor another meeting to strategize how the next steps would be implemented.

The NN/LM MCR is occasionally approached by Network members who have project ideas that they would like the RML to fund. Usually we recommend that they apply for one of our competitive awards, but sometimes a project idea will fall outside the scope or costs more than the funding budgeted for our competitive awards. In these cases, the MCR will approach the National Library of Medicine (NLM) and seek approval to fund the project as an enhancement project.

Staff from the NN/LM MCR regularly meets with their counterparts from the other Regional Medical Libraries. Ideas are discussed at these meetings and potential collaborative efforts may be identified that were not in any RML's budget. These collaborative efforts that require funding are also potential enhancement projects that the RMLs would propose to the NLM.

Schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5
Seek NLM approval for Enhancement Projects as they are proposed by the region	X	X	X	X	X
Seek NLM approval for Enhancement Projects that are developed in collaboration with other Regional Medical Libraries	X	X	X	X	X

Regional Services Plan

Section C: Logic Models

Note: In consultation with the Outreach Evaluation Resource Center, we are deleting objectives from our logic model. Goals and outcomes provide enough of a basic structure in which to operate and measure the NN/LM MCR's impact.

Goal #1

Develop collaborations among Network members and other organizations to improve access to and sharing of biomedical information resources throughout the nation

	Statement of work	Objective	Outcome	Summary of Activities
A1	<p>Develop and implement a program designed to provide health professionals in all parts of the Region with a basic level of information services which includes:</p> <ol style="list-style-type: none"> Access to books, journal articles, and audiovisuals; Access to online databases in the health sciences; and Access to reference and web services. <p>The RML shall establish agreements with Network member libraries to provide these services to unaffiliated health professionals. For any areas where the RML is unable to establish such agreements, the RML will provide the service on a cost recovery basis;</p>	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Network members and other organizations are better able to support access to health information resources</p>	<ul style="list-style-type: none"> - Provide basic services throughout the region - Sign subcontracts with Resources Libraries to provide basic services - Create web page for subsidized document delivery - Promote NN/LM Member Directory - Promote document delivery services - Promote free full text resources
A3	<p>Manage the NN/LM Network membership program for the Region. Membership in the NN/LM Network is an integral part of the NN/LM program and defines the NN/LM Network member constituency (see Appendix 1).</p> <p>The Network members are crucial to the operation of the NN/LM Network, providing health professionals and consumers with access to needed information resources. Network membership is a way of recognizing the contributions of members. The contractor shall:</p> <ol style="list-style-type: none"> Recruit new Network members from eligible libraries and information centers in the Region. Network membership certificates for the 2011-2016 time period will be provided by NLM and be personalized and distributed by the RML; Support Network members that participate in DOCLINE; Work with the NLM DOCLINE Team on DOCLINE 	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Network members and other organizations are better able to support access to health information resources</p>	<ul style="list-style-type: none"> - Manage the NN/LM Network membership program for the Region - Recruit New NN/LM Network Members - Support DOCLINE users - Test and implement DOCLINE system enhancement - Involve Network members in RML activities

	Statement of work	Objective	Outcome	Summary of Activities
	<p>system enhancement testing and implementation; and</p> <p>d. d. Actively involve Network members in NN/LM infrastructure and outreach programs, including obtaining feedback on regional and NLM programs on periodic basis.</p>			
<p>A5</p>	<p>Enter into formal agreements with a limited number of institutions in the Region to serve as Resource Libraries:</p> <p>a. Criteria for selection of Resource Libraries will be proposed by the offeror and may include, but are not limited to:</p> <ol style="list-style-type: none"> 1. Quality, uniqueness and/or size of the collection which add significantly to the resources of the Region; 2. Special expertise which contributes to improving regional or national programs, in areas such as distance learning, advanced applications of technology to solving information access and delivery problems, digitization of information, commitment to the retention and preservation of print materials, library and information research, etc.; <p>b. The RML will negotiate with Resource Libraries that are willing to develop projects that will build on their expertise to address the needs of the Region and to enhance the Resource Libraries' ability to contribute to their institutional goals and priorities.</p> <p>c. All Resource Libraries and the RML must agree to:</p> <ol style="list-style-type: none"> 1. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system, and keep detailed library profile information up-to-date in the system; 2. Contribute their institution's serial holdings 	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Resource Libraries are partners in carrying out the NN/LM 2011-2016 contract.</p>	<ul style="list-style-type: none"> - Sign subcontracts with Resources Libraries to provide basic services - Monitor the implementation of the Resource Libraries subcontracts through the Activity Reporting System - Administer Resource Library and Coordinators questionnaires

	Statement of work	Objective	Outcome	Summary of Activities
	<p>data to DOCLINE and keep holdings current by updating them online;</p> <ol style="list-style-type: none"> 3. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms; 4. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service; 5. Participate in the Electronic Fund Transfer System (EFTS); and 6. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations. 			
A6	<p>Implement the NN/LM National Emergency Preparedness & Response Plan (http://nnlm.gov/ep). Each RML is responsible to one other RML as a backup in an emergency, referred to as the Buddy System. Buddy responsibilities are located at: https://staff.nnlm.gov/wiki/Emergency_Preparedness#RML_pairs</p> <p>Buddy relationships are as listed:</p> <ul style="list-style-type: none"> MAR and SCR SEA and PNR GMR and PSR MCR and NER <p>RMLs also serve as backup for NLM customer service inquiries</p>	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>NN/LM MCR customers are satisfactorily served in time of a disaster.</p>	<ul style="list-style-type: none"> – Conduct interactive online instruction on the concepts presented in the 10-Step approach – Conduct internal drills to test the continuity of service plans on a regular basis – Conduct table-top exercises to test the communication and back-up service plans with the New England Region on a regular basis

	Statement of work	Objective	Outcome	Summary of Activities
A7	Identify and maintain effective methods of communication with current and potential NN/LM participants. All print and electronic communication should include an acknowledgment of NLM funding and the NN/LM Logo using the National Network of Libraries of Medicine Graphic Standards dated July, 1992. The contractor shall:			<ul style="list-style-type: none"> – Identify and maintain effective methods of communication – Distribute NN/LM and NLM information – Coordinate development of materials with RMLs – Maintain NN/LM MCR web site – Attend NLM and RML teleconferences and meetings
	a. Distribute important information about regional and national programs, policies, services, and procedures to the Region;	Librarians, health care providers and consumers receive information from the MCR and provide feedback about health information resources, services and programs	NN/LM MCR communications mechanisms are effective	<ul style="list-style-type: none"> – Communicate with other networks and relevant organizations – Inform NLM of regional, state, and local activities – Obtain feedback from NLM and NN/LM users – Identify and contribute classes to the MLA Educational Clearinghouse
	b. Coordinate the development of materials with other RMLs and NLM to avoid duplication of effort;	NN/LM MCR will collaborate with NLM and other RMLs	NN/LM MCR collaborations are valuable	<ul style="list-style-type: none"> – Investigate and implement communication technologies
	c. Develop and maintain a regional Web site as an integral component of the NN/LM Web site, that incorporates the guidelines of 508 compliance (http://www.section508.gov);	Librarians, health care providers and consumers receive information from the MCR and provide feedback about health information resources, services and programs	NN/LM MCR communications mechanisms are effective	<ul style="list-style-type: none"> – Participate in RML Directors’ meetings
	d. Participate in monthly teleconferences with NLM and the other RMLs to discuss topics of importance in the overall management of the NN/LM program;	MCR will collaborate with NLM and other RMLs	NN/LM MCR collaborations are valuable	
	e. Develop working relationships with other networks and relevant organizations by identifying common program interests and goals, work to develop regular lines of communication and develop appropriate cooperative programs;	Librarians, health care providers and consumers in the MCR receive information and provide feedback about health information resources, services and programs	NN/LM MCR communications mechanisms are effective	

	Statement of work	Objective	Outcome	Summary of Activities
	f. Inform NLM about regional, state and local activities of health professionals and health sciences libraries, networks, and other organizations as they relate to the programs of the NN/LM, NLM and the national information infrastructure;	MCR will collaborate with NLM and other RMLs	NN/LMMCR collaborations are valuable	
	g. Obtain ongoing feedback from users about their information preferences, needs and uses, and recommend ways of improving health professional and consumer access to information;	Librarians, health care providers and consumers receive information from the MCR and provide feedback about health information resources, services and programs	NN/LM MCR communications mechanisms are effective	
	h. Assist in the identification of training resources to be added to the MLA Educational Clearinghouse;	MCR will collaborate with NLM and other RMLs	NN/LMMCR collaborations are valuable	
	i. Participate in testing and using alternative methods of communication; and	Librarians, health care providers and consumers receive information from the MCR and provide feedback about health information resources, services and programs	NN/LM MCR communications mechanisms are effective	
	j. Participate in RML Directors' meetings.	MCR will collaborate with NLM and other RMLs	NN/LMMCR collaborations are valuable	
A8	Implement a Regional Advisory Committee (RAC). The RAC must include health professionals and health sciences librarians from hospital libraries and other large and small medical libraries within the Region. The RAC should also include representatives of state library agencies, public and school libraries, health information consumer groups, special populations, as well as	The Regional Advisory Board contributes to improving access to health information in the MCR	The Regional Advisory Board effectively advises the RML on outreach and programming for Network involvement and access to health	<ul style="list-style-type: none"> – Reconstitute Regional Advisory Board annually – Assign Regional Advisory Board members a project area – Hold annual and virtual meetings – Assess member's Board experience – Review impact of the Regional Advisory Board on RML programming

	Statement of work	Objective	Outcome	Summary of Activities
	<p>representatives of community organizations with which the RML has partnerships. The RAC need not be structured as a single body, nor is it necessary for it to meet in a physical location, as long as a system is in place that enables the RAC to:</p> <ul style="list-style-type: none"> a. Advise the RML within the framework of the NN/LM contract on ways to develop and implement outreach programs to improve health professionals' and the public's access to biomedical information; b. Advise the RML in establishing regional priorities, policies and procedures, including the development and implementation of a regional emergency preparedness plan, and reviewing regional programs; c. Develop plans to encourage health professionals and health sciences librarians to participate actively in regional and national programs affecting the delivery of health information; and d. Assist the RML in identifying health professionals without access to health information. 		<p>information for health professionals and public</p>	
A15	<p>Assist NLM in identifying collections of historical and unique materials related to the health sciences and developing ways to increase access to these materials (Appendix 3);</p>	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Network members are aware of and have access to historical collections within the region as well as those from the National Library of Medicine</p>	<ul style="list-style-type: none"> – Promote historical collections within the region – Invite speaker from NLM History of Medicine for “Breezing Along with the RML” webinars – Invite speaker from NLM Exhibitions for “Breezing Along with the RML” webinars

Goal #2

Promote awareness of, access to, and use of biomedical information resources for health professionals and the public, with a particular emphasis on contributing to Healthy People 2020 (<http://www.healthypeople.gov/HP2020/>)

	Statement of work	Objective	Outcome	Summary of Activities
A14	Develop programs, which may include pilot projects, to assist the information professional in promoting evidence based health information in the institution. The programs shall identify health information issues and address the changing role of the information professional with a special emphasis on hospital librarians. The programs may include but not be limited to: advocacy, education and training to address knowledge management, clinical information systems, patient safety programs, electronic health records, health literacy, or patient education;	Network members, especially hospital librarians, promote evidence based health information	Network members, especially hospital librarians, participate in emerging practices to promote evidence based health information in the institution	<ul style="list-style-type: none"> – Sponsor knowledge sharing workshop – Offer partial scholarships to attend online business classes – Co-sponsor Health Literacy Summit – Offer online patient safety classes – Sponsor Patient Safety Symposium – Support Network members involvement in electronic health record programs and/or clinical information system projects – Invite Network members to share their experiences in RML sponsored events
B1	Health Professionals and Public Health Workers			
	The contractor shall develop, implement, and evaluate outreach programs that bring biomedical information resources within easy reach of U.S. health professionals and the public health workforce, who are not directly affiliated with an institution with a medical library. In carrying out these programs, the contractor shall focus on unaffiliated health professionals located in rural, inner city, and Medically Underserved Areas (MUA), public health workers, and minority health practitioners or those who serve minority populations. The outreach to health professionals program shall enlist the assistance of Network members through the use of subcontracts, agreements and other mechanisms. Specifically, the contractor shall undertake the following:			

	Statement of work	Objective	Outcome	Summary of Activities
	<p>a. Develop programs that reach practicing health professionals, including but not limited to: physicians, physician assistants, nurses, pharmacists, complementary and alternative medicine and allied health practitioners, veterinarians, public health workers, and health educators, with particular emphasis on collaborations with organizations/institutions that represent these groups;</p>	<p>Health information resources are within easy reach of practicing U.S. health professionals</p>	<p>Health professionals, librarians, students and members of other organizations have increased skills to use resources for health information</p>	<ul style="list-style-type: none"> - Enlist the assistance of Network members and Regional Advisory Board members to exhibit at national, regional, state, and local meetings - Evaluate outreach activities to understand the impact of outreach and ways to enhance programs - Develop an exhibitor toolkit for Network members
	<p>b. Develop programs that reach minority health practitioners and students in Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges, Community Colleges, and Vocational Schools, including institutions and organizations that focus on Native Hawaiians and Alaska Natives and the health professionals serving those populations or working in those disciplines. Programs should also focus on subject disciplines that have been identified as priority initiatives (e.g., health disparities, consumer health, health information literacy, HIV/AIDS, health services research, toxicology and environmental health);</p>	<p>Health information resources are within easy reach of practicing U.S. health professionals</p>	<p>Health professionals, librarians, students and members of other organizations have increased skills to use resources for health information</p>	<ul style="list-style-type: none"> - Develop programs to infuse health information into the curriculum at minority serving institutions - Support integration of health information into the curriculum at institutions that have minority populations enrolled in allied health programs - Evaluate outreach activities to understand the impact of outreach and ways to enhance programs - Develop an exhibitor toolkit for Network members
	<p>c. Develop pilot projects, which may include professional schools and organizations, to identify and promote the roles of libraries in institutions that have e-science initiatives;</p>	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Network members, especially hospital librarians, participate in emerging practices to promote evidence based health information in the institution</p>	<ul style="list-style-type: none"> - Conduct pilot e-science project - Subcontract pilot project to identify skills, competencies and roles for librarians in e-science - Investigate opportunity for graduate library program to develop e-science curriculum

	Statement of work	Objective	Outcome	Summary of Activities
	<p>d. Develop programs, which may include pilot projects, with recently funded DHHS regional extension centers (RECs) (http://www.hhs.gov/news/press/2010pres/02/20100212a.html) to assist health professionals with implementing and using health information technology; and</p>	<p>Personal health information and access to evidence based health information are incorporated into EHR systems.</p>	<p>RECs and health IT programs are aware of the value of incorporating personal health information and access to evidence based medicine resources in EHR systems</p>	<ul style="list-style-type: none"> – Work with RECs during their funding period that ends in 2013 – Support librarians at the 5 community colleges to integrate evidence based medicine and consumer health information into the Health IT program curricula – Continue to educate ourselves and monitor new develops and advancements on the implementation and use of EHRs – Involve the RML and its Network members in REC committees – Form a task force of Network members that are on REC committees to share effective practices on adopting the EHR model – Develop a resource packet on Regional Extension Centers to assist Network members
	<p>e. Develop culturally and linguistically appropriate resources and provide training in the effective use of electronic health information resources. Before developing any training materials, the MLA Educational Clearinghouse will be checked to avoid duplication. Copies of all training materials developed will be registered with the MLA Educational Clearinghouse. Training should include, but not be limited to: PubMed, MedlinePlus, and other NLM resources.</p>	<p>Health information resources are within easy reach of practicing U.S. health professionals</p>	<p>Health professionals, librarians, students and members of other organizations have increased skills to use resources for health information</p>	<ul style="list-style-type: none"> – Promote culturally and linguistically appropriate electronic resources at state and local public health exhibits and conferences – Develop and offer faith-based health information classes for parish nurses – Work with Refugee Health Coordinators to identify culturally and linguistically appropriate resources – Assess and evaluate outreach activities in order to enhance programs – Develop an exhibitor toolkit for Network members

	Statement of work	Objective	Outcome	Summary of Activities
B2	Consumers			
	The contractor shall develop, implement, and evaluate outreach programs to increase the public’s awareness of and access to high quality electronic health information. In carrying out these programs, the contractor shall work with a variety of intermediaries including Network members, health professionals, public health workers, information professionals, educators, community, faith-based, volunteer, and other types of organizations, including those serving minorities, special and underserved populations, health advocacy and self-help groups, through the use of subcontracts, agreements, and other mechanisms. Specifically, the contractor shall undertake the following:		Network members and other organizations are better able to support access to health information resources	
	a. Develop programs that reach special populations (e.g. minorities, seniors, teens, veterans’ groups, low income populations, etc.), focus on special topics (e.g. health disparities, health information literacy, HIV/AIDS, public health, culturally and linguistically appropriate information, personal health records, emergency preparedness, etc.), and promote NLM resources to consumers;	The NN/LM MCR increases the public's awareness of and access to health information	Network members and other organizations are better able to support access to health information resources	<ul style="list-style-type: none"> – Provide online training for public librarians – Continue managing Bringing Health Information to the Community blog
	b. Foster collaborations and encourage outreach partnerships among Network members, community, faith-based, and volunteer organizations including those serving minority and underserved populations, and other types of organizations, to improve access to electronic consumer health information at the local, state, and regional levels;	Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information	Network members and other organizations are better able to support access to health information resources	<ul style="list-style-type: none"> – Promote health information literacy collaborations that reach other networks and relevant organizations – Recognize public health/public library partnerships – Develop strategies with the Community Outreach Working Group to assist Network members in outreach efforts – Include a health information literacy focus in the Continuity of Health Information Award – Share effective practices through the Library Success Wiki

	Statement of work	Objective	Outcome	Summary of Activities
				<ul style="list-style-type: none"> – Assess state needs and promote the NLM and NN/LM through various networking and collaborative efforts – Maintain State Library collaborations
	<p>c. Provide consultation for Network members in project planning, preparation, writing and evaluation;</p>	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Network members have the necessary skills to develop projects and programs</p>	<ul style="list-style-type: none"> – Use the RML’s communication tools to promote its project consultation service – Offer OERC data collection and data analysis modules – Offer the “Measuring Your Impact” class
	<p>d. Develop culturally and linguistically appropriate resources and provide training in the effective use of electronic health information resources. Before developing any training materials, the NLM Training Center and MLA Educational Clearinghouse will be checked to avoid duplication. Copies of all training materials developed will be registered with the MLA Educational Clearinghouse. Training should include, but not be limited to: PubMed, MedlinePlus, and other NLM resources; and</p>	<p>The NN/LM MCR increases the public’s awareness of and access to health information</p>	<p>Network members and other organizations are better able to support access to health information resources</p>	<ul style="list-style-type: none"> – Promote culturally appropriate resources in presentations including Spanish and Multiple Language resources on MedlinePlus – Encourage developers of multiple language resources to use MLA Clearinghouse and MedlinePlus materials – Maintain state web pages with Spanish section “Información en Español”, and section on Minority Health – Continue to develop and support classes developed by NN/LM Coordinators with regard to minority health topics
	<p>e. Develop pilot projects to identify and promote the roles of libraries in institutions that have received or are seeking NIH Clinical and Translational Science Awards (CTSA) with a focus on community engagement.</p>	<p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Network members, especially hospital librarians, participate in emerging practices to promote evidence based health information in the institution</p>	<ul style="list-style-type: none"> – Offer funding to members to explore their involvement in CTSA efforts within their institutions

	Statement of work	Objective	Outcome	Summary of Activities
B3	<p>Exhibits and Presentations at Meetings</p> <p>The contractor shall promote NLM and NN/LM programs and services at national, regional and state meetings of health professionals and organizations that represent consumers. NLM will provide each RML with an exhibit backdrop to be used at national exhibits. The national exhibit schedule will be set for October-September. Responsibilities shall include the following:</p> <p>a. Provide full support for a minimum of eight meetings (four national and four regional, state, or local) for an exhibit, program presentation, or course offering, including making all arrangements (scheduling, fees, shipping, logistics, equipment and publications), in consultation with the NN/LM National Network Office. Coordination of course offerings, program presentations and other offerings at meetings should be appropriate with national initiatives and promotional activities identified by NLM;</p> <p>b. Designate an RML staff member who is responsible for identifying health professional and consumer focused meetings, reporting exhibits and other RML activities at all national, regional, state and local meetings;</p> <p>c. Attend state library association meetings and exhibit or make presentations to promote NLM and NN/LM programs and services; and</p> <p>d. Enlist the assistance of Network members in exhibiting at national, regional, state, and local meetings.</p>	<p>Librarians, health care providers and consumers receive information from the MCR and provide feedback about health information resources, services and programs</p> <p>-</p> <p>-</p> <p>-</p> <p>Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information</p>	<p>Librarians, health care providers and consumers in the MCR are more aware of health information resources, services and programs</p> <p>-</p> <p>-</p> <p>-</p> <p>Network members and other organizations are better able to support access to health information resources</p>	<p>- Exhibit at national meetings as assigned and submit program proposals to present</p> <p>- Exhibit at local or regional meetings and submit program proposals to present</p> <p>- Submit exhibit reports on NLM External Exhibit Report System and in the Activity Reporting System</p> <p>- Exhibit at state library association meetings and submit program proposals to present</p> <p>- Enlist the assistance of Network members and Regional Advisory Board members to exhibit at national, regional, state, and local meetings</p>

	Statement of work	Objective	Outcome	Summary of Activities
<p>B6</p>	<p>The RML is responsible for creating records in NLM’s outreach applications database for all projects sponsored by the RML, including identifying an RML staff member who is responsible for creating and maintaining project records. All quarterly and final reports of projects will be submitted electronically using NLM’s Web-based reporting tool to be developed and deployed during the first year of the 2011-2016 contract.</p> <p>The following funding categories are not comprehensive, but illustrate the variety of projects an RML may fund:</p> <ul style="list-style-type: none"> • Community awards (Ready America awards) to fund projects that (1) assist Network members in becoming active partners in their communities’ emergency preparedness, response and recovery planning and (2) encourage emergency preparedness collaborations among Network members, community based organizations, first responders, public health workforce and other organizations. • Exhibit awards support Network members’ representing NLM and the RML at a regional, state or local meeting. • Express awards. Support a wide range of small outreach projects that target health professionals, librarians and/or consumers. • Information technology and policy awareness conferences may be conducted by a Network member with sponsorship by an RML to highlight the use of information technology to improve access to health information for health professionals and consumers. • Outreach awards provide support for health information outreach to health professionals, public health workforce, and/or consumers. • Technology improvement awards include funding to support (1) enhancement of equipment for access to 	<p>NN/LM MCR funding opportunities improve access to biomedical information</p>	<p>Projects funded by the NN/LM MCR demonstrate ways to improve access to health information</p>	<ul style="list-style-type: none"> – Offer funding to Network members to exhibit and present at local, state or regional conferences – Offer funding to members to explore their involvement in CTSA efforts within their institutions – Offer funding for projects in patient safety, e-science, health information literacy or clinical information systems – Offer funding to inner-city and rural health care organizations to provide alternative means to access health information – Offer funding to members on projects focused on health information literacy, library advocacy, and emergency preparedness – Provide technical consultations for awards

	Statement of work	Objective	Outcome	Summary of Activities
	and delivery of health information and for Network members, health professionals and consumers and (2) communication of the contributions of library services for the larger organization.			
B7	<p>Enhancements</p> <p>Throughout the five-year contract period, the Regional Medical Libraries are encouraged to submit proposals to conduct special projects designed to improve or enhance Network programs and services to health professionals, libraries, and the general public. These projects will be within the scope of work of the contract. In addition to regional programs, RMLs may propose joint projects with other Regions as well as programs that are national in scope. Enhancements may also be proposed by other Network libraries under subcontract to the RML.</p>	<p>NN/LM MCR funding opportunities improve access to biomedical information</p>	<p>Projects funded by the MCR demonstrate ways to improve access to health information</p>	<ul style="list-style-type: none"> – Request NLM enhancement funds for projects as they are proposed by the region – Request NLM enhancement funds for projects developed in collaboration with other RMLs

Goal #3

Develop, promote, and improve electronic access to health information by Network members, health professionals, and organizations providing health information to the public.

	Statement of Work	Objective	Outcome	Summary of Activities
A2	Assess and respond to the needs of health sciences libraries to support programs that improve the transfer of health care and biomedical information within their institutions and through their participation in the network. This includes promoting the use of relevant NLM services, testing new features of these services; and identifying the need for new or enhanced NLM services;	Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information	Network members and other organizations are better able to support access to health information resources	<ul style="list-style-type: none"> – Conduct Network Member Questionnaire – Conduct focus groups with Network members – Promote and gather feedback on NLM products and services
-				
A4	Implement the portion of the Regional Services Plan concerned with document delivery to provide health professionals, including unaffiliated health professionals throughout the Region, with efficient, rapid access to health sciences information resources, and promote network participation in the Electronic Fund Transfer System (EFTS). The plan for the Region shall conform to the NN/LM Resource Sharing Plan (Appendix 2);	Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information	Network members and other organizations are better able to support access to health information resources	<ul style="list-style-type: none"> – Implement portions of the NN/LM Resource Sharing Plan as they relate to document delivery services: <ul style="list-style-type: none"> o Serial Holdings Maintenance o Standardize Policies and Procedures o Test New Resource Sharing Methods o Support Negotiating e-journal Subscriptions o Emergency Document Delivery and Collection Access o Promote use of electronic document delivery o Support EFTS
-				
A11	Assist Network members with negotiating e-licensing agreements that meet the needs of their institutions and support the mission of the NN/LM by providing resources on and training in e-licensing issues;	Librarians in the MCR provide programs and services that improve the transfer of health care and biomedical information	Network members and other organizations are better able to support access to health information resources	<ul style="list-style-type: none"> – Assist Network members with negotiating e-licensing agreements – Provide training on licensing electronic resources – Develop and maintain electronic resources on licensing electronic resources – Provide consultation services on negotiating e-licenses

	Statement of Work	Objective	Outcome	Summary of Activities
A12	Provide consultation to Network members as well as community-based, faith based and other organizations representative of special populations on preparing proposals for projects to compete for NLM and NN/LM funding	Network members and other organizations have resources to support and improve information services for health professionals and others.	Network members have the necessary skills to develop projects and programs	<ul style="list-style-type: none"> - Promote consultation services - Provide resources on developing partnerships - Offer proposal writing classes - Offer technical sessions
-				
A13	Promote and encourage the submission of applications for NLM sponsored grants;	Network members and other organizations have resources to support and improve information services for health professionals and others	Network members and other organizations are aware of NLM grants available for application and funding	<ul style="list-style-type: none"> - Publish NLM grant opportunities in NN/LM MCR communication tools - Review regionally funded projects as possible candidates for NLM funding - Promote NLM funding in presentations - Promote successful projects through NN/LM MCR communication tools
-				
A16	Provide a training facility equipped with personal computers as well as technologies supporting distance learning, including webcasts for conducting NLM training classes as outlined in the NLM Training Center Statement of Work. There will be one personal computer for every student. Equipment requirements are in (Appendix 4). Priority shall be given for scheduling regional training. When not in use for regional training classes, the facility may be used for other types of training.	Health information resources are within easy reach of practicing U.S. health professionals	Health professionals, librarians, students and members of other organizations have increased skills to use resources for health information	<ul style="list-style-type: none"> - Outfit Eccles Health Sciences Library computer lab with computers and distance education technology - Host NLM Training Center workshops at 2-3 sites annually
B4	The contractor shall develop an information technology and policy awareness program which includes:			
	a Regional forums that focus on e-science initiatives, e.g., the use of information technology to manage large stores of scientific and/or clinical data (as in clinical data warehouses), approaches	The NN/LM MCR information technology and policy awareness program improves	Health sciences librarians are integrated in the conduct of e-science	<ul style="list-style-type: none"> - Hold an inter-regional e-science forum - Create and maintain the e-science web pages - Offer e-science education webinars

	Statement of Work	Objective	Outcome	Summary of Activities
	<p>to integrating data with other types of information, involvement of libraries in teaching e-science research methods, and policy issues affecting production, distribution, and access to data and information; and</p> <p>b Monitoring current technological and policy developments and trends to identify those that will improve access to biomedical information.</p>	<p>access to biomedical information</p> <p>The NN/LM MCR information technology and policy awareness program improves access to biomedical information</p>	<p>Network members adopt new technologies to increase access to biomedical information</p>	<ul style="list-style-type: none"> - Regularly monitor and disseminate technology policies and trends - Form the Technology Work Group - Offer technology sandbox sessions - Teach at least 12 technology classes - Attend NN/LM technology meetings - Poll members about the usefulness of the technology program
<p>B5</p>	<p>Technology Improvement</p> <p>The contractor shall develop and implement an NN/LM technology improvement program, if needed, to encourage high quality health information access and delivery to Network members, health professionals and consumers in the Region. Emphasis should be on the “underconnected,” particularly in inner city and rural health organizations, to upgrade and maintain technology access. If no program is proposed, the contractor shall provide an explanation of why the program is not needed. Site selection requirements are found in (Appendix 5). The contractor shall:</p> <p>a Identify current or potential Network members that do not have onsite access to NLM resources, do not participate in Resource Sharing, and meet the minimum criteria; and</p> <p>b Improve information services delivered to staff and consumers.</p>	<p>The NN/LM MCR information technology and policy awareness program improves access to biomedical information</p> <p>-</p> <p>-</p>	<p>Network members and other organizations are better able to support access to health information resources</p>	<ul style="list-style-type: none"> - Continue to review and report on the barriers to health information by Network members on an annual basis - Offer updated versions of 13 Things class that reflects new web-based tools - Form a Technology Advisory Group - Poll Network members to determine if they are working with organizations that meet the criteria of being underconnected - Work with NN/LM MCR Network members and other organizations that are interested in participating in an underconnected pilot project - Publish articles or present at professional conferences on the process and results of working with NN/LM MCR Network members and community organizations - Inform NLM on our progress through our quarterly reports

Goal # 4

Understand how the products and services of the NN/LM and NLM contribute to improved access to health information by health professionals, and the public. [Note: added for the NN/LM MCR]

	Statement of Work	Objective	Outcome	Summary of Activities
A9	<p>Monitor and evaluate the Region's programs to assess their effectiveness in meeting NN/LM goals and to identify and resolve problems which impede the effective delivery of health information services. The contractor shall:</p> <ul style="list-style-type: none"> a Evaluate and/or assess selected regional programs in consultation with the NN/LM Outreach Evaluation Resource Center and the Regional Advisory Committee; b Provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups; and c Participate in a formal contract site visit and review of the regional program, to be conducted at least once during the contract, by selected representatives from NLM, the RAC and/or Network members, and at least one other RML 	<p>NN/LM MCR is effective in assisting Network members in the delivery of health information services</p>	<p>Evaluation data demonstrates the effectiveness of the Region's programs</p>	<ul style="list-style-type: none"> - Analyze the outcomes and indicators achieved in the 2006-2011 contract and identify effective practices - Review Activity Report System reports and make adjustments to planned activities - Investigate and implement additional methods for obtaining information about NN/LM MCR member needs - Develop questions for and administer Network Member Questionnaire and focus groups - Prepare reports for NLM site visit
A10	<p>Participate in tests, usability studies, and user needs assessments of NLM and NN/LM products and services</p>	<p>Develop a mechanism to provide NLM with regular feedback about NLM and NN/LM products and services from individuals and constituent groups</p>	<p>NLM and NN/LM products and services better reflect the needs of users</p>	<ul style="list-style-type: none"> - Provide NLM and NN/LM with data from usability studies and user needs assessments - Develop questions for and administer Network Member Questionnaire and focus groups - Participate and provide feedback on tests requested by NLM

Part II: Personnel

**National Network of Libraries of Medicine
MidContinental Region
Personnel 2011-2016**

Professional PersonnelDirector

Spencer S. Eccles Health Sciences Library, University of Utah

Jean Shipman is the NN/LM MCR Director. She is responsible for overall implementation of the contract and will be the key contact for the technical aspects of the contract. Ms. Shipman's responsibilities will require her to spend .1 FTE on the RML contract. (208 hrs)

Associate Director

Spencer S. Eccles Health Sciences Library, University of Utah

Claire Hamasu is the NN/LM MCR Associate Director responsible for the coordination of planning, implementing and evaluating NN/LM programs, including special projects. She will supervise the RML staff and direct the activities of the RML coordinators. She is responsible for leading the development of annual program objectives, budgets, and for submitting reports on the progress of the contract to the NLM. This is a 1 FTE position.

Members Services and Utah Coordinator

Spencer S. Eccles Health Sciences Library, University of Utah

John Bramble is the RML coordinator responsible for carrying out RML services and promoting NLM and NN/LM resources in the state of Utah. As the Member Services Coordinator he has regional responsibilities for:

- coordinating recruitment of new members,
- identifying services for Full as well as Affiliate Network members,
- developing and encouraging resource sharing in the region,
- DOCLINE support and management,
- coordinating the regional response to DOCLINE team questions and testing of system enhancements,
- supervising the DOCLINE liaison,
- coordinating regional licensing,
- coordinating member involvement in outreach activities and the RML infrastructure.

This is a 1 FTE position (2080 hrs.).

Technology Coordinator

~~Sharon Dennis~~ **The librarian filling this vacant position** shares responsibility for providing technology leadership for the MidContinental Region programs and projects. ~~As The~~ **Technology Coordinator, she:**

- Supports the applications used by the NN/LM MCR,
- Troubleshoots problems related to the NN/LM.gov web sites, videoconferencing applications and other communication tools,
- Explores new technologies that can be applied to libraries and improve health information access,
- Trains librarians and health care providers in the use of communication and web 2.0 tools,
- Writes documentation in the use of systems hardware, software, and related troubleshooting,
- **Oversees that the NN/LM MCR web site complies with 508 requirements.**

A more detailed position listing is available in Part II Personnel, page 221.

~~The Technology Coordinator position is shared with the NN/LM Pacific Southwest Region. Ms. Dennis also leads their technology program. The NN/LM MCR is reimbursed by UCLA for the .5 FTE that she allocates for the NN/LM PSR. This is a .5 FTE full time position (1040 2080 hrs.).~~

Assessment and Evaluation Coordinator

Bernard Becker Medical Library, Washington University

Betsy Kelly is the RML Coordinator for Washington University. This is a .5 FTE position.

Ms. Kelly's responsibilities include:

- Coordinating the assessment of regional needs
- Evaluating the MCR program
- Training members on evaluation theory and practice
- Providing resources to support members in their own assessment and evaluation efforts
- Working with the Outreach Evaluation Resource Center and the Regional Advisory Board on evaluation activities

Health Information Literacy Coordinator

Creighton University Health Sciences Library, Creighton University

Siobhan Champ-Blackwell is the RML Coordinator for Creighton University. She shares the responsibility for providing health information literacy leadership for the region. This is a 1 FTE position. Ms. Champ-Blackwell's responsibilities include:

- Coordinating and conducting outreach activities focused on improving health information literacy among librarians, health care providers and the public
- Raising awareness of the importance of health information literacy
- Training librarians, health care providers and staff from community organizations about health information literacy
- Working with coordinators from other RMLs on joint efforts

Health Information Literacy and Colorado State Coordinator

Denison Memorial Library, University of Colorado

Dana Abbey is the RML Coordinator for the University of Colorado. She shares the responsibility for providing health information literacy leadership for the region. This is a 1 FTE position.

Ms. Abbey's responsibilities include:

- Coordinating and conducting outreach activities focused on improving health information literacy among librarians, health care providers and the public
- Raising awareness of the importance of health information literacy
- Training librarians, health care providers and staff from community organizations about health information literacy
- Working with coordinators from other RMLs on joint efforts
- Statewide coordination of RML resources and services

Education and Nebraska State Coordinator

McGoogan Library of Medicine, University of Nebraska

Marty Magee is the RML Coordinator for the University of Nebraska. She is responsible for providing leadership for the NN/LM MCR education program. This is a 1 FTE position.

Ms. Magee's responsibilities include:

- Developing the educational infrastructure
- Working with the National Library of Medicine Training Center
- Increasing training opportunities in the region
- Improving instructional skills of Network members
- Supporting training for health professionals and consumers
- Developing new skills among Network members
- Statewide coordination of RML resources and services

Library Advocacy and Missouri State Coordinator

J. Otto Lottes Health Sciences Library, University of Missouri-Columbia

Barbara Jones is the RML Coordinator for the University of Missouri-Columbia. This is a 1 FTE position. Ms. Jones' responsibilities include:

- Coordinating NN/LM MCR's program that supports the value of Network members in their institutions

- Promoting health sciences librarianship
- Statewide coordination of RML resources and services

Technology and Kansas State Coordinator

Archie R. Dykes Library of the Health Sciences, University of Kansas

Rebecca Brown is the RML Coordinator for the University of Kansas. Rebecca Brown shares responsibility for providing technology leadership for the MidContinental Region programs and projects. This is a 1 FTE position. Ms. Brown:

- Supports the applications used by the NN/LM MCR,
- Troubleshoots problems related to the NN/LM.gov web sites, videoconferencing applications and other communication tools,
- Explores new technologies that can be applied to libraries and improve health information access,
- Trains librarians and health care providers in the use of communication and web 2.0 tools,
- Writes documentation in the use of systems hardware, software, and related troubleshooting
- **Oversees that the NN/LM MCR web site complies with 508 requirements,**
- Statewide coordination of RML resources and services

Funding Resources and Wyoming State Coordinator

University of Wyoming Libraries, University of Wyoming

Jim Honour is the RML Coordinator for the University of Wyoming. This is a ~~1~~ **.75** FTE position.

Mr. Honour's responsibilities include:

- ~~○ Promoting NN/LM MCR funding opportunities~~
- ~~○ Coordinating the review and management of NN/LM MCR awards~~
- ~~○ Partnering with all coordinators to improve member proposal planning and writing skills~~
- Statewide coordination of RML resources and services

Starting in Year 2 depending on funding:

Funding Resources and Wyoming State Coordinator

University of Wyoming Libraries, University of Wyoming

Jim Honour is the RML Coordinator for the University of Wyoming. This is a 1 FTE position.

Mr. Honour's responsibilities include:

- **Promoting NN/LM MCR funding opportunities**
- **Coordinating the review and management of NN/LM MCR awards**
- **Partnering with all coordinators to improve member proposal planning and writing skills**
- **Statewide coordination of RML resources and services**

State Coordinator Responsibilities

All state coordinators are responsible for implementing the activities of the special projects within their states as specified in the logic model. These include but are not limited to the following:

- Exhibiting and presenting at local and assigned national meetings
- Training groups that the RML has designated for the year
- Recruiting participation in the outreach and infrastructure activities of the MCR
- Submitting articles and information blurbs on NLM and NN/LM resources and services to publications of local organizations
- Attending local health sciences library consortia meetings to keep members abreast of NN/LM MCR initiatives
- Recruiting new members
- Responding to questions from Network members on NLM and NN/LM resources and services
- Contributing their state's perspective in planning and implementation of special projects
- Establishing a relationship with the state library, the state library association, public health departments, and community organizations with an interest in health information literacy

Support Staff

Project Coordinator

Spencer S. Eccles Health Sciences Library, University of Utah

Suzanne Sawyer, Project Coordinator, is responsible for the day-to-day operation of the RML office. As Project Coordinator, she:

- triages voice and data communications to the RML office,
- assures that the web site is current,
- **Maintains her familiarity with 508 requirements,**
- edits and designs the layout of the newsletter and other publications,
- assists in the preparation of RML plans, budgets, reports, and meetings,
- assists in the management of the subcontracts and Network membership for the region,
- coordinates the attendance at national and local exhibits.

This is a full-time position (2080 hrs.)

Financial Analyst

Spencer S. Eccles Health Sciences Library, University of Utah

Sandy Drollinger, Financial Analyst, works with the Associate Director to administer the project budget. As Financial Analyst, she:

- prepares and interprets management information and other financial reports,
- analyzes and interprets financial documents, statistical data, and historical data,
- audits and reconciles data and recommends solutions when appropriate,
- recommends and implements improvements that affect the RML's accounting system,
- works with other university departments in the preparation and administration of the RML's account,
- helps prepare the RML budget.

This is a .5 FTE position (1040 hrs.)

Technology Associate

~~Spencer S. Eccles Health Sciences Library, University of Utah~~

~~Susan Roberts, Technology Associate, supports the RML's technology outreach efforts and digital communication tools. As Technology Associate, she:~~

- ~~○ oversees and makes changes to the MCR web site,~~
- ~~○ **Maintains her familiarity with 508 requirements,**~~
- ~~○ suggests and implements improvements on the usability of the MCR web site,~~
- ~~○ assists liaisons with Dreamweaver,~~
- ~~○ promotes web pages from development to public view,~~
- ~~○ teaches online sessions on web-related topics,~~
- ~~○ reviews Google Analytics for web site and report implications,~~
- ~~○ manages the MCMLA-I.~~

~~This is a .4 FTE position (832 hrs.)~~

DOCLINE Liaison

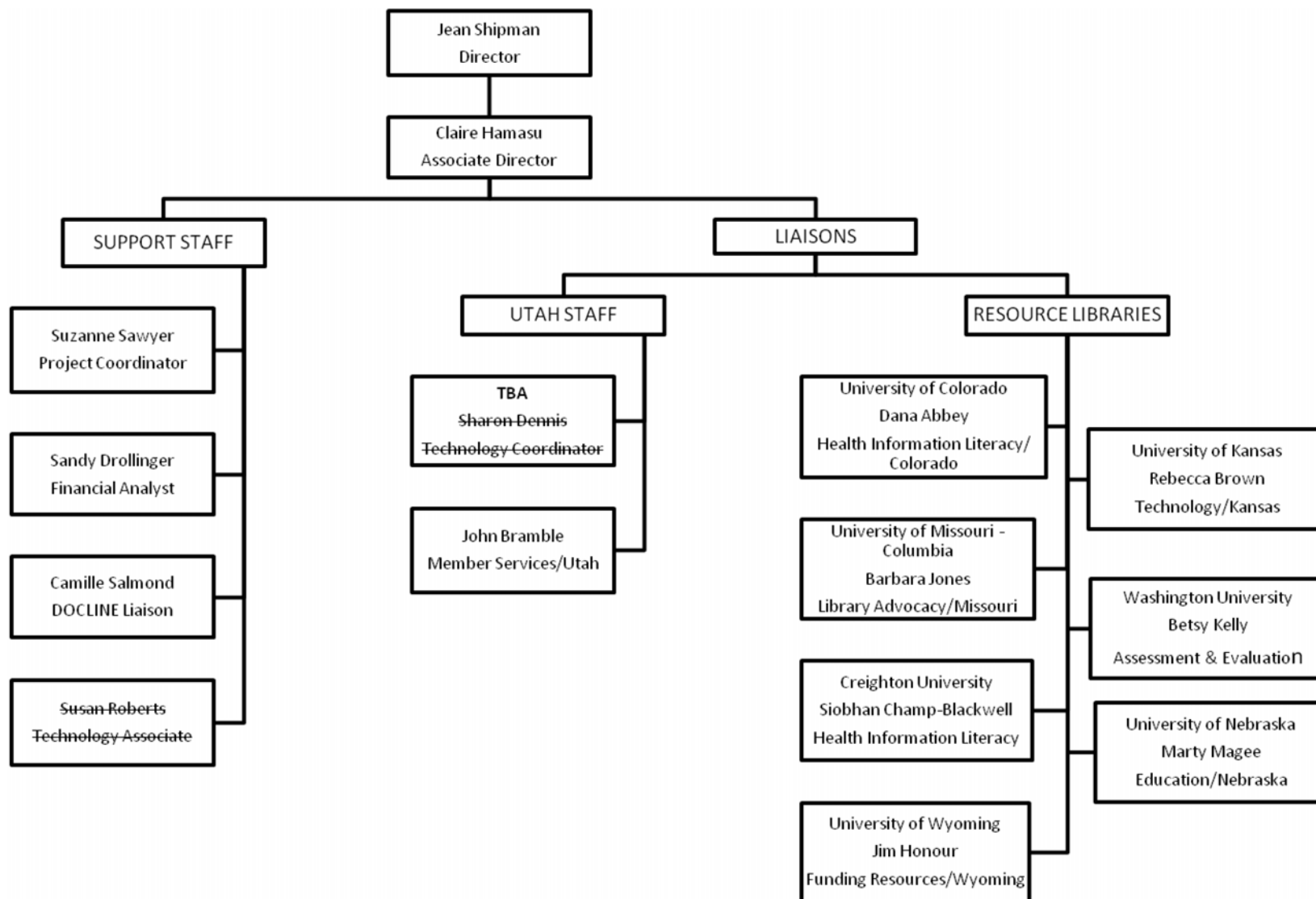
Spencer S. Eccles Health Sciences Library, University of Utah

Camille Salmond, the DOCLINE Liaison, consults with the other liaisons advising them on ILL issues in the region. She:

- approves routing table changes,
- handles DOCLINE holds,
- answers questions from Network members and liaisons,
- contributes to the regional response to DOCLINE team questions and testing of new DOCLINE features,
- reviews DOCLINE training materials and publications for accuracy,
- assists with and follows up on potential Network members in Utah.

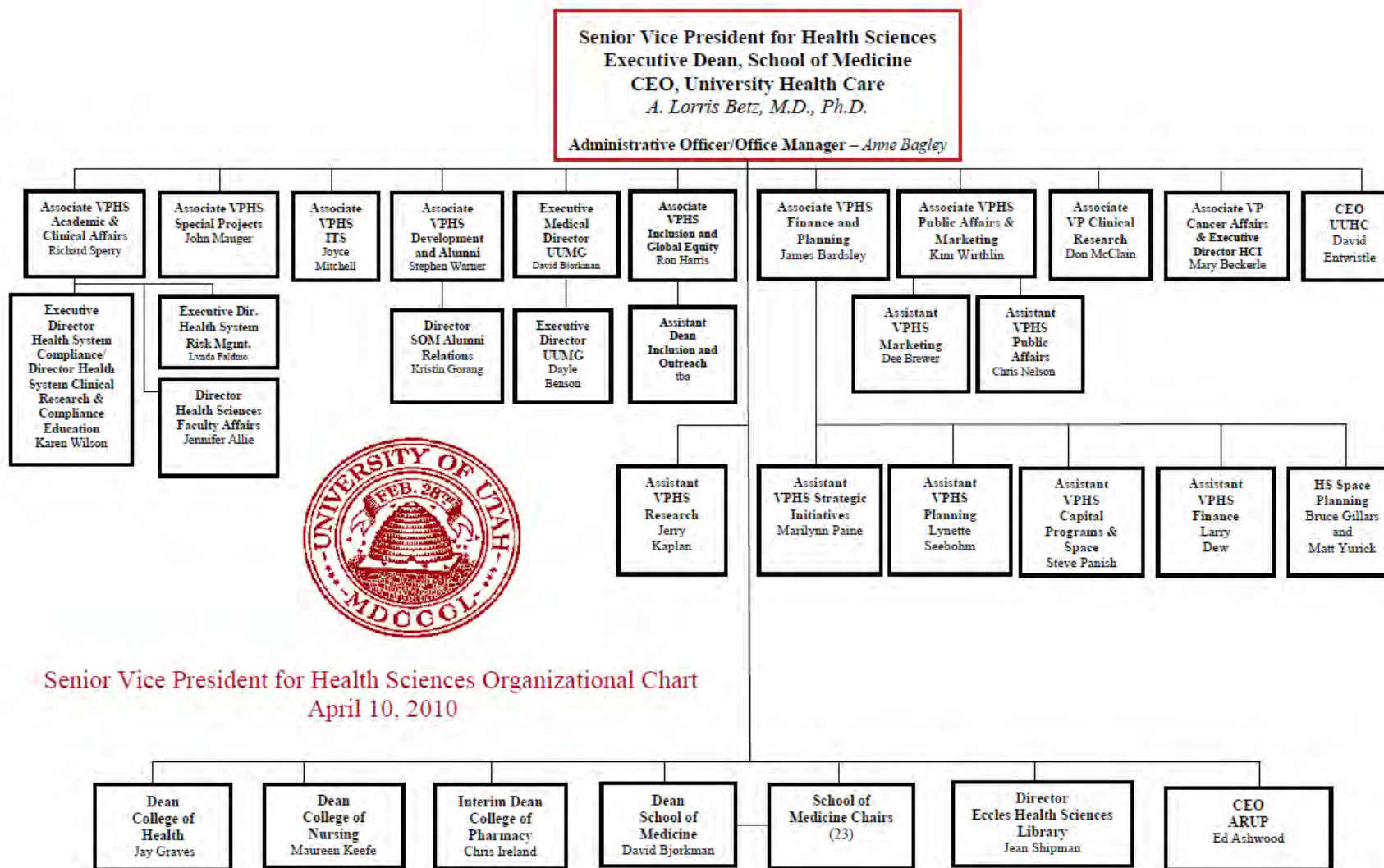
This is a .1 FTE position (208 hrs).

NN/LM MidContinental Region Organization



NN/LM MidContinental Region Staffing Chart

Name/Job Title (Professional Personnel)	Outreach Programs					Total FTE*
	Network Programs	Outreach to Health Professionals & Public Health Workers	Outreach to Consumers	Exhibits & Presentations at Meetings	Information Tech/ Policy Awareness/ Technology Improvement	
Jean Shipman, Director	0.016	0.016	0.02	0.032	0.016	0.10
Claire Hamasu, Associate Director	0.2	0.16	0.16	0.32	0.16	1.00
John Bramble, Utah/Network Membership Liaison	0.4	0.2	0.1	0.2	0.1	1.00
Sharon Dennis TBA, Technology Coordinator	0.2	0.08	0.02	0.4	0.3	1.00
Subtotal (Professional Personnel)	0.816	0.456	0.30	0.952	0.576	3.10
Suzanne Sawyer, Project Coordinator	0.16	0.16	0.16	0.36	0.16	1.00
Sandy Drollinger, Financial Analyst	0.10	0.08	0.08	0.16	0.08	0.50
Camille Salmond, DOCLINE Liaison	0.10	0.00	0.00	0.00	0.00	0.10
Susan Roberts, Technology Associate	0.10	0.04	0.01	0.20	0.05	0.40
Subtotal (Support Personnel)	0.36	0.24	0.24	0.52	0.24	1.60
TOTAL (All Personnel)	1.176	0.696	0.54	1.472	0.816	4.70



Senior Vice President for Health Sciences Organizational Chart
 April 10, 2010

Jean P. Shipman**Director, Spencer S. Eccles Health Sciences Library and the Spencer F. and
Cleone P. Eccles Health Sciences Education Building****Director, National Network of Libraries of Medicine MidContinental Region
University of Utah**

Jean P. Shipman, M.S.L.S., AHIP, FMLA, is the Director of the Spencer S. Eccles Health Sciences Library and the NN/LM, MidContinental Region. From 2000-2008, she was Director, Tompkins-McCaw Library for the Health Sciences and Associate University Librarian, VCU Libraries. Ms. Shipman received her MLS from Case Western Reserve University in 1980 and her BA in Biology in 1979 from Gettysburg College.

Ms. Shipman has over thirty years of health science library experience, many of which were obtained within IAIMS institutions. She worked directly under the supervision of Nina Matheson, one of the original IAIMS concept co-creators. She also served as an NN/LM RML Coordinator (Southeastern/Atlantic Regional Medical Library) for three years where she implemented Loansome Doc for the region. Her background includes experience in major academic health sciences libraries as well as hospital libraries. She served as president of the Medical Library Association (MLA) from 2006-2007. She also was secretary of the MLA Board of Directors, chair of the Informationist Task Force that planned the MLA/NLM Informationist Conference held in April 2002, and was a member of the Information Specialist in Context Implementation Task Force. Ms. Shipman served on the 2003-2006 Annual Statistics Editorial Board, Association of Academic Health Sciences Libraries, and is an editor of the *Journal of Electronic Resources in Medical Libraries*. Ms. Shipman served on NIH Special Emphasis Panel grant review teams for IADL G07 and Information System Grants (G08) and on a NLM Long Range Planning Panel. She has hosted three National Library of Medicine Second Year Associate Fellows within the past seven years.

Ms. Shipman has developed and taught several MLA-accredited continuing education courses. With funding from the National Library of Medicine, she served as co-PI for the Health Information Literacy Research Project and has taught many sessions (in-person and via Adobe Connect) related to health information literacy. She also will serve as co-PI of an IMLS grant if awarded in June 2010 to Association of Health Sciences Academic Libraries (AAHSL) to teach librarians about publishing. She has a distinguished and prolific publication and presentation record, with over 85 publications and presentations to date. She co-edited two special award-winning themed-issues of *Reference Services Review* which showcase over 20 case studies of emerging roles of health sciences librarians.

Ms. Shipman is chair of the AAHSL Scholarly Communications Committee and is a member of AAHSL's Joint Publisher/Liaison Task Force and the Chicago Collaborative. She also is a member of the SPARC Steering Committee and the SPARC Open Access Working Group.

Claire Hamasu

**Associate Director, National Network of Libraries of Medicine MidContinental Region
Spencer S. Eccles Health Sciences Library
University of Utah**

Claire Hamasu was selected in 2001 to be the associate director to establish the NN/LM MidContinental Region based upon a new model of sharing the responsibility with Resource Libraries for the planning, implementation, and evaluation of the NN/LM program. Ms. Hamasu was not new to Regional Medical Libraries when she accepted the position at the University of Utah. She had served for nine years as a coordinator at the Pacific Southwest Regional Medical Library (PSRML) at the UCLA Louise M. Darling Biomedical Library. From 1992-2001 she was responsible for developing the program and budget for PSRML's outreach to health professionals. In the day-to-day administration of the NN/LM MidContinental Region Ms. Hamasu oversees the development and implementation of the program by managing and supporting the activities of the RML staff. She prepares the annual budget and monitors the budget for the contract. She responds to NLM when there are questions and concerns with the region and represents regional concerns to NLM.

An associate director requires the skill to work well with other individuals and with other organizations. Tribal Connections Four Corners is an example of Ms. Hamasu's skills in leading a collaboration. This is a partnership of four academic health sciences libraries and three Regional Medical Libraries who have joined to improve the health information access of Native Americans in the Four Corners juncture (AZ, CO, NM, UT). They decided it is better to work together than to address the challenge separately. Ms. Hamasu has worked with the National Library of Medicine to obtain funding for this effort, coordinated the subcontracts to implement the project, and provided guidance for the group.

Ms. Hamasu's experience with outreach to health professionals is as long as her career as a medical librarian. Her first position as a hospital librarian had her visiting other facilities in the state hospital system promoting information services to their physicians and staff. Her next position was as a reference librarian at Hawaii Medical Library in Honolulu, which at that time was the Resource Library for the state of Hawaii. Ms. Hamasu was part of the library team who applied for and received one of the first Grateful Med purchase orders to teach health professionals around the state to do their own MEDLINE searches. Ms. Hamasu helped write the proposal and was one of the trainers for this outreach project. During this time NLM added a new position for outreach to the RMLs. Based on her experience she was hired by the Pacific Southwest Regional Medical Library to design and implement a program to improve the information access of health professionals in the Pacific Southwest Region. She coordinated the PSRMLs exhibit, training, and funding program to introduce health professionals to NLM and NN/LM resources and services. She was responsible for making the contacts that would result in presentations at professional meetings and invitations to exhibit at local meetings. In addition to training health professionals at facilities without medical librarians, she also worked with health sciences librarians to offer training and promote their services to organizations in their own communities. Before leaving PSRML she was piloting the use of videoconferencing to

teach public health professionals in California to use PubMed and NLM's environmental and toxicology databases. Ms. Hamasu was constantly looking for ways to simplify the funding process of regional awards to encourage more Network members to apply for financial support for outreach projects to health professionals. The PSRML express awards that offer seed money for a limited project is a result of this effort.

Ms. Hamasu has been involved in all aspects of the grants/contracts process an applicant, a reviewer, a funder, and an instructor. Ms. Hamasu has submitted successful proposals to NLM. She has reviewed proposals submitted for RML funding and for the NN/LM Access to Electronic Health Information RFP. Ms. Hamasu has written RFPs for the RML and developed submission and review forms. She has been employed by programs funded by NLM grants and contracts. Most recently, she shares her experience when she co-teaches a workshop "Grant Writing for \$ucce\$\$" to provide Network members with the skills to write a successful proposal and to encourage them to apply for NLM and NN/LM funding.

In the area of public health, Ms. Hamasu has taught public health professionals to use NLMs resources so she is aware of the issues that they face. She has worked with the Public Health Liaison of the NN/LM MidContinental Region to establish priorities for this part of the contract to address Healthy People 2010 objectives. She was a member of the Partners for Information Access to the Public Health Workforce Steering Committee.

**~~Sharon Dennis, Technology Coordinator Position Description~~
~~National Network of Libraries of Medicine MidContinental Region~~
~~Spencer S. Eccles Health Sciences Library~~
~~University of Utah~~**

The NN/LM MidContinental Region is under contract with the National Library of Medicine to “advance the progress of medicine and improve the public health through access to health information.” The NN/LM MCR is headquartered at the MidContinental Regional Medical Library based at the University of Utah’s Spencer S. Eccles Health Sciences Library in Salt Lake City, Utah.

The Technology Coordinator is responsible for promoting and supporting the use of technology throughout MCR with the Technology Coordinator at the University of Kansas. This position reports to the NN/LM MCR Associate Director.

Responsibilities:

- Provide technology leadership for the region
- Partner with all coordinators to support the use of technology to improve library services and access to health information
- Teach the skills necessary for librarians to become technology leaders in their institutions
- Keep up with new developments and disseminate information to the members about informatics (e.g., electronic health record) as it relates to the role of the hospital librarian participating in clinical information systems
- Participate in testing or re-testing methods for communication and collaboration
- Promote new technologies (such as smartphones, social media, etc.) to librarians across the region
- Encourage the use of alternative means of communication among Network members, including teleconferences, online conferences, videoconferencing, chat, and other technologies
 - Act as a technology resource for the NN/LM MCR Coordinators and Network members throughout the region
- Supervise the administration of the MCR and PSR websites
- Serve as a representative to the Web Services Technology Operations Center (Web-STOC) for MCR and PSR
- Contribute to the goals, objectives and budget for the technology program for both MCR and PSR
- Report on progress in meeting program goals and objectives
- Maintain familiarity with Section 508 requirements

Qualifications

Required: An ALA accredited MLS; demonstrated excellent written, teaching, and oral communication skills, and the ability to explain technology in plain English; good project management skills that include planning and setting priorities; good interpersonal skills and the ability to work in a team environment; demonstrated experience with information access technologies; familiarity with current web trends and technology; a working knowledge of NLM resources (PubMed, MedlinePlus), HTML, and MS Office applications to include but not limited to Word, PowerPoint, and Excel. A valid driver's license and travel is required.

Desirable: 3 years of professional librarian experience in the health sciences; experience with adult education; familiarity with PHP and MySQL; web management and videototechnology experience; familiarity with Section 508 requirements.

Rebecca Brown, Technology/Kansas Coordinator
National Network of Libraries of Medicine MidContinental Region
Archie R. Dykes Library of the Health Sciences
University of Kansas

The MCR has two staff members assigned to the Technology Special Project. ~~Sharon Dennis TBA~~ and Rebecca Brown are the Technology Coordinators for the MCR.

- 1) Applications support:
 - ~~Ms. Dennis and~~ Ms. Brown regularly troubleshoot problems related to the use of the NN/LM.gov web sites, videoconferencing applications, and other communication applications that are used by the MCR staff. Onsite hardware and software systems support for the liaisons is provided by systems support staff at each Resource Library.
- 2) Training in the use of communications and web 2.0 tools:
 - ~~Ms. Dennis and~~ Ms. Brown both teach classes related to communications tools and web 2.0 tools, including classes about social bookmarking, personalized web pages, blogs, wikis, and RSS news feeds. In 2008 they developed "Web 2.0: 13 Things," a 10-week online class covering a variety of web 2.0 technologies. The "13 Things" class has been taught three times since 2008 and has received positive feedback.
- 3) Provide written documentation in the use of systems hardware, software and related troubleshooting.
 - ~~Ms. Dennis and~~ Ms. Brown wrote training materials and documentation for Dreamweaver to assist coordinators with adding web site content, using Adobe Connect, and using videoconferencing tools. They also wrote web site documentation for new staff members.

4) Expertise in the use of...:

- a) *The Internet:* ~~Both Ms. Dennis and Ms. Brown~~ have been using the Internet for a variety of applications and information access since 1990.
- b) *Running a LISTSERV™:* ~~Before joining the RML, Ms. Dennis administered several LISTSERVs.~~ Listservs are currently administered by systems staff at the Eccles Health Sciences Library and the University of Kansas Medical Center. Ms. Brown has managed the RML listserv since
- c) *Responding to information requests and questions about the Internet:* ~~Ms. Dennis and~~ Ms. Brown assist Network members with questions about the Internet when appropriate.
- d) *Experience with web sites:* ~~Ms. Dennis designed the Eccles Library's original web site in 1993 and has worked with teams of graphic artists, usability experts, and programmers since then to produce numerous web sites for the Eccles Library, the Knowledge Weavers project (an educational technology project at the Eccles Library from 1995-2001), and the Health Education Assets Library (HEAL) project. She also worked with Web STOC to implement the web site templates for the current MCR web site.~~ Ms. Brown has been managing and working on web sites since 1999. She is knowledgeable in the use of Dreamweaver and Frontpage. She has participated in redesigning a web site as a member of a web development team.

Staff Resumes

JEAN PUGH SHIPMAN

7909 S. Desert Ridge Cove Home (801) 930-5096
 Cottonwood Heights, UT 84121 Office (801) 581-8771
 jean.shipman@utah.edu

EXPERIENCE

2008- **Director, Spencer S. Eccles Health Sciences Library, University of Utah**
 Salt Lake City, UT

Administer the health sciences library and its branch library, the Hope Fox Eccles Clinical Library; oversee the interdisciplinary Spencer F. and Cleone P. Eccles Health Sciences Education Building; serve as principal investigator for the National Network of Libraries of Medicine, MidContinental Region; administer the budget, strategic planning, and formulate policy for library resources (including endowed chair), programs, and services; advance new and innovative technologies in the health professions curricula; support health sciences faculty development in using new technologies for patient care, education and research; provide campus leadership in open access, the institutional repository, distance education, telemedicine, streaming video, and networking.

2000-2008 **Director, Tompkins-McCaw Library for the Health Sciences and Associate University Librarian, VCU Libraries**

VCU Libraries, Virginia Commonwealth University, Richmond, VA

Develop and advance library services and collections in support of research programs and the educational curriculum; stimulate innovation and creativity in new service initiatives; advance the use of information technologies for collection and service delivery; manage fiscal resources; pursue external funding opportunities and develop donor relations; negotiate library service contracts with hospital; interact with VCU Medical Center faculty, deans, directors and other key personnel; assist with overall VCU Libraries' strategic planning, governance, administration and budgeting; manage operations of COIN (Community Health Information Network) including directing operations of the Community Health Education Center and Women's Health Resource Center at Stony Point consumer health information resource centers, administrate COIN grants and maintain community partnerships.

1995-2000 **Associate Director, Information Resources Management**

Health Sciences Libraries, University of Washington, Seattle, WA

Responsible for \$3.3 million biennial collection budget, two self-sustaining budgets and digital resource contract license negotiations; directly manage 4.5 supervisors; oversee supervision of 12.25 FTE library technicians and 18 FTE student assistants. Administer fee-based services, document delivery, interlibrary loan, circulation, photocopy, serials, acquisitions and collection management sections as well; serve as co-chair of HSL Service 2000 Team; serve as library liaison to various Health Sciences Center departments; serve as HSL representative on University Libraries' policies and operations committees.

- 1993-1995 **Acting Head, Access Services**
Health Sciences Libraries, University of Washington, Seattle, WA
Responsible for managing Document Delivery/Photocopy, Interlibrary Loan and Circulation Departments; directly supervise 3.5 FTE; member of library administrative team; assist with development of Libraries portion of Health Sciences Center web server and gopher; coordinate and implement special resource sharing agreements; managed two self-sufficient budget centers; prepare administrative reports; supervise fee-based service program; member of two University Libraries committees and numerous HSL committees.
- 1993-1995 **Outreach Information Services Librarian**
Health Sciences Libraries University of Washington, Seattle, WA
Responsible for developing, marketing and providing fee-based services to non-affiliated clientele; serve as Washington state resource librarian; provide educational instruction sessions and reference assistance; perform database searches.
- 1990-1993 **Coordinator, Resources Management**
National Network of Libraries of Medicine, Southeastern/Atlantic Region, University of Maryland at Baltimore, Health Sciences Library, Baltimore, MD
Coordinate regional resource networks and sharing activities including DOCLINE, SERHOLD and the document delivery module of Grateful Med (LOANSOME DOC) for a 13-state region; negotiate and monitor subcontracts with constituency groups; develop educational materials and provide training sessions on computerized systems including end-user software GRATEFUL MED; represent the RML and NLM throughout the region at association meetings and health professional exhibits; provided consultation services and monitor regional programs and services; provide feedback to NLM on user needs and concerns; assist with planning semi-annual Regional Advisory Council meetings; participate in developing the UMAB Library's strategic plan. Contribute substantially to the writing and negotiation of the 1991-1996 RML contract.
- 1988-1990 **Library and Audiovisual Services Manager**
Greater Baltimore Medical Center, Baltimore, MD
Plan and administer activities associated with directing the daily and long-term operations of a 365-bed hospital library; supervise 1.7 FTE; conduct bibliographic computer searches; manage information resources; co-direct CME program; coordinate HSN educational programs; responsible for patient education closed-circuit television; coordinate meeting room scheduling and associated meeting services for the hospital; oversee audiovisual services.
- 1984-1988 **Psychiatry/Neurosciences Library Supervisor**
Welch Medical Library, The Johns Hopkins University, Baltimore, MD

Manage satellite library's daily operations and 2 FTE staff; provide in-depth reference services to the Departments of Psychiatry, Neurology and Neurosurgery; perform computerized bibliographic services, orientations, microcomputer and end-user system consulting services; teach information management educational seminars; assist in the acquisition, maintenance and distribution of library resources; participate in over 30 library committees, chair several; member of strategic planning committee composed of supervisors and Library Director; solely develop a Psych/Neuro Core Concept database, a quality-filtered subject specialty bibliographic database; create system and user documentation for numerous library databases.

1982-1984

Access Librarian

Welch Medical Library, The Johns Hopkins University, Baltimore, MD

Administer and coordinate the activities of the Circulation and Interlibrary Loan Departments which include developing, implementing, and monitoring policies and supervising staff of 9 FTE; responsible for the evaluation, tailoring, training, implementation and monitoring of the Circulation Subsystem of the Integrated Library System; develop procedures manual for Circulation Subsystem; responsible for granting library admissions and borrowing privileges to clients; represent library in numerous resource sharing networks; manage the Information Resource Center satellite library which houses the reserve collection, CAI terminals and audiovisuals; prepare statistical reports of departments' operations.

1981-1982

Senior Reference Librarian

Welch Medical Library, The Johns Hopkins University, Baltimore, MD

Concentrate primarily on searching online databases, providing orientations and tours, and conducting information resource seminars.

1980-1981

Entry Level Reference Librarian

Welch Medical Library, The Johns Hopkins University, Baltimore, MD

EDUCATION

1980-1986

Johns Hopkins University, Baltimore, MD

Miscellaneous graduate level credit and non-accredited courses.

1980

School of Library Science, Case Western Reserve University, Cleveland, OH,
(ALA Accredited)

Master of Science in Library Science, Health Sciences Library Emphasis

Cumulative Grade Average: 4.00 on a 4.00 scale

1979

Gettysburg College, Gettysburg, PA

Bachelor of Arts, CUM LAUDE, Biology

Cumulative Grade Average: 3.42 on a 4.00 scale

Class Rank: 46 in 466

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

New England Journal of Medicine Library Advisory Board

2008-2010 Member

Journal of Electronic Resources in Medical Libraries

2003- Member, Editorial Board

Ninth Annual Health Literacy Conference, The Institute for Healthcare Advancement

2010- Member, Session Planning Team

Association of Academic Health Sciences Libraries

2003-2006 Member, Annual Statistics Editorial Board of Directors

2007- Member, Chicago Collaborative (AAHSL/Publisher Liaison Task Force)

2009-2012 Chair, Scholarly Communication Committee; Member, 2007-2010

2009- Ex officio member, Joint MLA/AAHSL Legislative Task Force

Scholarly Publishing and Academic Resources Coalition (SPARC)

2010- Member, Steering Committee, Health Sciences Library Representative

2009- Member, Open Access Working Group (OAWG)

Association of American Medical Colleges. Group on Information Resources

2008-. Member

Society for Scholarly Publishing

2009- 2010 Program Committee, Member

2007- Member

AMIA: American Medical Informatics Association

2007 Paper reviewer for AMIA 2007 Annual Symposium

2010- Member

Medical Library Association

2009-2012 Ex officio member, Ad Hoc Committee for Advocating Scholarly Communications

2009-2011 Member, National Program Committee, 2011 Annual Meeting

2007-2008 Immediate Past-President

2007-2008 Chair, Nominating Committee

2007-2008 Board Liaison and Member, MLA/NLM Joint Electronic Personal Health Record Task Force

2007-2008 Board Liaison, Awards Committee

2007-2008 Board Liaison, Grants and Scholarships Committee

2007-2008 Board Liaison, Donald A. B. Lindberg Research Fellowship Jury

2006-2008 Board Liaison, Task Force on the Health Sciences Librarian in Medical Education

2006-2008 Board Liaison, Hospital Libraries Vital Pathways Steering Committee

2006-2007 President

2006-2007 Board Liaison, National Program Committee 2007

2005-2006 President-Elect
 2003-2005 Member, Information Specialist in Context Implementation Task Force
 2002-2003 Member, Nominating Committee
 2001-2003 Board Liaison and Member, Task Force to Plan Recruitment of the 21st Century
 Workforce of Health Information Professionals
 2001, 2002, 2003 Chapter Roundtable Facilitator, Annual Meetings
 2001-2002 Chair, Informationist Task Force
 1999-2002 Board of Directors, secretary 2000-2002
 1999-2002 Board Liaison, Membership Committee
 1999-2001 Board Liaison, Mentor Task Force
 1998-2001 Co-Chair, 2001 National Program Committee
 1994-1998 Member, 1998 National Program Committee
 1992-1993 Chair, Ida and George Eliot Prize Jury of the Awards Committee
 1991-1992 Member, Ida and George Eliot Prize Jury of the Awards Committee
 1984-1985 Ex Officio, Governmental Relations Committee
 1980- Member

Consumer and Patient Health Information Section of the Medical Library Association

2008- Member

Leadership & Management Section of the Medical Library Association

2005-2006 Advisory Group, Task Force on Professional Development for Current and
 Aspiring Middle Managers
 2001-2002 Member, 2002 Program Committee
 2001-2002 Member, MLA/AAHSL Leadership Reconsidered Symposium Planning Team
 2001- Member

Hospital Library Section of the Medical Library Association

2007- Member

Medical Informatics Section of the Medical Library Association

1989-2007 Member

Public Services Section of the Medical Library Association

1998-2000 Secretary/Treasurer
 1996-1998 Chair, Access Services Special Interest Group
 1995-1996 Member, 1996 Program Planning Committee
 1988-2007 Member

Mid-Atlantic Chapter of the Medical Library Association

1992-1993 Chair-Elect/1993 Program Chair [Oct 92-Mar 93]
 1992-1993 Board Liaison, Honors and Awards Committee
 1991-1992 Secretary
 1991 Member, Financial Planning Committee
 1990-1992 Co-Chair, Local Arrangements Committee 1992
 1990 Member, Nominating Committee

1989 Hospital Luncheon Coordinator, Program Committee
1987-1988 MAC Nominee to MLA Nominating Committee Candidates
1987 Co-Chair, Exhibits Committee, Local Arrangements Committee
1985 Online Luncheon Coordinator, Program Committee
1984-1985 Chair, Governmental Relations Committee
1983-1986 Member, Governmental Relations Committee
1981-1993,
2000-2008 Member

Pacific Northwest Chapter of the Medical Library Association
1993-2000 Member

Southern Chapter of the Medical Library Association
1991-1999,
2007- Member

Midcontinental Chapter of the Medical Library Association
2008- Member

Evidence-Based Library and Information Practice 4th International Conference, Chapel Hill, NC
2007 Member, International Program Committee
2007 Session Moderator

National Library of Medicine Long Range Plan
2005-2006 Planning Panel 1 - NLM Resources and Infrastructure

Regional Advisory Council, Southeastern/Atlantic Regional Medical Library, National Network
of Libraries of Medicine
2001-2006 Member

Group on Information Resources, Association of American Medical Colleges
2006 Nominating Committee
2008- Member

Virginia Council of Health Sciences Libraries (VaCOHSL)
2004 Chair, Nominating Committee
2003- Member

Region 12 Literacy Coordinating Committee
2004-2005 Co-chair, Health Literacy Subcommittee

NASIG (North America Serials Interest Group)
1995- 2002 Member

Special Library Association
1993-1997 Member

Pacific Northwest Chapter of the Special Library Association

1994-1997 Member, Employment Committee

1993-1997 Member

Library Management Section of the Special Library Association

1993-1997 Member

Washington Medical Library Association

1996 Member, Semi-Annual Meeting Program Committee

1993- 2000 Member

Seattle Area Health Library Consortium (SAHLC)

1995 Treasurer

Maryland Association of Health Sciences Librarians

1991-1992 Chair, Professional Development Award Committee

1991-1992 Chair, Bylaws Committee

1990-1991 President

1990-1991 Chair, Strategic Planning Committee

1990-1991 Member, Finance Committee

1989-1990 Vice-President, Program Chair

1989 Treasurer, Membership Chair

1988 Bylaws Committee

1987-1988 Treasurer, Membership Chair

1985 Editor, Membership Directory

1985-1986 Chair, Nominating Committee

1984-1985 Mailing Coordinator; Editor, Membership Directory

1983-1984 Treasurer

1981-1982 Member, Nominating Committee

1981-1993 Member

International Congress of Medical Librarianship

1993-1995 Member, 1995 Special Presentations Committee, Washington, D.C.

PUBLICATIONS

Shipman Jean P., Sabrina Kurtz-Rossi, Carla J. Funk. "The Health Information Literacy Research Project." Journal of the Medical Library Association. Vol. 97(4), October 2009: 273-281.

Schwartz, Diane G., Paul M. Blobaum, Jean P. Shipman, Linda Garr Markwell, and Joanne Gard Marshall. "The Health Sciences Librarian in Medical Education: A Vital Pathways Project Task Force." Journal of the Medical Library Association. Vol. 97(4), October 2009: 280-284.

Shipman Jean P., Carla J. Funk. Teachers of Health Information Literacy – Future Roles for Librarians. IFLA World Library and Information Congress: 75th IFLA General Conference and Assembly, Milan, Italy, August 25, 2009. <http://www.ifla.org/files/hq/papers/ifla75/145-shipman-en.pdf>

Shipman, Jean P., Carla J. Funk. “Health Information Literacy Research Project”, Poster for the Institute for HealthCare Advancement’s 8th Annual Health Literacy Conference, Irvine, CA, May 7-8, 2009.

Wright, Barbara A., Catherine S. Canevari, Irene M. Lubker, Margaret E. Henderson, Mary Jane Green, Kristine M. Hughes, Alan T. Williams, Shannon D. Jones, Jean P. Shipman. “Striving for new peaks in reference services: Becoming strategic partners in research initiatives.” Poster for the 2008 Mid-Atlantic Chapter, Medical Library Association meeting, Morgantown, WV, October 21, 2008.

Shipman, Jean P., Dixie A. Jones, Michael J. Ackerman, Joan Ash, Patti Corbett-Bregman, Taneya Koonce, Daphne Plaut, Catherine R. Selden, David Sweet, Carla J. Funk. “Frontier places: Librarians connecting with patients and providers through personal health records.” Poster for the 2008 Midcontinental Chapter, Medical Library Association meeting, Cody, WY, October 6, 2008.

Kennedy, May G, Laura Kiken, Jean P. Shipman. “Addressing underutilization of consumer health information resource centers: a formative study.” Journal of the Medical Library Association. Vol. 96(1), January 2008: 42-49.

Shipman, Jean P. "Informationists or Information Specialists in Context (ISIC): six years after conception." IFLA Journal, Vol. 33(4), December 2007: 335-339.

Leisey, Monica, Jean P. Shipman. “The Journey Project.” Poster for the 2007 Southern Chapter, Medical Library Association meeting, Charleston, SC, November 14, 2007.

Monica R. Leisey and Jean P. Shipman. “Information prescriptions: a barrier to fulfillment.” Journal of the Medical Library Association. Vol. 95(4), October 2007: 435–438.

Turman, Lynne, Jean P. Shipman. “Dine-In or Take-Out? Journal Circulation Policies in Academic Health Sciences Libraries.” Poster for the 2007 Mid-Atlantic Chapter, Medical Library Association meeting, Baltimore, MD., October 10, 2007.

Leisey, Monica, Jean P. Shipman. “The Journey Project.” Poster for the 2007 Mid-Atlantic Chapter, Medical Library Association meeting, Baltimore, MD., October 10, 2007.

Lubker, Irene M., Alan T. Williams, Barbara A. Wright, Catharine S. Canevari, Patricia Flanagan, Jean P. Shipman. “Cooking Up Customer Service: A Recipe for Success.” Poster for the 2007 Mid-Atlantic Chapter, Medical Library Association meeting, Baltimore, MD., October 10, 2007.

Kurtz-Rossi, Sabrina, Carla J. Funk, Jean P. Shipman. "MLA Health Information Literacy Research Project." Poster for the 2007 Medical Library Association meeting, Philadelphia, PA, May 23, 2007.

Leisey, Monica, Jean P. Shipman. "The Journey Project." Poster for the 2007 Medical Library Association meeting, Philadelphia, PA, May 20, 2007.

Hammond, Patricia A., Jean P. Shipman, Catharine S. Canevari and Barbara A. Wright. "Consumer Health Information Patient Bedside Rounds – A Proactive Role for Librarians." Poster for the 2006 Southern/Mid-Atlantic Chapters/Medical Library Association meeting, Atlanta, GA, October 14, 2006.

Shipman, Jean P., Catharine S. Canevari, Jill S. Stover, Rachel Gyore. "Librarians as Key Partners in Campus-wide University-Community Initiatives." Poster for the 2006 Southern/Mid-Atlantic Chapters/Medical Library Association meeting, Atlanta, GA, October 14, 2006.

Leisey, Monica, Jean P. Shipman. "Information Prescriptions: Real and Perceived Barriers to Fulfillment." Poster for the 2006 Southern/Mid-Atlantic Chapters/Medical Library Association meeting, Atlanta, GA, October 14, 2006.

Hammond, Patricia A., Jean P. Shipman, Catharine S. Canevari. "A New Role for Hospital-based Librarians in Academic Medical Centers: Providing Consumer Health Information Curricular-based Practica." Poster for the 2006 Medical Library Association meeting, Phoenix, AZ, May 22, 2006.

Leisey, Monica, Jean P. Shipman. "Information Rx's: Real and Perceived Barriers to Fulfillment." Poster for the 2006 Medical Library Association meeting, Phoenix, AZ, May 21, 2006.

Hammond, Patricia A., Catharine S. Canevari, Jean P. Shipman. "Consumer Health Information Patient Bedside Rounds: New Roles for Librarians " Poster for the 2006 Medical Library Association meeting, Phoenix, AZ, May 21, 2006.

Shipman, Jean P., Catharine S. Canevari, Jill S. Stover, Rachel A. Gyore. "Librarians as Key Partners in Campus-wide University-Community Initiatives." Poster for the 2006 Medical Library Association meeting, Phoenix, AZ, May 21, 2006.

Canevari, Catharine S., Shannon D. Jones, Susan J. Phipps, Jean P. Shipman, Alan T. Williams, Barbara Allen Wright. "Career Trailblazing: Mentoring Staff to Become Future Librarians." Poster for the 2005 Mid-Atlantic Chapter/Medical Library Association meeting, Charlottesville, VA, October 5, 2005.

Shipman, Jean P., Susan J. Phipps, Cynthia J. Simonson. "COIN: VCU's Compass in the Quest for Healthy Communities." Poster for the 2005 Mid-Atlantic Chapter/Medical Library Association meeting, Charlottesville, VA, October 5, 2005.

Jones, Shannon D., Barbara A. Wright, Jodi Koste, Virginia Stone, Catharine Canevari, Jean P. Shipman. "Library in a Box: Re-engaging with Users via a Scholarly Circuit Librarian Program." Poster for the 2005 Mid-Atlantic Chapter/Medical Library Association meeting, Charlottesville, VA, October 5, 2005.

Hammond, Patricia A., Jean P. Shipman, Cate S. Canevari. "A New Role for Hospital-Based Librarians in Academic Medical Centers: Providing Consumer Health Information Curricular-Based Practica." Poster for the 2005 Mid-Atlantic Chapter/Medical Library Association meeting, Charlottesville, VA, October 5, 2005.

Seago, Brenda L., Lois Culler and Jean Shipman. "Collaboration between Library Professionals: Starting a New Medical School Campus at a Community Hospital in a Distant Location." Poster for the 2005 Medical Library Association meeting, San Antonio, TX, May 17, 2005.

Jones, Shannon D., Patricia A. Hammond, and Jean P. Shipman. "Health Adventure: A City Urban League Office and the University Libraries Collaborate to Eliminate Health Disparities." Poster for the 2005 Medical Library Association meeting, San Antonio, TX, May 17, 2005.

Canevari, Catharine S., Yuki Dixon, Mark A. Elliott, Heather Enderle, Shannon D. Jones, Joel B. Lammers, Susan J. Phipps, Jean P. Shipman, Alan T. Williams and Barbara Allen Wright. "Growing Our Own: Mentoring Staff to Become Future Librarians." Poster for the 2005 Medical Library Association meeting, San Antonio, TX, May 16, 2005.

Shipman, Jean P., Susan J. Phipps, Cynthia J. Simonson, and Deborah Frett. "Reaching Out to Local Communities through COIN: Virginia Commonwealth University's Community Outreach Information Network." Poster for the 2005 Medical Library Association meeting, San Antonio, TX, May 16, 2005.

Shipman, Jean P. and Sarah B. Watstein (eds.). "Emerging Roles of Health Sciences Librarians, Part 2" – special themed issue. Reference Services Review. Vol. 33(1), January 2005.

Jones, Shannon D., Jean P. Shipman, Kelly Near, Judith G. Robinson, Ruth M. Smith and Linda Watson. "Information Rx – Librarians and Physicians Collaborate to Empower Patients via Quality Health Information." Poster for the 2004 Mid-Atlantic Chapter, Medical Library Association meeting, Raleigh, N.C., October 14, 2004.

Shipman, Jean P., Denise C. Daly and JoAnne K. Henry. "Partnering with the Community: A Woman's Health Network for Multicultural Communities." Journal of Consumer Health on the Internet, Vol. 8(4), 2004, 27-39.

Jones, Shannon, Jean P. Shipman, Kelly Near, Judith Robinson, Ruth Smith, and Linda Watson. "Health Information Prescriptions: Librarians and Physicians Collaborate to Empower Patients via Quality Health Information." Poster for the AAMC GIP/GBA/GIR 2004 Joint Spring Meeting, Salt Lake City, UT, May 2, 2004.

Jones, Shannon and Jean P. Shipman. "Health Information Referral Project: Librarians and Physicians Collaborate to Empower Patients with Quality Health Information." Virginia Libraries, Vol. 50(2), April/May/June 2004, 11-16.

Shipman, Jean P. and Sarah B. Watstein (eds.). "Emerging Roles of Health Sciences Librarians" – special themed issue. Reference Services Review. Vol. 32(1), January 2004.

Shipman, Jean P. "Why Emerging Roles for Health Sciences Librarians?" Reference Services Review. Vol 32(1), January 2004, 9-12.

Shipman, Jean P. "Document Delivery Suppliers." World Wide Web Document. <http://www.library.vcu.edu/tml/docsupp/>, 1995- (updated continually).

Shipman, Jean P. and Jodi L. Koste. "Building Inviting Places: A Trio of VCU Experiences." Invited Poster for *The Library is a Place: Symposium on Building and Renovating Health Sciences Libraries in the Digital Age*, 2003 NLM/AAHSL Building Symposium, Bethesda, MD, November 5-6, 2003.

Shipman, Jean P., Coleman E. Rose, Denise C. Daly, JoAnne K. Henry, Catharine S. Canevari, and Barbara A. Wright. "Partnering with the Community: A Women's Health Network for Multicultural Communities." Poster for the 2003 Mid-Atlantic Chapter/MLA Meeting, Philadelphia, PA, October 27, 2003.

Shipman, Jean P., Catharine S. Canevari and Ramona H. Thiss. "Collaboration Grounds: Installing a Coffee Service with University Partners to Increase Library Usage and Generate Funding." Poster for the 2003 Mid-Atlantic Chapter/MLA Meeting, Philadelphia, PA, October 27, 2003.

Shipman, Jean P., Catharine S. Canevari, and Ramona H. Thiss. "Common grounds: lessons learned from installing a coffee service to increase library usage and generate funding." Poster for the 2003 Medical Library Association meeting, San Diego, CA, May 5, 2003.

Shipman, Jean P., Catharine S. Canevari, Coleman E. Rose., JoAnne K. Henry, Denise C. Daly and Barbara A. Wright. "Catching the community outreach wave: a women's health network navigates multicultural communities towards quality health information." Poster for the 2003 Medical Library Association meeting, San Diego, CA, May 6, 2003.

Shipman, Jean and Michael Homan. "Medicine's library lifeline: librarians in the new role of "informationist" can help doctors and researchers stay ahead of the curve and may help save lives along the way ." Library Journal. Vol. 128(6), April 1, 2003, 49-50.

Martin, Elaine R., Helen Ann Brown, Barbara A. Epstein, Carolyn E. Lipscomb, Ruth A. Riley and Jean P. Shipman. "The Leadership Reconsidered Symposium: Report." Journal of the Medical Library Association. Vol. 91(2), April 2003, 251-257.

Shipman, Jean P., Diana J. Cunningham, Ruth Holst, and Linda A. Watson. "The Informationist Conference: Report." Journal of the Medical Library Association. Vol. 90(4), October 2002, pp. 458-464.

Canevari, Catharine S., John D. Jones, Jr., Barbara A. Wright and Jean P Shipman. "Collection Management and Access Issues Concerning Licensed Handheld Computer Resources." Poster for the 2002 Medical Library Association Mid-Atlantic Chapter meeting, Washington, DC, October 17-19, 2002.

Shipman, Jean P., Patricia A. Hammond, Barbara A. Wright and Gregory N. Pendergast. "Dimensions of Opening a Community Health Education Center. Electronic poster for the 2002 Medical Library Association meeting, Dallas, TX, May 20 2002.

Shipman, Jean P., Andrew C. Morton. "The New Black Bag: PDAs, Health Care and Library Services." Reference Services Review. Vol. 29(3), 2001, pp. 229-237. (Emerald Literati Club Award for Excellence, Reference Services Review Outstanding Paper, 2002).

Shipman, Jean P., Barbara A. Wright, Kimberly R. Separ. "Hypertension Resources: An Overview of Web Resources." Health Care on the Internet. Vol. 5(3), 2001, pp. 41-48.

Shipman, Jean P., William L. Gembala, Jeffrey M. Reeder, Brian A. Zick and Mary J. Rainwater. "Desktop Document Delivery Using Portable Document Format (PDF) Files and the Web." Bulletin of the Medical Library Association. Vol. 86(3), July 1998, pp. 307-315.

Shipman, Jean P. "Document Delivery Suppliers Web Page." Journal of Interlibrary Loan, Document Delivery & Information Supply. Vol. 9(2), 1998, pp. 1-62.

Emily Hull, Jean P. Shipman, Constance Worley, Kathleen von der Hofen and Barbara Cantwell. "Self-Service Reserves: Online and On the Shelf." Electronic poster for the 1998 Medical Library Association meeting, Philadelphia, PA, May 25, 1998.
<http://healthlinks.washington.edu/courses/reserves/mla98/>

Shipman, Jean P. Document Delivery: Decisions and Opportunities: Course Syllabus. 1997.

Shipman, Jean P. "Delivering Full-Text Articles to Desktops – One Library's Approach." Supplement (the newsletter of the National Network of Libraries of Medicine, Pacific Northwest Region), Vol. 27(4), December 1996, pp. 2.

Shipman, Jean P. and Elaine R. Martin. NP 509: Planning and Administrating a Health Sciences Library Fee-Based Information Service: Course Syllabus. 1995.

Martin, Elaine and Jean P. Shipman. NP 419: Management of Electronic Document Delivery Systems: Course Syllabus. 1994.

Baird, Laura, Faith A. Meakin, Susan Bailey and Jean P. Shipman. Assessing the Information Needs of Health Professionals: An Annotated Bibliography. Baltimore: National Network of Libraries of Medicine, Southeastern/Atlantic Region, 1991.

Kraft, Melissa A. and W. Jean Pugh. "Designing a User Manual to Support an In-House Database" Database, Vol. 11(6), December 1988, pp. 62-64.

Pugh, W. Jean and Gary Moore. "Psych/Neuro Core Concept Database - A Quality Filtered Database," pp. 333-336. In: National Online Meeting. Proceedings of the Ninth National Online Meeting, New York, May 10-12, 1988. Medford, NJ: Learned Information, Inc., 1988.

Kraft, Melissa A. and W. Jean Pugh. OMIM User Manual: Online Mendelian Inheritance in Man. Version 2.1. Baltimore: Welch Medical Library, 1987.

Fredenburg, Anne M. and W. Jean Pugh. "Help in Choosing Microcomputer Software and Hardware - An Update," Online, Vol. 10(2), March 1986, pp. 38-53.

Pugh, W. Jean and Anne M. Fredenburg. "Decisions, Decisions, Decisions: Help in Choosing Microcomputer Software and Hardware," Online, Vol. 9(1), January 1985, pp. 18-30.

Pugh, W. Jean and Carol Jenkins. "The Proper Way to Voice an Opinion," MLA News, No. 172, 1985, pp. 11-12.

Pugh, W. Jean and Stephanie C. John. "A Bibliography of Database and Search System Comparisons," Online, Vol. 6(5), September 1982, pp. 41-55.

PRESENTATIONS

"Results from the MLA/NLM Health Information Literacy (HIL) Research Project" NN/LM Webinar given to the New England Region, December 11, 2009.

"Results from the MLA/NLM Health Information Literacy (HIL) Research Project" NN/LM Webinar given to the SouthEast/Atlantic Region, November 18, 2009.

"Jammin' with the Results of the MLA/NLM Health Information Literacy Research Project (research paper)." Presented at the Annual Meeting of the Southern Chapter, Medical Library Association, October 31, 2009, Memphis, TN.

"Health Literacy Workshop." Workshop taught at the Taubman Medical Library, University of Michigan, October 23, 2009, Ann Arbor, MI.

"MLA Health Literacy Education." Continuing education course taught at the Annual Meeting of the South Central Chapter, Medical Library Association, October 18, 2009, Tulsa, OK.

"Changing Attitudes and Reaching New Altitudes via Results of the MLA/NLM Health Information Literacy Research Project (HILRP)." Presented at the Annual Meeting of the Midcontinental Chapter, Medical Library Association, September 23, 2009, Breckenridge, CO.

“Teachers of Health Information Literacy – Future Roles for Librarians.” Presented at the Annual Meeting of the International Federation of Library Associations (IFLA), August 25, 2009, Milan, Italy.

“Results from the MLA/NLM Health Information Literacy (HIL) Research Project.” Presented to the Utah Health Sciences Library Consortium, August 17, 2009, Salt Lake City, UT.

“Update on the MLA/NLM Health Information Literacy Research Project.” Presented at the Sixth Annual Wyoming Symposium for Health Information Professionals: Plowing Through Pandemonium: Proactive Librarians, July 16, 2009, Laramie, WY.

“Results from the MLA/NLM Health Information Literacy (HIL) Research Project” NN/LM Webinar given to the South Central Region, June 17, 2009.

“The Chicago Collaborative.” Co-panelist and co-convenor, 2009 Medical Library Association Annual Meeting, May 19, 2009, Honolulu, HI.

“Results from the MLA/NLM Health Information Literacy (HIL) Research Project.” Co-presented at an Open Forum Session, 2009 Medical Library Association Annual Meeting, May 19, 2009, Honolulu, HI.

“News from the MidContinental Regional Medical Library and Results from the MLA/NLM Health Information Literacy (HIL) Research Project.” Presented at the Annual Meeting of the Kansas Biomedical Librarians, April 30, 2009, Kansas City, KS.

“Results from the MLA/NLM Health Information Literacy (HIL) Research Project and Vision for MidContinental Region of the NN/LM.” Presented at the ICON meeting, March 13, 2009, Omaha, NE.

“Innovation WOW! Projects.” Presentation given as part of the Utah State Library Leadership Series, March 5, 2009, Salt Lake City, UT.

“Results from the MLA/NLM Health Information Literacy (HIL) Research Project” NN/LM Webinar given to the Midcontinental Region, January 21, 2009.

“Vital Pathways Plus: MLA Champions Hospital Librarians.” Co-authored contributed paper presented at the 2008 Annual Meeting of the Midcontinental Chapter, Medical Library Association, October 5, 2008, Cody, WY.

“Change is in the Air.” MLA Presidential Address, 2007 Medical Library Association Annual Meeting, May 20, 2007, Philadelphia, PA.

“Health Information Literacy Research Project.” Invited speaker for AHA Society for Healthcare Consumer Advocacy 2007 annual conference, April 13, 2007, Tucson, Arizona.

“Informationist or Information Specialist in Context: Who is this?” 72nd IFLA World Library and Information Congress, Health and Biosciences Libraries Section, August 21, 2006, Seoul, Republic of Korea.

“Getting high on MLA.” MLA Presidential Inaugural Address, 2006 Medical Library Association annual meeting, May 23, 2006, Phoenix, AZ.

“Tea and leadership.” New Leader’s Orientation, 2006 Medical Library Association annual meeting, May 20, 2006, Phoenix, AZ.

“Info Rx: Providing information first aid to your users.” Presentation for a concurrent session. 2004 Virginia Library Association annual meeting, October 28, 2004, Williamsburg, VA.

“Mentoring: sharing experiences for professional growth.” Invited town meeting facilitator for plenary session. 2003 Medical Library Association annual meeting, May 7, 2003, San Diego, CA.

“MLA Mentoring Program.” Invited speaker for the 52nd Annual Meeting of the Southern Chapter, Medical Library Association, October 18, 2002, Nashville, TN.

“The Informationist.” Invited speaker for the 52nd Annual Meeting of the Southern Chapter, Medical Library Association, October 20, 2002, Nashville, TN.

“Capitolizing on Our Assets: A Partnership to Establish a Community Health Education Center.” Co-authored contributed paper presented at the 2002 Annual Meeting of the Mid-Atlantic Chapter, Medical Library Association, October 18, 2002, Washington, DC.

“A Mentoring Portrait.” Moderator and planner of panel presentation at the 2002 Annual Meeting of the Medical Library Association, May 20, 2002, Dallas, TX.

“Sync or Swim: Managing the Flood of PDAs in Health Care.” Medical Library Association Satellite Teleconference, Wednesday, February 6, 2002.

“Internet Document Delivery Methods.” Technology Fair Participant, 1999 Pacific Northwest Chapter of the Medical Library Association, October 25, 1999, Seattle, WA.

“Just in Time Information Delivery Options.” Instructor of CE course, 1998 Pacific Northwest Chapter of the Medical Library Association, October 27, 1998, Boise, ID.

“Document Delivery: Decisions and Opportunities.” Instructor of CE course, 1997 North Atlantic Health Sciences Libraries, September 28, 1997, Burlington, VT.

“NP 404: Planning and Administrating a Health Sciences Library Fee-Based Information Service.” Co-instructor of CE course, 1997 Annual Meeting of the Medical Library Association, May 28, 1997, Seattle, WA.

“Desktop Delivery of Articles via the Internet.” Presented at the Washington Medical Library Association Western Washington Internet Users Group Meeting, January 24, 1997, Seattle, WA.

“Desktop Document Delivery via the Internet.” Presented at the University of Washington IAIMS Selected Topics in Health Informatics Series, October 30, 1996, Seattle, WA.

“Impact of Electronic Journals and Document Delivery on the Future of Technical Services and Collection Development - University of Washington’s Experience.” Invited Speaker for EBSCO Executive Seminar, March 7, 1996, Birmingham, AL.

“Commercial Document Delivery Sources.” Presented at the Washington Medical Library Association Western Washington Internet Users Group Meeting, February 15, 1996, Seattle, WA.

"NP 509: Planning and Administrating a Health Sciences Library Fee-Based Information Service." Co-teacher of CE course, 1995 Annual Meeting of the Medical Library Association, May 5, 1995, Washington, D.C.

"SAHLC Pilot Test Revisited: HSLIC Viewpoint." Presented at the Resource Sharing & Document Delivery Preconference Session of the Pacific Northwest Chapter, Medical Library Association's 1994 Annual Meeting, October 23, 1994, Coeur d'Alene, ID.

"Maneuvering through the Medical Maze." Presentation for CE Course W-5 The "Changing Environments" of Legal Research: Providing Reference Assistance in Non-Legal Disciplines." American Association of Law Libraries 1994 Annual Meeting, July 9, 1994, Seattle, WA.

"NP 419: Management of Electronic Document Delivery Systems." Co-teacher of CE course, 1994 Annual Meeting of the Medical Library Association, May 18, 1994, San Antonio, TX.

"Biomedical/Health Information Resources and Services for Small Businesses." Presentation for the National SBIR Conference, November 16, 1993, Seattle, WA.

"Collecting Information via the Internet." Presentation for panel session "Linkages: Data and Programs Session" of the 1993 Washington Data Users Conference: Focus on Community Health, October 21, 1993, Yakima, WA.

"Getting to Know Your Users and Their Needs through Loansome Doc." Co-authored contributed paper presented at the 92nd Annual Meeting of the Medical Library Association, May 19, 1992, Washington, D.C.

"Characteristics of Libraries Willing to Serve the Unaffiliated Health Professional." Co-authored contributed paper presented at the 91st Annual Meeting of the Medical Library Association, June 3, 1991, San Francisco, CA.

"VULBS: A History and Update on the Virginia Union List of Biomedical Serials," Judith Robinson, Jean Shipman, and Renee Mansheim. Presented at the 1990 Meeting of the Virginia Health Sciences Librarians.

"Systems Functions Advisory Group: Its Contributions to the WELMED System." Co-authored contributed paper presented at the 88th Annual Meeting of the Medical Library Association, May 24, 1988, New Orleans, LA.

"The WELMED Project - Featuring the Core Concept Database." Poster Session/Demo exhibited at the 88th Annual Meeting of the Medical Library Association Expo 88, May 25, 1988, New Orleans, LA.

"Psych/Neuro Core Concept Database - A Quality-Filtered Database." Co-authored contributed paper presented at the Ninth National Online Meeting, May 11, 1988, New York, NY.

"Core Concept Database: A New Response to Professional Information Needs." Contributed paper presented at the 87th Annual Meeting of the Medical Library Association, May 19, 1987, Portland, OR.

"In Search of the Perfect Software Collection." Invited Speaker. Presented at the Mid-Atlantic Chapter of the Medical Library Association Annual Meeting, October 16, 1986, Charlottesville, VA.

"Electronic Document Delivery." Online Searchers Luncheon Session Moderator, Joint Meeting of the Mid-Atlantic Chapter and Southern Chapter, Medical Library Association, November 14, 1985, Winston-Salem, NC.

RML-RELATED PRESENTATIONS

"Consortia Officers Workshop." Held in conjunction with the Georgia Health Sciences Library Association meeting, March 26, 1993, Jekyll Island, GA.

"Producing a Type-Set Newsletter." Panel presentation for the Georgia Health Sciences Library Association 1991/92 Annual Meeting, March 26, 1992, Helen, GA.

"Navigating the ILL Medical Network." Presentation for the Maryland Association of Interlibrary Loan Librarians, January 29, 1992, Baltimore, MD.

"Interlibrary Loan Practices & Copyright." MLA credit-approved Course Developer and Instructor. Course given to the West Virginia Health Sciences Librarians Association, April 18, 1991, Lewisburg, WV.

Also numerous presentations relating to DOCLINE, Loansome Doc, Grateful Med and RML Updates to regional, state and local library associations and health professionals.

GRANTS & CONTRACTS

2009-2010 National Library of Medicine Associate Fellowship, Host Institution

- 2008- N01-LM-6-3504, Jean Shipman (PI) 05/01/2006-
04/30/2011
NIH National Library Of Medicine (NLM)
National Network Of Libraries Of Medicine (NN/LM) Service
- 2008- 5415-S-JB349, Jean Shipman, Joan Stoddart (PIs) 08/14/2007-
04/30/2011 University Of California Los Angeles, UCLA Project
- 2006-2008 National Library of Medicine, "MLA Health Information Literacy Research
Project," Unsolicited Contract - \$250,000 (Co-Principal Investigator)
- 2006-2008 National Library of Medicine Informationist Fellowship
- 2005-2006 National Library of Medicine Associate Fellowship, Host Institution
- 2005-2006 National Library of Medicine, "VCU Information Rx Evaluation Project",
Unsolicited Contract, - \$35,000 (Principal Investigator); #N01-LM-1-3522
- 2005 Reviewer, NLM Review Meeting for IADL and Information System
Grants, February 11, 2005.
- 2004 Reviewer, NLM Review Meeting for IADL and Information System
Grants,
July 9, 2004.
- 2004 Reviewer, NN/LM SE/A Access to Electronic Health Information contracts, June
2004
- 2004-2006 National Library of Medicine, "COIN: Community Outreach Information
Network", Community Outreach Partnership Project, - \$49,995 (Co-Principal
Investigator)
- 2003-2004 NLM Associate Fellowship, Host Institution
- 2003-2004 National Library of Medicine, "COIN: Community Outreach Information
Network", Planning Grant, - \$20,000 (Co-Principal Investigator)
- 2001-2004 National Library of Medicine, Specialized Information Services Division,
"Women's Health Network for Minority Consumer Health Outreach: Where
Knowledge Empowers People" - \$49,990 (Co-Principal Investigator)

HONORS AND AWARDS

- 2009 Fellowship, Medical Library Association
- 2009 Honorary Fellowship, Southern Chapter, Medical Library Association
- 2009 Research Award, Best Paper, Midcontinental Chapter, Medical Library
Association
- 2006- Who's Who in America
- 2006 Medical Library Association Ida and George Eliot Award
- 2006 NCLIS Health Award for Libraries. COIN: VCU's Community Health
Information Network, May 3, 2006, National Library of Medicine
- 2005 Emerald Literati Club Award for Excellence, Reference Services Review
Outstanding Special Issue – Highly Commended
- 2002 Emerald Literati Club Award for Excellence, Reference Services Review
Outstanding Paper
- 1992 Who's Who in Science
- 1992/93 Who's Who Among Young American Professionals, 2nd ed.
- 1991- Distinguished Level of the Academy of Health Information Professionals,
Medical Library Association

1991/92 Who's Who of American Women, 17th & 18th eds.
1991 The World Who's Who of Women, 11th ed.
1991 Alumni Association Service Certificate, Gettysburg College
1984 Outstanding Young Women of America
1980- Beta Phi Mu
1977- Beta Beta Beta

Claire C. Hamasu, M.L.S.

Eccles Health Sciences Library
 10 North 1900 East
 Salt Lake City, UT 84112
 801-587-3412 (phone)
 chamasu@rml4.utah.edu

EDUCATION

<u>Years</u>	<u>Degree</u>	<u>Institution (Area of Study)</u>
1967 - 1971	B.A.	University of Hawaii (French) Manoa, HI
1971 - 1972	M.L.S.	University of Hawaii (Library Science) Manoa, HI

PROFESSIONAL EXPERIENCE**Full Time Positions**

2001 - Present	Associate Director, University of Utah, Spencer S. Eccles Health Sciences Library, MidContinental Regional Medical Library, Salt Lake City, UT
1992 - 2001	Health Information Services Coordinator, UCLA, Louise M. Darling Biomedical Library, Pacific Southwest Regional Medical Library, Los Angeles, CA
1989 - 1991	Reference Librarian, Hawaii Medical Library, Honolulu, HI
1983 - 1989	Librarian IV, Hilo Hospital Medical Library, Hilo, HI
1980 - 1983	Librarian II, Library, Anuenue Fisheries Research Center, Honolulu, HI

ADMINISTRATIVE EXPERIENCE**Professional Organization & Scientific Activities**

2000 - 2003	Member, Medical Library Association, 2003 National Program Committee
2003 - 2004	Member, Medical Library Association: Midcontinental Chapter, Government Relations Committee
2003 - 2005	Program Chair, Medical Library Association: Midcontinental Chapter, 2005 Planning Committee
2003 - 2005	Member, National Library of Medicine, Community-Based Outreach Symposium Planning Committee
2005 - 2006	Co-Chair, National Network of Libraries of Medicine, Proposal Assistance Work Group
2005 - 2007	Member, National Library of Medicine, Partners in Information Access for the Public Health Workforce Steering Committee
2007 - 2008	Chair, Medical Library Association: Midcontinental Chapter, Research Committee
2009 - 2010	Chair, Medical Library Association: Midcontinental Chapter, Business Plan Task Force
2009 - 2010	Chair, Medical Library Association: Midcontinental Chapter

Grant Review Committee/Study Section

2003	NN/LM South Central Region Proposal Reviewer. Closing the Gap: Health Information Outreach to Health Professionals Serving Special Populations
------	--

PROFESSIONAL COMMUNITY ACTIVITIES

2004-2005	Member, Texas A&M University, Colonias Program Project, Advisory Committee
2001 - Present	Member, Tribal Connections 4 Corners
2006 - Present	Member, Outreach Connections: Native Health Information, Steering Committee
2009 - Present	Co-Chair, Outreach Connections: Native Health Information, Evaluation Sub-Committee

CURRENT MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Medical Library Association
 Medical Library Association - Hospital Libraries Section
 Medical Library Group of Hawaii
 Medical Library Group of Southern California and Arizona
 Medical Library Association - Leadership and Management Section
 Medical Library Association: Midcontinental Chapter
 Special Library Association
 Utah Library Association

PEER-REVIEWED JOURNAL ARTICLES

1. Horak BB, **Hamasu CC**. (1991). Grateful Med: gateway to world-wide literature. *Hawaii Med J*, 50(12), 419-20.
2. Glitz, B, **Hamasu C**, Sandstrom H. (2001). The Focus Group: A Tool for Program Planning, Assessment and Decision-making—an American View. *Health Info Libr J*, 18(1), 30-37.
3. Dutcher G, **Hamasu C**. eds (2005). Community-Based Organizations' Perspective on Health Information Outreach: A Panel Discussion. *JMLA*, 93(4 Suppl), S35-S42.

CONFERENCE PROCEEDINGS

1. Glitz B, Lovas I, **Hamasu C**. (1995). Active Partnerships: Successful Government Outreach Efforts in the Pacific Southwest Region of the United States' NN/LM. Washington, DC: Proceedings of the International Congress of Medical Librarianship, 67-72.
2. Trafford M, Consales J, **Hamasu C**. (1998). The Role of Information Science and Knowledge-based Resources in Delivering Telehealth Services. Honolulu, HI: Proceedings Pacific Medical Technology Symposium, 394-400.
3. Glitz B, **Hamasu C**, Sandstrom H. (2000). The Focus Group: A Tool for Program Planning, Assessment and Decision-Making. London: Proceedings of the International Congress of Medical Librarianship.

OTHER (Commentary/Letters/Editorials/Case Reports/Video/Film)

1. **Hamasu C**. (1984). Hilo Hospital: Evolution of a medical library. *HLA Journal* (41, pp. 45-47).
2. Latitudes: Newsletter of the Pacific Southwest Region, National Network of Libraries of Medicine. 1992-2001 contributed articles.
3. Plains to Peaks Post (Newsletter of the NN/LM MidContinental Region) 2001-2010 contributed articles.

UNPUBLISHED POSTER PRESENTATIONS

1. Youngkin M, **Hamasu C**. (2004). *Hanging Ten with Public Libraries: Health Information Services to the State of Utah*. Washington, DC.
2. **Hamasu C**, Kelly B, Peay W. (2006) *Transforming a Regional Medical Library Program*. Phoenix, AZ.
3. **Hamasu C**, Bramble B, Dennis S. (2009). *Accelerating Technology Adoption by Health Sciences Librarians*. Salt Lake City, UT

ORAL PRESENTATIONS**Meeting Presentations (Not Published Abstracts and Not Unpublished Posters)**International

- 2000 International Congress of Medical Librarianship. City/Country: London, UK.
Presenter: B Glitz, C Hamasu Presentation: "The Focus Group: a Tool for Program Planning and Decision Making"

National

- 2004 MLA 2004. City/State: Washington D.C. Instructors: B. Glitz, C. Hamasu Workshop: "Focus Group Interviewing: A Qualitative Research Methodology"
- 2006 MLA 2006. City/State: Phoenix, AZ. Presenters: Kelly B, Hamasu C. Presentation: "Logic Models - A Tool for Planning and Evaluating Services"
- 2008 MLA 2008. City/State: Chicago IL. Presenters: Kelly B, Hamasu C. Presentation: "Demonstrating Effectiveness from Planning to Outcomes: One Regional Medical Library's Story"
- 2008 MLA 2008. City/State: Chicago IL. Authors: Dennis S, Hamasu C, Sandstrom H. Presentation: "Cloning the Technology Coordinator"

Local/Regional

- 2002 NN/LM MidContinental Region. City/State: Salt Lake City, UT Instructors: B. Glitz, C. Hamasu Workshop: "Focus Group Interviewing: A Qualitative Research Methodology"
- 2002 NN/LM South Central Region. City/State: Houston, TX Instructors: B. Glitz, C. Hamasu Workshop: "Focus Group Interviewing: A Qualitative Research Methodology"
- 2003 University of Hawaii Library Council. City/State: Waikoloa, HI. Instructors: B. Glitz, C. Hamasu Workshop: "Focus Group Interviewing: A Qualitative Research Methodology"
- 2004 NN/LM MidContinental Region. City/State: Kansas City, KS; St. Louis MO; Denver, CO; Salt Lake City, UT (Distance Class). Instructors: J. R. Johnson, C. Hamasu Workshop: "Grant Writing for \$ucce\$\$"
- 2005 MCMLA 2005. City/State: Salt Lake City, UT. Instructors: C. Hamasu, R. Davis Workshop: "Focus Group Interviewing: A Qualitative Research Methodology"
- 2005 MCMLA 2005. City/State: Salt Lake City, UT. Presenter: C. Hamasu Presentation: "Multi-institutional Collaborative Grants: Managing Geographic and Institutional Diversity"
- 2006 InfoFair 2006. City/State: Salt Lake City, UT. Panelist: C. Hamasu Presentation: "Breeze Meeting: Online Communication for Many Needs"
- 2007 NN/LM MidContinental Region. City/State: St. Louis MO; Denver, CO; Kansas City, KS. Instructors: J. R. Johnson, C. Hamasu. Workshop: "Grant Writing for \$ucce\$\$"
- 2008 MCMLA 2008. City/State: Cody, WY. Presenters: B Kelly, C Hamasu Presentation: "Demonstrating Effectiveness from Planning to Outcomes: One Regional Medical Library's Story"
- 2009 ULA 2009. City/State: Salt Lake City, UT. Presenters: J Bramble, C Hamasu Presentation: "Essential Health Information for Librarians"
- 2009 Health Disparities Conference 2009. City/State: Salt Lake City, UT. Panelist:

- 2009 Hamasu C “Using Data Effectively in Fundraising”
6th Annual Wyoming Symposium for Health Information Professionals. City/State: Laramie, WY. Presenters: Magee M, C Hamasu Presentation: “Money Makes the World go Round and Emergency Planning too!”
- 2009 MCMLA 2009. City/State: Breckenridge, CO. Presenters: Bramble J, C Hamasu Presentation: “Elevated Practices for Long Distance Collaborations”
- 2009 University of Maryland, Baltimore. City/State: Baltimore, MD. Instructors: C Hamasu, R Davis Workshop: “Focus Group Interviewing: A Qualitative Research Methodology”

Curriculum Vitae

Name: Dana Abbey

Present Position: Senior Instructor, Health Sciences Library, University of Colorado Denver, Aurora, CO

Date: January 2010

Birth Place: Denver, CO USA

Office Address: University of Colorado Denver-Health Sciences Library
Anschutz Medical Campus
12950 E. Montview Blvd., Box A003, MS 6508
Aurora, Colorado 80045
Tel: (303) 724-2110; Fax (303) 315-0294
Email: dana.abbey@ucdenver.edu

Education:

1990 B.A. Bachelor of Arts (English), Metropolitan State College of Denver, CO

1994 MLS, Master of Library Science, Emporia State College, Emporia, KS

Present Professional Positions: (includes present academic appointments):

2005- Consumer Health Liaison, National Network of Libraries of Medicine
MidContinental Region, Health Sciences Library, Aurora, CO

2005- Senior Instructor, Health Sciences Library, University of Colorado
Denver, Aurora, CO

Previous Professional Positions:

2001-2005 Knowledge Management Consultant, Denver, CO

2002-2004 Manager of Operations, UD Testing, Inc., Marco Island, FL- Denver, CO office

2001-2000 Department Manager, Denver Public Library, Denver, CO

1995-2000 Reference and Research Senior Librarian, Denver Public Library, Denver, CO

1989-1995 Reference and Research Librarian, Denver Public Library, Denver, CO

Professional Affiliations:

American Academy of Family Physicians
Editor, Monthly FPIN Patient Handout
Colorado Association of Libraries
Colorado Council of Medical Librarians
Chair, Consumer Health Special Interest Group
Member, Advocacy Committee
Colorado Medical Society
Member, Continuing Education Committee
Colorado Public Health Association
Board of Directors, Education Co-Chair
Colorado Rural Health Association
Medical Library Association
MidContinental Chapter-Medical Library Association

Professional and Educational Presentations:

- "Introduction to NLM Databases," Rocky Vista University, Parker, CO, December 2009 (3 sessions)
- "Expert PubMed Searching," Colorado School of Public Health, Aurora, CO, December 2009
- "NLM Gateway," Spotlight on NLM Resources Series, Distance Learning, December 2009
- "New Look of PubMed," Distance Learning, December 2009
- "A Dose of Health: Injecting Health Information Across the Curriculum," American School Health Association Annual Conference, Denver, CO, October 2009
- "Putting Information into Health Literacy," Colorado Association of Libraries, Denver, CO, November 2009
- "Consumer Health Resources," Colorado Bright Beginnings, Denver, CO, November 2009
- "Empowering Change Through Health Information Access," poster presentation, North Atlantic Health Science Libraries, Rockport, ME, October 2009
- "Emergency and Disaster Resources for Public Libraries," Distance Learning, October 2006 (3 sessions)
- "New Look of PubMed," University of Northern Colorado Michener Library, October 2009
- "Medication Safety: Resources for Tracking, Identification, and Disposal," Breezing Along with the RML, Distance Learning, October 2009
- "In-Depth Look at MedlinePlus," Distance Learning, October 2009
- "10-Step Approach to Service Continuity," MCMLA Chapter Meeting, Breckenridge, CO, September 2009
- "Get Fit With the RML," MCMLA Chapter Meeting, Breckenridge, CO, September 2009
- "In-Depth Look at MedlinePlus," Distance Learning, September 2009 (2 sessions)
- "Lessons Learned: Hospital Librarian Summit," Breezing Along with the RML, Distance Learning, August 2009
- "Consumer Health Resources," Children's Hospital, Aurora, CO, August 2009
- "In-Depth Look at MedlinePlus," Distance Learning, August 2009
- "Get Wise to WISER," University of Wyoming, Laramie, WY, July 2009
- "Outreach Connection Wiki" poster presentation, Indian Health Summit, Denver, CO, July 2009
- "Expert PubMed Searching," Colorado Health Foundation, Denver, CO, June 2009
- "Consumer Health Resources," Health Careers Pre-Collegiate Students, Aurora, CO, June 2009
- "Environmental and Toxicology Databases," Spotlight on NLM Resources, Online, June 2009
- "Expert PubMed Searching," University of Denver Westminster Law Library, Denver, CO, June 2009
- "Expert PubMed Searching," Adams State College, Alamosa, CO, May 2009
- "Consumer Health Resources," Aurora Lights Program, Aurora, CO, April 2009 (3 sessions)

"Consumer Health Resources," University of Colorado Hospital Patient Resource Center, April 2009

"Health Information Literacy," Distance Learning, March 2009

"Introduction to PubMed," National Institute for Occupational Safety and Health, Lakewood, CO, February 2009

"Finding Primary Literature in PubMed and OVID PubMed," University of Colorado Denver Health Sciences Library, Aurora, CO, January 2009

"Expert PubMed Searching," Colorado Department of Public Health and Environment Prevention Services Division Injury, Suicide, Denver, CO, January 2009

"Introduction to PubMed," Platt College, Aurora, CO, January 2009

"Resources for the Public Health Workforce," Health and Human Services Region 8, Denver, CO, December 2008

"Consumer Health Resources", Grillo Health Center Volunteers, Boulder, CO, November 2008

"ABCs of DNA," Consumer Health Information Specialization Series, Aurora, CO, October 2008

"No Comprende: Spanish Health Information Resources for English Speaking Librarians," Consumer Health Information Specialization Series, Aurora, CO, October 2008

"Beyond an Apple a Day," Consumer Health Information Specialization Series, Aurora, CO, October 2008

"Introduction to PubMed," Platt College, Aurora, CO, October 2008

"Innovations in Perspective: Reinventing Information Services at the UCD Health Sciences Library," MCMLA, Cody, Wyoming, October 2008

"PubMed Enhancements," Breezing Along With the RML, Distance Learning, October 2008

"Advanced PubMed Searching," MCMLA, Cody, Wyoming, October 2008

"Innovations in Perspective: Reinventing Information Services at the UCD Health Sciences Library," Reference Renaissance Conference, Denver, CO, August 2008.

"Consumer Health Resources," Red Feather Lakes Public Library, Red Feather Lakes, CO, July 2008

"Resources for the Public Health Workforce," Larimer County Department of Health, Ft. Collins, CO, July 2008

"NIH Public Access Policy and New Roles for Libraries," Breezing Along With the RML, Distance Learning, July 2008

"NIH Public Access Policy and New Roles for Libraries," Emporia State University, Denver, CO, July 2008

"Take Two Aspirin: Helping Librarians Meet the Public Demand for Consumer Health Information," American Library Association, Anaheim, CA, June 2008

"Getting Started with Minority Outreach," Medical Library Association, Chicago, IL, May 2008

"Will Duct Tape Cure My Warts?" CLIC Spring Workshop, Pueblo, CO, April 2008

- "Creating Partners in Health Information Workshop," Aurora, CO, April 2008
- "Advanced PubMed," Univ. of Colorado Denver-HSL, Aurora, CO, March 2008
- "Will Duct Tape Cure My Warts?" CLiC Spring Workshop, Grand Junction, CO, February, 2008
- "AHIP and the RML," Breezing Along with the RML web conference, February 2008
- "Advanced PubMed," Univ. of Colorado Denver-HSL, Aurora, CO, January 2008
- "Introduction to PubMed," Platt College, Aurora, CO, January 2008
- "NLM Consumer Health Information Resources," Urban Peak, Denver, CO, December 2007
- "Complimentary and Alternative Medicine Resources," Colorado Consumer Health Information Librarians, Aurora, CO, December 2007
- "Preparing for Disaster: Connecting Communities to Local Resources" poster presentation, Colorado Association of Libraries, Denver, CO, November 2007
- "Free and Reliable Substance Abuse Resources: Addressing a Public Health Priority" oral presentation, Public Health Association Conference, Ft. Collins, CO, September 2007
- "Breezing Along with the RML: Complimentary and Alternative Medicine Resources," Virtual Presentation, NN/LM-MCR, March 2007
- "Introduction to PubMed and MedlinePlus," Adams State College, Alamosa, CO, July 2007
- "PubMed for Experts," University of Wyoming, Laramie, WY, July 2007
- "Complimentary and Alternative Medicine Resources," University of Wyoming, Laramie, WY, July 2007
- "NLM Consumer Health Information Resources," Undergraduate Pre-Health Diversity Students Program, UCHSC-Office of Diversity, June 2007
- "NLM Consumer Health Information Resources," Health Sciences Library (4 sessions), Denver, CO, June 2007
- "Databases on Display: Other NLM Resources," Virtual Presentation, NN/LM-MCR, April 2007
- "NLM Consumer Health Information Resources," Colorado Library Consortium, Pueblo, CO, April 2007
- "Beyond an Apple a Day," Utah State Library, Salt Lake City, UT, April 2007
- "NLM Consumer Health Information Resources," Red Feather Lakes Public Library, Red Feather Lakes, CO, April 2007
- "NLM Consumer Health Information Resources," Colorado Library Consortium, Grand Junction, CO, March 2007
- "Databases on Display: What's New in MedlinePlus," Virtual Presentation, NN/LM-MCR, March 2007
- "NLM Consumer Health Information Resources," Colorado Library Consortium, Greeley, CO, March 2007
- "Introduction to MedlinePlus and PubMed," Grillo Health Center, Boulder, CO, February 2007

"NLM Consumer Health Information Resources," Louisville Public Library, Louisville, CO, January 2007

"NLM Consumer Health Information Resources," Englewood Public Library, Englewood, CO, January 2007

"NLM Tools for the Public Health Workforce," Colorado Department of Public Health and Environment, Denver, CO, December 2006.

"NLM Consumer Health Resources for Health Professionals," East Morgan County Hospital, Brush, CO, November 2006.

"NLM Consumer Health Resources for Health Professionals," Informatics Session-Denison Library, Denver, CO, November 2006.

"Where Consumers Get Health Information," panel presentation-Colorado Association of Libraries, Denver, CO, November 2006.

"Substance Abuse Information the Easy Way," poster presentation-Colorado Association of Libraries, Denver, CO, November 2006.

"NLM Consumer Health Information Resources," NN/LM Update Panel, MCMLA, St. Louis, MO, October 2006.

"NLM Consumer Health Information Resources," Denison Memorial Library, Denver, CO, October 2006.

"Introduction to PubMed and NLM Environmental Databases," National Swimming Pool Foundation, Colorado Springs, CO, September 2006.

"NLM Tools for the Public Health Workforce," Colorado Department of Public Health and Environment, Denver, CO, September 2006.

"Introduction to MedlinePlus and PubMed," Aurora Public Library, Aurora, CO, September 2006.

"Introduction to PubMed Veterinary Resources," Tiara Rado Animal Hospital, Grand Junction, CO, August 2006.

"NLM Consumer Health Resources," Evidence-Based Health Care Workshop, Vail, CO, August 2006.

"Looking in all the Wrong Places: PubMed for Librarians," Wyoming Symposium, Laramie, WY, July 2006.

"Introduction to PubMed," Informatics Session-Denison Library, Denver, CO, June 2006.

"NLM Consumer Health Resources," Red Feather Lakes Public Library, Red Feather Lakes, CO, June 2006.

"Introduction to PubMed and MedlinePlus," Aims Community College, Greeley, CO, May 2006.

"Transforming Borders: A Multi-State, Multi-Institutional Approach to Go Local Services," poster presentation-Medical Library Association, Phoenix, AZ, May 2006.

"NLM Consumer Health Resources," Informatics Rotation-Denison Library, Denver, CO, April 2006.

"Introduction to PubMed and MedlinePlus," Prevention Information Center, Lakewood, CO, March 2006.

"What's New in MedlinePlus," presentation-Public Library Association National Conference, Boston, MA, March 2006

"PubMed for Special Libraries," Helen Fowler Library-Denver Botanic Gardens, Denver, CO, March 2006.

Go Local TC4C Training, Ute Mountain Ute Education Center, Towaoc, CO, March 2006.

"NLM Consumer Health Resources," Ignacio Public Library, Ignacio, CO, February 2006.

"NLM Consumer Health Resources," Denver Public Library, Denver, CO, February 2006.

"NLM Consumer Health Resources," Denver Public Libraries, January, 2006.

"Introduction to PubMed," Native American Telehealth Training, Ben Nighthorse Campbell Center, Aurora, CO, January 2006.

"Introduction to MedlinePlus and PubMed," Barbara Davis Center for Childhood Diabetes, Aurora, CO, January 2006.

"NLM Consumer Health Resources," Ignacio Community Library, Ignacio, CO December 2005.

"Bioinformatics Research: An Introduction to NCBI Tools." Presentation at the Rocky Mountain Bioinformatics Conference, Snowmass, CO, December 2005.

"Introduction to PubMed," Colorado School of Traditional Chinese Medicine, December 2005.

"Introduction to MedlinePlus," Aurora Public Library, Aurora, CO, December 2005.

"NLM Consumer Health Resources," Informatics Session, Denison Memorial Library, University of Colorado at Denver and Health Sciences Center, November 2005.

"Introduction to MedlinePlus," Jefferson County Public Libraries, Lakewood, CO, November 2005.

"Introduction to PubMed," Presentation at the ASTRO Annual Conference, Denver, CO, October 2005.

"Introduction to PubMed," Platt College of Nursing, Aurora, CO, October, 2005.

"Overcoming Cyberchondria: Or, How I Learned to Navigate Quality Consumer Health Information on the Web," Presentation at the MiniMed School, Denver, CO, September, 2005.

"NLM Consumer Health Resources," Aspen Public Library, Aspen, CO, July, 2005.

"NLM Public Health Resources on the Web," Pitkin County Community Health Center, July, 2005.

Professional Exhibits:

Colorado Association of Libraries, Denver, CO, November 2009

American School Health Association, Denver, CO, October 2009

American Dietetic Association, Denver, CO, October 2009

Colorado Public Health Association, Copper Mountain, CO, September 2009

Colorado Hospital Association, Keystone, CO, September 2009

Colorado Rural Health Association, Rocky Ford, CO, September 2009

Culture of Data: What Makes a Community Healthy, Vibrant and Thriving?" Arvada, CO, October 2009

Indian Health Summit, Denver, CO, June 2009

Colorado Rural Health Association, Ft. Morgan, CO, June 2009

United States Public Health Service, Atlanta, GA, June 2009

Medical Library Association, Honolulu, HI, May 2009

Colorado Association of Libraries, Denver, CO, November 2008
 MCMLA, Cody, WY, October 2008
 Colorado Public Health Association, Breckenridge, CO, September 2008
 Colorado Hospital Association, Vail, CO, September 2008
 Title X Clinical Family Planning Conference, Broomfield, CO, August 2008
 National AHEC Conference, Denver, CO, June 2008
 Colorado Rural Health Association, Copper Mountain, CO, June 2008
 USPHS Scientific and Training Symposium, Tucson, AZ, June 2008
 1st Annual Cybrarian Fair, Ft. Collins, CO, May 2008
 9 Health Fair, Denver, CO, April 2008
 9 Health Fair, Denver, CO, April 2008
 9 Health Fair, Arvada, CO, April 2008
 Colorado Colleague Connection, April 2008
 National Western Stock Show, Denver, CO, January 2008
 Colorado Association of Libraries, Denver, CO, November 2007
 MidContinental Chapter-Medical Library Association, Omaha, NE, October 2007
 National Home Care and Hospice Conference, Denver, CO, October 2007
 Public Health in the Rockies Conference, Ft. Collins, CO, September 2007
 Colorado Hospital Association, Vail, CO, September 2007
 Special Libraries Association, Denver, CO, June 2007
 9 Health Fair, Arvada, CO, April 2007
 9 Health Fair, Red Feather Lakes, CO, April 2007
 Colleague Connection, University of Denver, Denver, CO, April 2007
 Colorado Association of Libraries, Denver, CO, November 2006
 Colorado Public Health Conference, Vail, CO, September 2006
 MCMLA, St. Louis, MO, October, 2006
 Academy of General Dentistry National Conference, Denver, CO, August 2006
 American Library Association National Conference, New Orleans, LA, June 2006
 Colorado Rural Health Conference, Longmont, CO, June 2006
 American College of Sports Medicine National Conference, Denver, CO, May 2006
 Medical Library Association Annual Conference, Phoenix, AZ, May 2006
 United States Public Health Service Professionals Conference, Denver, CO, May 2006
 Indian Health Service Conference, Albuquerque, NM, May 2006
 Colleague Connection, University of Denver, Denver, CO, April 2006
 Molecular Biology Symposium-Anschutz Medical Campus, Aurora, CO, April 2006
 Public Library Association National Conference, Boston, MA, March 2006
 Culture of Data, Arvada, CO, October, 2005
 Colorado Association of Libraries, Denver, CO, October 2005
 Society for the Advancement of Chicanos and Native Americans in Science, Denver, CO, September, 2005
 MCMLA, Salt Lake City, UT, September, 2005
 Wilderness Medical Society, Snowmass, CO, July, 2005

Continuing Education and Workshops:

"Introduction to Public Health," Colorado Association of Local Public Health Officials, December 2009
 "Cut the Cord: Connecting to our Mobile Users," Medical Library Association, Educational Webcast, November 2009
 Culture of Data: What Makes a Community Healthy, Vibrant and Thriving?" Arvada, CO, October 2009
 MidContinental Chapter Medical Library Association, Breckenridge, CO, September 2009
 Hospital Librarian Summit, University of Illinois-Chicago, August 2009
 Wyoming Symposium, University of Wyoming, Laramie, WY, July 2009
 Indian Health Summit, Denver, CO, June 2009
 Medical Library Association, Honolulu, HI, May 2009
 Open Access Publishing Forum, Aurora, CO, November 2007
 MidContinental Chapter-Medical Library Association, Omaha, NE October 2007
 Research for Native Health, Denver, CO, August 2007

“Marketing as if Your Library Depended on it,” Denver, CO, August 2007
Colorado Rural Health Conference, Trinidad, CO, June 2007
Medical Library Association Conference, Philadelphia, PA, May 2007
UCDHSC Change Management Seminar, Aurora, CO, October 2006
Colorado Medical Society Outcomes Institute, Denver, CO, September 2006
Caring for Colorado’s Medically Underserved Conference, Denver, CO, September 2006
Dreamweaver Training, Denver, CO, April 2006
“A Medical Home for Every Child: Ethics, Law and Policy Conference,” Children’s Hospital, Denver, CO, April 2006
Colorado Rural Health Forum, Lakewood, CO, April 2006
Bob Pike’s Train-the-Trainer Bootcamp, Phoenix, AZ, February 2006
DOCLINE/QuickDoc CE Course, Denver, CO, January 2006
Building Effective Relations with American Indian Tribes, Durango, CO, December, 2005
Searching PubMed-National Training Center Clearinghouse, Salt Lake City, UT, September, 2005
Third Annual Wyoming Symposium for Health Information Professionals, Laramie, WY, July, 2005

John C. Bramble, M.L.I.S.
 Eccles Health Sciences Library
 10 North 1900 East
 Salt Lake City, UT 84112
 801-581-5534 (phone)
 jbramble@lib.med.utah.edu

EDUCATION

<u>Years</u>	<u>Degree</u>	<u>Institution (Area of Study)</u>
1995 - 1999	B.S.	University of Utah (Sociology) Salt Lake City, UT
1999 - 2003	M.L.I.S.	Florida State University Tallahassee, FL

PROFESSIONAL EXPERIENCE

Full Time Positions

1998 - 1999	Reference & Circulation Assistant, University of Utah, Spencer S. Eccles Health Sciences Library, Salt Lake City, UT
1999 - 2001	Responsibilities: Provided reference and circulation services to library patrons Circulation Supervisor, University of Utah, S.J. Quinney Law Library, Salt Lake City, UT
2002 - 2003	Responsibilities: Training of circulation staff, scheduled staff, scheduled building hours, maintained print & electronic reserve for the University of Utah College of Law, and provided reference services to library patrons Training Coordinator, University of Utah, Spencer S. Eccles Health Sciences Library, Salt Lake City, UT
2006 - Present	Responsibilities: Coordinates cross-departmental training NN/LM MidContinental Region: Utah/Network Liaison. Academic Rank: Research Assistant Librarian, University of Utah, Spencer S. Eccles Health Sciences Library, Salt Lake City, UT
2001 - 2003	Reference Librarian. Academic Rank: Adjunct Affiliate Librarian, University of Utah, Spencer S. Eccles Health Sciences Library, Salt Lake City, UT
2003 - 2006	Responsibilities: Provision of reference assistance, instructor in library education program, mediates database searching, formal & informal electronic & print resources, and participant in special projects Outreach Librarian. Academic Rank: Assistant Librarian, University of Utah, Spencer S. Eccles Health Sciences Library, Salt Lake City, UT
	Responsibilities: Arrange library education and training services for non-University of Utah health care professionals within our service area. Keep skills current on technology hardware and software used to access library resources. Identify and work with University of Utah Health Sciences Center distant learning students for provision of library services and training. Responsible for statistics collection and interpretation in written reports for grant activities and for library annual report. Liaison to the Utah Health Sciences Consortium, Utah Library Association, and promotes consumer health information efforts within the state of Utah. Works with

the Utah Area Health Education Centers (AHEC) and Utah Department of Health. Participates in professional meetings, Mid-continental Regional Medical Library outreach activities, and in the Spencer S. Eccles Health Sciences Library Education Team planning and teaching library related classes
 2007-Present Network Membership / Utah Outreach Liaison

National Network of Libraries of Medicine MidContinental Region (MCR)

Academic Rank: Assistant Librarian, Research Faculty

Responsibilities include: Managing the Network membership by keeping records current and accurate, renewing of expired memberships, etc. Provides synchronous and asynchronous training on NLM document delivery services and access (DOCLINE, EFTS, Loansome Doc, LInkOut) and licensing electronic resources. Administers the MCR Reference Continuity Service Network project. Co-editor of the Plains to Peaks Post Newsletter, a printed newsletter distributed to MCR Network members and other Regional Medical Libraries in the United States. Exhibits and presents at national, state, and local professional meetings and conferences on accessing and using National Library of Medicine resources and services. Provides state outreach services to Utah, such as promotion and training on accessing quality health information to health care professionals, public health workers, and librarians.

SCHOLASTIC HONORS

2004 United States National Commission on Libraries and Information Science Blue Ribbon Consumer Health Information Recognition Award for Libraries for Utah
 2005 MLA Public Relations Swap and Shop Exhibit Honorable Mention for Creating an Innovative Campaign Promoting Medical Libraries and the Health Sciences Information Profession
 2006 United States National Commission on Libraries and Information Science Blue Ribbon Consumer Health Information Recognition Award for Libraries for Utah.

ADMINISTRATIVE EXPERIENCE

Professional Organization & Scientific Activities

2003 - 2004 Chair, Medical Library Association, Mid-Continental Chapter, Education Committee
 2003 – 2006 Chair, Utah Library Association, Computer & Digital Technologies Training Round Table
 2004 Member, Utah Academic Library Consortium, 2004 Fall Retreat Planning Committee
 2004 - 2006 Chair, Medical Library Association, Mid-Continental Chapter, Education Committee
 2004 - 2005 Member, Medical Library Association, Mid-Continental Chapter, 2005 Annual Meeting Planning Committee
 2009-2011 Chair, Utah Library Association Health Round Table
 2009-2011 Member, Medical Library Association, Mid-Continental Chapter, Membership Committee

CURRENT MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Utah Library Association
 American Library Association
 Medical Library Association
 Medical Library Association: Mid-Continental Chapter
 Mountain Plains Library Association
 Rural Health Association of Utah
 Rural Health Association of Utah
 Special Library Association
 Special Library Association Pacific Northwest Chapter

FUNDING**Past Grants**

- 08/01/03 - Present Mobile Information and Curriculum Tools.
 Principal Investigator: Wayne J. Peay
 Direct Costs: \$19,500 Total Costs: \$19,500
 Marriner S. Eccles Foundation
 Role: Co-Investigator
- 02/01/05 - Present LSTA Grant, Internet Communication Technology Pilot Program.
 Direct Costs: \$7,500 Total Costs: \$7,500
 American Library Association
 Role: Principal Investigator
- 04/01/05 - 04/30/06 GoLocal Utah (gLU).
 Funded by a grant from the National Network of Libraries of Medicine. The goLocalUtah project team built and maintains a database of health and human services in Utah that debuted to the general public in January of 2006. MedlinePlus users access this database through the Go Local tool in MedlinePlus. Internet users may also directly access the database at <http://golocalutah.org>. This is a joint project of the National Library of Medicine, the Spencer S. Eccles Health Sciences Library, the Utah Health Sciences Library Consortium, the Health Round Table of the Utah Library Association, and the Utah Cares Project
 Principal Investigator: T. Elizabeth Workman
 Direct Costs: \$19,608 Total Costs: \$25,000
 Spencer S. Eccles Health Sciences Library
 Role: Co-Principal Investigator

PEER-REVIEWED JOURNAL ARTICLES

1. Le Ber, JM, Lombardo NT, Weber A, **Bramble J.** (2004). Portable classroom leads to partnership. *Med Ref Serv Q*, 23(2), 41-8.
2. Le Ber, J.M., Lombardo NT, & **Bramble J.** (2005) Medical Students Find Power in Their Palm: PDAs in a Clinical Rotation. *J Electronic Resources in Medical Libraries*, 2 (2), 91-100.

OTHER (Commentary/Letters/Editorials/Case Reports/Video/Film)**Other**

1. **Bramble, JC** (2003). Library Seeing Red, Infrared That Is: Cool tool for your PDA. *IAIMS Newsletter*, 18, 3.
2. **Bramble JC.** (2003). Librarians Bring High Tech Expertise to San Francisco. *IAIMS News Letter* (19, p. 3).
3. **Bramble JC.** (2003). Library Seeing Red, Infrared That Is: Cool tool for your PDA. *IAIMS News Letter* (18, p. 3).
4. **Bramble JC.** (2003). Mobile Curriculum Tools: an opportunity for collaboration. *IAIMS News Letter* (18, p. 3).
5. **Bramble JC.** (2004). LSTA Mini Grant Awarded for Internet Communication Technology Pilot. *IAIMS News Letter* (20, p. 2).
6. **Bramble, JC.** (2010). What's New in MedlinePlus? *eSynapse* (25, No. 1)

UNPUBLISHED POSTER PRESENTATIONS

1. Le Ber JM, Lombardo NT, **Bramble JC.** (2003). *Portable classroom leads to partnership.* San Diego, CA.
2. Youngkin ME, Le Ber JM, **Bramble JC.** (2003). *Surf's up and so are the fences! Providing access to health sciences information from inside the Olympic security zone.* San Diego, CA.
3. Le Ber JM, Lombardo NT, **Bramble JC.** (2003). *Portable classroom leads to partnership.* Cedar City, Utah.
4. Le Ber JM, Lombardo NT, **Bramble JC,** Maloney CG. (2004). *Students find power in their palm: personal digital assistants in a clinical rotation.* Washington, DC.
5. Hamasu, C., Bramble, J.C., and Dennis, S.E. "Accelerating Technology Adoption by Health Sciences Librarians." Poster. 2009 LITA Forum, Salt Lake City, UT, October 3, 2009

ORAL PRESENTATIONS**Meeting Presentations (Not Published Abstracts and Not Unpublished Posters)****National & International**

- | | |
|------|---|
| 2004 | Norlin, C., Maloney, C., Dennis, S., Roberts, S., and Bramble, JC. "Using Digital Technology To Support Teaching and Programs". Presentation. Pediatric Academic Society" Annual Meeting, San Francisco, CA |
| 2004 | Norlin C, Maloney C, Dennis S, Roberts S, and Bramble JC. "Using Digital Technology To Support Teaching and Programs." Pediatric Academic Society Annual Meeting, San Francisco, California |
| 2004 | Maloney C, Le Ber JM, and Bramble JC. "Pretty Darn Amazing; Providing Clinically Important Resources at the Point-of-Care using PDA technology: A Hands-on Example from a Pediatric Clerkship," 2004 SLICE of Life Conference. Amsterdam, Netherlands |
| 2005 | Le Ber, J.M., Lombardo, N.T. and Bramble JC. Technology Update: New Technologies Used in Health Sciences Education and Training. Medical Library Association Continuing Education [8] Credits, Medical Library Association Annual Meeting. San Antonio, TX |
| 2006 | Gregory JM, Bramble JC, Patrick S, Reid A, Craigle V, Salmond C, Birks A, Utah Health Info Direct (UHID) Pilot Project: Customizing ILLiad to Meet the Needs of Specialized Clientele. ILLiad International Conference, OCLC, Dublin, OH |
| 2009 | Hamasu, C., Bramble, JC, Champ-Blackwell, S., Barnes, S., Mishra, R., and Ryan, J. "Elevated Practices for Long Distance Collaborations." Paper presentation given at the 2009 MCMLA Annual Meeting, Breckinridge, CO, |
| 2009 | Bramble JC. "Technology and E-resources: Evolving with the Times" Invited |

- panelist at the 2009 Medical Library Association Annual Conference Collection Development Section, Honolulu, HI
- 2009 Kelly E., Jones, B.B., and **Bramble, JC**. "Infusing Health Sciences Libraries with Economic Muscle." Paper presentation given at the 2009 Medical Library Association Annual Conference Hospital Library Section, Honolulu, HI

Local/Regional

- 2001 Youngkin ME and **Bramble JC**. "Full Text Resources from Your Desktop." Presentation given at the Library and Information Technology (LIFT) Forum, Salt Lake City, UT
- 2002 **Bramble JC**. "PDA Operating Systems: Which One Is Best for You?" University of Utah College of Nursing students and faculty, Salt Lake City, UT
- 2002 Lombardo NT and **Bramble JC**. "Pocket PC versus Palm OS: Which OS is right for you?." Library and Information Technology Forum. Salt Lake City, UT
- 2002 Lombardo NT and **Bramble JC**. "Mobile Curriculum Tools." University of Utah Health Sciences Center, Salt Lake City, UT
- 2002 Lombardo NT and **Bramble JC**. "The ABCs of PDAs PDQ: or PDAs, what are they good for?" Presentation given at the Utah Library Association 2002 Conference. Salt Lake City, UT
- 2003 Peay WJ, Lombardo NT, Le Ber JM, and **Bramble JC**. "Next Generation Library, A Discussion of a New Vision for Libraries." Utah Library Association Annual Meeting. Sandy, UT
- 2003 Patrick S, **Bramble JC**, and Youngkin M. "Focusing on Consumer Health Information: Your resources now and in the future." Utah Library Association Fall Workshop. Cedar City, Utah
- 2003 **Bramble JC**. "Making Technology Fun & Useful: Practical Uses of PDA's (Personal Digital Assistants)." Utah Library Association Fall Workshop. Cedar City, Utah
- 2003 Patrick, S., and **Bramble, JC**. "Focusing on Consumer Health Information: Your resources now and in the future". Utah Library Association Fall Workshop. Logan, UT
- 2003 Lombardo NT and **Bramble JC**. "Mobile Curriculum Tools." University of Utah College of Nursing. Salt Lake City, UT
- 2003 Lombardo NT and **Bramble JC**. 2003 InfoFair, Next Generation Communication Co-moderator. Active Class Demonstration. Salt Lake City, Utah
- 2003 **Bramble JC**. "Introduction to MEDLINEplus and NIH Senior Health Web Resources." Murray Senior Center, Murray, Utah
- 2003 Patrick S, and **Bramble JC**. "Introduction to Library Resources." Rural Health Association of Utah Annual Meeting, Cedar City, Utah
- 2004 **Bramble JC**. "PDAs in Libraries & Health Care Settings," Four Medical Library Association Continuing Education Credits, Mid-Continental Medical Library Association Annual Meeting. Sioux Fall, SD
- 2004 Evershed S, **Bramble JC**, Belton DG, and Atkinson K. "The Road Less Traveled: Distance Learning Technology brings education to rural communities." Rural Health Association of Utah annual meeting. Cedar City, Utah
- 2004 **Bramble JC**, "Community Outreach Small Group Discussion." Discussion Facilitator. UALC Fall 2004 Retreat. Springdale, Utah
- 2004 Evershed S and **Bramble JC**. "Introduction to Utah Telehealth Network and Eccles Health Sciences Library Services." Utah Association of Diabetes Educators annual meeting. Park City, Utah
- 2004 **Bramble JC**. "New Technology Hands On!" Spencer S. Eccles Health Sciences

- Library InfoFair 2004. Salt Lake City, Utah
- 2006 **Bramble, J.C.** "Health Information Resources: Finding the Heart Healthy Gems". Presentation. 3rd Annual Utah Stroke Symposium. Salt Lake City, Utah.
- 2009 **Bramble JC.** "Continuity of Library Services and Resources" Presentation given at the 2009 Wyoming Symposium, Laramie, WY
- 2010 **Bramble JC** and Youngkin ME "Finding the Information You Need" Presentation given at the Utah Academy of Physician Assistants. Mesquite, NV

CONTINUING EDUCATION ATTENDED

- 2000 Utah Library Association, Professional Meeting Attended (1 hour(s)/day)
- 2002 MLA CE 2; PDAs from A to Z (1 hour(s)/day)
- 2002 MLA CE 11.5; Introduction to Web-based Searching: Using PubMed, the NLM Gateway & Clinical Trials (1 hour(s)/day)
- 2002 MLA CE 4; Palmtop Computers in the Library (1 hour(s)/day)
- 2002 MLA CE 4; Library Directors: Knowledge, Skills, and Career Paths (1 hour(s)/day)
- 2002 Mid-Continental Chapter of the Medical Library Association, Professional Meeting Attended (1 hour(s)/day)
- 2002 MCMLA CE 4; Creating Influence: Getting What You Want (1 hour(s)/day)
- 2002 MCMLA CE 4; Generation Mix (1 hour(s)/day)
- 2002 Medical Library Association, Professional Meeting Attended (1 hour(s)/day)
- 2003 MLA CE 6; Development and Fundraising for Health Sciences Librarians (1 hour(s)/day)
- 2003 MLA CE 4; Teaching Adults: Is It Different? (1 hour(s)/day)
- 2003 MLA CE 4; Consumer Health: An Evidence Based Approach to Complementary & Alternative Medicine (1 hour(s)/day)
- 2003 MLA CE 6; Developing and Fundraising for Health Sciences Librarians (1 hour(s)/day)
- 2003 MLA CE 8; Project Management: From Inception to Completion (1 hour(s)/day)
- 2004 MCMLA CE 3; Consumer Health: An Evidence Based Approach to Complementary & Alternative Medicine (1 hour(s)/day)
- 2004 MCMLA CE 3; Teaching Adults: Is it different? (1 hour(s)/day)
- 2004 MLA CE 6; Planning & Managing Consumer Health Libraries (1 hour(s)/day)
- 2004 SLICE of Life Conference, Netherlands (1 hour(s)/day)
- 2004 MLA CE 4; Face to Face: Strategies for Effective Consumer Health Communication (1 hour(s)/day)
- 2004 MCMLA CE 3; Consumer Health: An Evidence Based Approach to Complementary & Alternative Medicine.
- 2004 MCMLA CE 3; Teaching Adults: Is it different?
- 2005 MLA CE 6; NLM Training: TOXNET[®]
- 2005 MLA CE 1.5; Partnering for Public Health: Information, Librarians, and the Public Health Workforce
- 2007 MLA CE 6; Grant Writing for \$ucce\$\$
- 2009 Ninth House Management training series sponsored by the Utah State Library

REBECCA BROWN

3011 W. 82nd Terrace • Leawood, KS 66206

EDUCATION

Texas Woman's University, Denton, TX
Master's of Library Science, December 2006

University of Kansas, Lawrence, KS
Bachelor of General Studies, 2003

Johnson County Community College, Overland Park, KS
Windows NT Local Area Network Administrator Certificate, 1999

LIBRARY RELATED EXPERIENCE

- January 2007 – Present **National Network of Libraries of Medicine (NN/LM)**
Kansas/Technology Liaison
Work with community organizations, librarians, public health departments, and professional organizations throughout Kansas to provide training on the resources of the National Library of Medicine. Develop coursework and provide instruction on new technology tools for librarians. Develop relationships with eligible groups and coordinate funded projects within Kansas. Collection development in Health Policy and Management at KU Medical Center. Manage annual Kansas NN/LM budget.
- August 2005 – January 2007 **Kansas University Medical Center A.R. Dykes Library**
Copyright and Interlibrary Loan Specialist
Use PubMed, WorldCat and a variety of other databases to verify and process interlibrary loan requests. Work with publishers and faculty to secure copyright permissions for course reserves. Collaborate with librarians to create online instructional materials for library resources. Member of the web development team.
- December 2004 - August 2005 **Kansas City Public Library**
Reference Associate
Provided reference services via face-to-face, virtual chat and telephone
- September 2004 - December 2004 **Johnson County Community College**
Computer Lab Assistant
Staffed computer labs and provided technical and software support to students and faculty.

- February 2004 - **Johnson County Central Resource Library**
December 2004 *Periodicals Clerk*
Assisted patrons with electronic databases, computers, Internet, and online catalog. Interlibrary loan duties.
- August 2003 - **Johnson County Central Resource Library**
February 2004 *Circulation Page*
Sorted and shelved books. Performed shelf-reading duties.
- May 1999 – **Menu News**
Present *Website Administrator/Technical Support*
Worked with local restaurants to design and manage email marketing campaigns to promote business. Managed web sites using FrontPage and Dreamweaver.

OTHER WORK EXPERIENCE

American Century Investors

Investor Services Representative

- Provided assistance with shareholder account questions, transactions and problems
- Created reference materials for distribution to the Investor Services department
- Twice received recognition from shareholders for exceptional service

Dinner at Your Door

Caterer

- Marketed and managed catering events
- Worked with customers to develop menus
- Served as chef
- Managed budget and schedule

Foundation Workshop for the Handicapped

Marketing Manager

- Collaborated with group managers to determine job flow
- Bid and managed piece-work contract terms
- Liaison between Workshop, manufacturers and third parties

COMMUNITY SERVICE

Johnson County Public Library; Volunteer Instructor, Microsoft Word
Jewish Vocational Services; Refugee Mentor

Siobhan Champ-Blackwell

Creighton University Omaha, NE 68178 402-280-4156 siobhan@creighton.edu

Education

M.S. Library and Information Science 2002 (4.0 GPA), University of Illinois, Urbana-Champaign

B.A. Speech Communication 1982, cum laude, Ripon College, Ripon, Wisconsin

Professional Experience

Community Outreach Liaison 2002-present
National Network of Libraries of Medicine, MidContinental Region (NN/LM MCR)
Creighton University Health Sciences Library, Omaha, NE

- Provide training in National Library of Medicine resources to health care providers of underserved patients and NN/LM MCR Network members.
- Exhibit and present at local, state, regional and national conferences on health disparities issues related to increased access to health information
- Provide management of community outreach project, including the development of a yearly activity plan and logic model for all NN/LM MCR staff.
- Provide consultation services to community and faith based organizations seeking to increase the health education of underserved populations.
- Assist in planning and running of regional symposia on collaborative health information partnerships around community and minority health concerns.
- Develop tools and resources to assist in creating and maintaining collaborations between Network members, public libraries and community based organizations.
- Contribute to NN/LM MCR publications, including quarterly newsletter, weekly news, as well as write informational articles for external organizations.
- Develop and maintain web resources on minority health and low income concerns, cultural competence, and multilingual materials.
- Content Management for "Bringing Health Information to the Community" web log <<http://nnlm.gov/mcr/bhic/>>
- Assist Network members and staff at regional community organizations with research on health disparities and cultural competence issues.
- Ensure that staff and publications of the NN/LM MCR are culturally sensitive.

Photo Librarian

Jim Krantz Studios, Omaha, NE

2000-2002

- Digitized commercial photography collection
- Indexed collection using ARPEGGIO System for stock photography database

Library Cataloger/Assistant, College of St. Mary, Omaha, NE 1999-2000

Library Assistant, Jewish Federation Library, Omaha, NE 1997-1999

Websites

National Network of Libraries of Medicine-MidContinental Region: responsible for content on the Minority and Low Income resources pages
<<http://nnlm.gov/mcr/resources/>>

Bringing Health Information to the Community Web Log: responsible for daily postings and maintaining a distribution email list <<http://nnlm.gov/mcr/bhic/>>

Honors & Awards

Library Journal "Mover and Shaker" 2005

University of Illinois Graduate School of Information Science "Health Sciences Information Award" 2003

Beta Phi Mu (Library and Information Science International Honor Society) since 2003
Nebraska Library Association Louise A. Nixon Scholarship 2002

Community Memberships

HELP Adult Services, Board of Directors 2008 - present

Professional Memberships

Medical Library Association, Member

Midcontinental Chapter of the Medical Library Association, Member

- MidContinental/Midwest MLA Chapters 2007 Joint Conference Program Committee Chair

American Library Association (ALA), Member

- Wellness in the Workplace Advisory Circle Chair 2006–2008

ALA Affiliate American Indian Library Association, Member

ALA Affiliate REFORMA, Member

- Executive Committee Secretary 2008-2010
- Executive Committee Member-At-Large Representative 2006-2008
- Trejo Foster Foundation Representative 2006

ICON: Nebraska Medical Librarians, Member

- Executive Board 2005-2007

Nebraska Library Association, Member

- College and University Section, Executive Board 2003-2006

Publications

Champ-Blackwell, Siobhan and Hartman, Teresa, "Librarian Is Out: The Role of the Librarian in Rural Health Outreach" IN Royeen, Charlotte Brasic, Jensen, Gail M. and Harvan, Robin Ann, *Leadership in Interprofessional Health Education and Practice* Jones and Bartlett Publishers, 2008.

Champ-Blackwell, Siobhan and Stokes, Henry "Your Circle of Wellness" *American Libraries*, June/July 2008, 52-55.

Champ-Blackwell, Siobhan and Hartman, Teresa "Skype and PBWiki" *Journal of the Medical Library Association*, July 2008, 276-278.

Champ-Blackwell, Siobhan and Bergjord, Judith "Webliography: Alzheimer's Disease Information on the Internet" IN Callone, PR et al. *Alzheimer's Disease: 300 Tips for Making Life Easier* Elkhorn, NE: Caring Concepts, Inc. 2006.

Champ-Blackwell, Siobhan and Weldon, Stephanie. "Free Online Consumer Health Classes" *Journal of Consumer Health on the Internet* Volume 9, Issue 3 2005

Champ-Blackwell, Siobhan "Subject Analysis of Photographs" *Technically Speaking* Volume 4, No. 1 Fall 2001 <http://www.nebraskalibraries.org/TSRT/newsletter/news4-1.htm#photos>

Champ-Blackwell, Siobhan "Descriptive Cataloging of Photographs" *Technically Speaking* Volume 4, No. 2 Winter 2002
<http://www.nebraskalibraries.org/TSRT/newsletter/news4-2.htm#photo>

Posters and Conference Papers

Abbey, Dana; Champ-Blackwell, Siobhan; and Leskovec, Jacqueline. "National Network of Libraries of Medicine: Empowering Change Through Health Information Access" American Library Association Diversity Fair Poster, July 2009.

Boyd, Lisa and Champ-Blackwell, Siobhan, "National Network of Libraries of Medicine: Empowering Change Through Health Information Access" 3rd National Leadership Institute Summit, Poster February 2009.

Howard, Ellen; Gillispie, Mary Alice; and Champ-Blackwell, Siobhan. "Patient Education for Diverse Populations: Development, Evaluation & Dissemination" *The Fifth National Conference on Quality Health Care for Culturally Diverse Populations* October 2006, Seattle, WA.

Champ-Blackwell, Siobhan and Kelly, Betsy. "Blogging to Empower". *Medical Library Association Paper* May 2006; *Midcontinental Chapter Medical Library Association* 2006

Champ-Blackwell, Siobhan and McGee, Marty. "Getting HIP: Health Information Partnerships" *Medical Library Association Poster 2006; Midcontinental Chapter Medical Library Association 2006*

Champ-Blackwell, Siobhan and Davison-Turley, Whitney "Reaching Out: Training Tools for Underserved Populations" *Medical Library Association Poster 2005*.

Champ-Blackwell, Siobhan; Hebert, Becky and Sahali, Roy "Outstanding Outreach: Building Relationships with Your Community" *Medical Library Association Poster 2005; American Library Association Diversity Fair Poster 2005*.

Champ-Blackwell, Siobhan and Henning, Mary "RML Funding Fuels Consumer Health Initiatives" *Medical Library Association Poster 2004, MidContinental Medical Library Association Poster 2004*.

Sample of Presentations

"¿No Comprende? Spanish Health Information Resources for English Speaking Librarians " University of Illinois, Chicago and Northbrook Public Library, December 3-4, 2009.

"Getting Started with Information Outreach to Minority Communities" CE, Medical Library Association Annual Conference, Honolulu, HA, May 2009; Chicago, IL, May, 2008; NN/LM South Central Region Resource Library Directors Meeting, August 2009.

"Don't be a Bystander: Own Your Sexual Health" Panelist, NOW Conference, June 2009.

The Healthy Library: Creating a Culture of Wellness, Panel Moderator, Medical Library Association Annual Conference, Honolulu, HA, May 2009.

"The Healthy Librarian" Omaha Public Library Staff Retreat, April 2009.

"Connecting With Your Community" Nebraska Library Association Paraprofessional Spring Meeting, 2009.

"Beyond an Apple a Day: Providing Consumer Health Information at Your Library"; "¿No Comprende? Spanish Health Information Resources for English Speaking Librarians " ;and *"ABCs of DNA: Unraveling the Mystery of Genetics Information for Consumers"* MLA CE Mini-conference, Omaha, NE February 2009.

"Rural Health Care Information: the Challenges" Midcontinental Chapter of the Medical Library Association Annual Conference, Cody, WY October 2008

"Let's Talk About Sex!" REFORMA National Conference, El Paso, TX, September 2008

“*The Healthy Librarian: Cultivating Workplace Wellness*”, American Library Association Annual Conference, Anaheim, CA, June 2008

“Plains to Peaks Podcast” #1: Interview with Joy Voltz”, April 2007

<<http://nmlm.gov/mcr/services/podcasts/podcast1.html>>

#2 Interview with Ira Combs, June 2007

<<http://nmlm.gov/mcr/services/podcasts/podcast2.html>>

“Healthy Blazing on the Web” *ARCH Respite National Conference*, Omaha, NE October 2006

“Spanish for the Health Care Provider: Finding Resources online for the Spanish Speaking Patient”, Alegent Healthcare System, Omaha, NE May 2005, October 2003; Methodist College, Omaha, NE October 2003

“Practical Solutions for Working with Patients Speaking Languages Other Than English”, *Nebraska Physicians Assistants Annual Conference*, Kearney, NE April 2005

“How to Find Reliable HIV/AIDS Information on the Internet”, Nebraska AIDS Project Annual Conference, Kearney, NE April 2005

“Diverse Resources for Diverse Populations” NN/LM-MCR *Wyoming Symposium*, Laramie, WY July 2004

“Incorporating Access to Health Information into the Computer Technology Center Training Curriculum”, *CTCnet Conference* (Community Technology Centers’ Network) Seattle, WA June 2004

“Finding Health Resources: Focus on Culture”, *Nebraska Library Association Annual Conference*, Omaha, NE October 2003

“Teaching the Adult Learner”, *Midcontinental Medical Library Association (MCMLA) Annual Conference*, Sioux Falls, SD October 2003

“PubMed Searching” Carl T. Curtis Health Education Center, Macy, NE April 2003

“Resources for Spanish Speaking Childcare Providers”, Office of Minority Health, Lexington, NE April 2003

Faculty Appointment

Office of Interprofessional Scholarship, Service & Education (OISSE), Creighton University, School of Pharmacy and Health Professions, Faculty Associate 2006-2008, Core Faculty 2008 - present

Continuing Education

“Statistical Literacy for Medical Librarians Series April 2010, 2 MLA CE

Health Indicators: Parts 1 & 2: Professional Competency Area: Leadership and Management; Health Sciences Resource Management, March 2010, 2MLA CE

“Foundations of Effective Supervision: A Non-Credit Program for Creighton University Supervisors and Managers”, Fall Semester 2009.

“The Librarian as Professional, Or How I Learned to Stop Worrying and Love Complexity” September 22, 2009, MCMLA Chapter Meeting, Breckenridge, CO, 4 MLA CE

Medical Informatics MBL/NLM Course Fellow - Marine Biological Laboratory, Woods Hole, MA. 2007

“Focus Group Interviewing: A Qualitative Research Methodology for the Library” September 17, 2005, 8 MLA CE

“Planning and Evaluating Health Information Outreach Projects”, February 3, 2006, 6 MLA CE

“Addressing Health Disparities: Focus on Cancer” April 21, 2007, Creighton University 5.25 CE

“Thinking Outside the Borders: Library Leadership in a World Community” October 22-26, 2007, Nebraska Library Commission

“Scholarly Publishing and Open Access: Straight Talk”, November 20, 2007 2 MLA CE

CURRICULUM VITAE**Sharon E. Dennis****Education:** _____

_____ 1983 _____ Master of Science
 _____ School of Library and Information Science
 _____ Drexel University, Philadelphia, PA

_____ 1980 _____ Bachelor of Science, Biology
 _____ Houghton College, Houghton, NY
 _____ 1980

Current Position:

_____ 2007 — present _____ Technology Coordinator
 _____ National Network of Libraries of Medicine (NN/LM)
 _____ MidContinental and Pacific Southwest Regions
 _____ Spencer S. Eccles Health Sciences Library
 _____ University of Utah, Salt Lake City, UT

_____ 2003 — 2007 _____ Technology Coordinator
 _____ National Network of Libraries of Medicine (NN/LM)
 _____ MidContinental Region
 _____ Spencer S. Eccles Health Sciences Library
 _____ University of Utah, Salt Lake City, UT

Academic Promotions:

_____ 1999 _____ Librarian, University of Utah, Salt Lake City, UT
 _____ 1995 _____ Associate Librarian, University of Utah, Salt Lake City, UT
 _____ 1992 _____ Assistant Librarian, University of Utah, Salt Lake City, UT

Previous Positions:

_____ 1999-2003 _____ Librarian for Multimedia Development, University of Utah
 _____ 1995-1999 _____ Associate Librarian for Multimedia Development, University of Utah
 _____ 1992-1995 _____ Assistant Librarian for Multimedia Development, University of Utah
 _____ 1991-1992 _____ Educational Computing Consultant, Self-Employed
 _____ 1990-1991 _____ Computer Learning Specialist, Medical College of Pennsylvania, Philadelphia
 _____ 1986-1990 _____ Learning Resource Center Manager, Hahnemann University, Philadelphia, PA
 _____ 1986-1986 _____ Reference Librarian, Hahnemann University, Philadelphia, PA
 _____ 1984-1986 _____ Reference Librarian, Cooper Hospital/University Medical Center, Camden, NJ
 _____ 1983-1984 _____ Reference Librarian, Camden County Library, Voorhees, NJ

Funded Grants, Contracts and Projects:

- ~~2003—Principal Investigator, National Library of Medicine, "Health Education Assets Library Services Enhancement." Subcontract to University of Oklahoma, \$35,000 over 3 years, 2003-2006.~~
- ~~2002—Principal Investigator. National Science Foundation, "'Collaborative Research: Health Education Assets Library.'" This project will increase the breadth and depth Health Education Assets Library (HEAL) multimedia collection by establishing software bridges with a variety of institutional partners. In collaboration with University of Oklahoma and UCLA. Awarded \$292,448 over 2 years.~~
- ~~2000—Principal Investigator. National Science Foundation, "'Digital Multimedia Library for Health Science Education.'" This project will develop the underpinnings for a national Digital Multimedia Library for health sciences education. The prototype will include a database structure and user interface tools for uploading, indexing, and retrieval of records. Awarded \$355,678 over 2 years.~~
- ~~1998—Principal Investigator. National Library of Medicine, "A Model Multimedia Support Center for the Health Sciences," continuation grant for development of tools to support health sciences education. Awarded \$435,731 over 3 years.~~
- ~~1995—Principal Investigator. National Library of Medicine, "A Model Multimedia Support Center for the Health Sciences," for development of a Multimedia Support Center to proactively guide faculty in the application of multimedia programs to enhance learning. Awarded \$516,018 over 3 years.~~
- ~~1990—Co-Principal Investigator with James Baggott, Ph.D. Health Sciences Libraries Consortium, in conjunction with The Pew Charitable Trusts, for development of *Bioenergetics*, a Biochemistry hypermedia program.~~
- ~~1989—Co-Principal Investigator with James Baggott, Ph.D. Health Sciences Libraries Consortium, in conjunction with The Pew Charitable Trusts, for development of *Metabolic Interrelationships*, a Biochemistry hypermedia program.~~
- ~~1988—Principal Investigator. Health Sciences Libraries Consortium, in conjunction with The Pew Charitable Trusts, for development of *MacREQUEST*, a question and answer program generator which integrates text, graphics, sound, and videodisc links.~~

Publications:

- Lombardo, N., Dennis, S., and Cowan, D. (2007) "Streams of Consciousness: Streaming Video in Health Sciences Libraries", *Medical Reference Services Quarterly* 26: Supplement 1: 91-115.
- Candler, C., Dennis, S., Uijtdehaage, S., and McIntyre, S. (2003). "The Structure and Function of a Global Digital Library for Health Sciences Education: The Health Education Assets Library", *Pathology Education* 27: 37-48.

- Candler, C. S., Uijtdehaage, S. H. J., and Dennis, S. E. (2003). "Introducing HEAL: The Health Education Assets Library," *Academic Medicine*, March 1, 2003; 78(3): 249-253.
- Uijtdehaage, S. H. J., Contini, J., Candler, C. S., and Dennis, S. E. (2003). "Sharing Digital Teaching Resources: Breaking Down Barriers By Addressing the Concerns of Faculty Members." *Academic Medicine*, March 1, 2003; 78(3): 286-294.
- Locatis, C., Fontelo, P., Sneiderman, C., Ackerman, M., Uijtdehaage, S., Candler, C., Stensaas, S., Dennis, S. (2003). "Webcasting Videoconferences over IP: A Synchronous Communication Experiment." *J Am Med Inform Assoc*; 10: 150-153.
- Dennis, S.E., Uijtdehaage, SHJ, Candler, C. "Introducing the Health Education Assets Library: a National Multimedia Repository." In: S.S. Stensaas, M.R. Fisher, M.M. Batschkus, J.W. Dietrich (Eds): *Multimedia in Health Sciences Education*. Berlin, Logos Verlag, 97-101, 2001.
- Uijtdehaage, S., Candler, C., Dennis, S. (2001) "Supporting Health Sciences Education with IMS-based Multimedia Repository." *Poster Proceedings of the Tenth World Wide Web Conference*. Chinese University Publications: Hong Kong, p. 10-11.
- Uijtdehaage, SHJ; Dennis, E; Candler, C. (2001) "A web-based database for sharing educational multimedia within and among medical schools." *Academic Medicine*, 76, 543-544.
- Dennis, S.E. (1999) "Less Is More: Opera, An Alternative Web Browser." *Health Care on the Internet*; 3(1):61.
- Klatt, E.C. and Dennis, S.E. (1998) "Web-based Pathology Education." *Arch Pathol Lab Med*; 122(5):475-479, May 1998.
- Klatt, E.C. and Dennis, S.E. (1998) "Build Internet Multimedia for Web Browsers with JavaScript." *Journal of Medical Education Technologies*, 6(4):4-10.
- Baggott, J. and Dennis, S.E. (1994) "NetBiochem." *Proceedings of the Second International WWW Conference '94*, v.1, 239-243.
- Baggott, J. and Dennis, S.E. (1994) "The Integrated Biochemistry Learning Series." *Biochemical Education*, 22(1):8-9.
- Baggott, J. and Dennis, S.E. (1994) "Use of NCSA Mosaic to present a Medical Biochemistry course over a local computer network." *The FASEB Journal*, Federation of American Societies for Experimental Biology, 8:A1429.
- Baggott, J. and Dennis, S.E. (1993) "Effect of computer based learning on examination performance in a medical biochemistry course." *The FASEB Journal*, Federation of American Societies for Experimental Biology, 7(7):A1129. (abstr.)

- Dennis, S.E. and Baggott, J. (1993) "The Integrated Biochemistry Learning Series." *Proceedings of the Association for Applied Interactive Multimedia*, 2:52-53.
- Dennis, S. "Multimedia myths." (1992) *NFAIS Newsletter* 34(1): 1, 4.
- Mangione, S., and Dennis, S.E. (1992) "CompuLung: A Multimedia CBL on Pulmonary Auscultation." *Proceedings of the Symposium on Computer Applications in Medical Care* (abstr.)
- Baggott, J. and Dennis, S.E. (1991) "The Impact of Computer-Based Learning on Examination Performance in Medical Biochemistry." *Proceedings of the Association for the Development of Computer-Based Instructional Systems*, 33:224-228.
- Baggott, J. and Dennis, S.E. (1990) "Programming Techniques for Interactive Concept Development in HyperCard." *Proceedings of Association for the Development of Computer-Based Instructional Systems*, 32:230-245.
- Silver, H. and Dennis, S.E. (1990) "Monitoring Patron Use of CD-ROM databases using SignIn-Stat." *Bulletin of the Medical Library Association*, 78(3):252-257.
- Dennis, S.E. and Baggott, J. (1989) "Student Controlled Learning in a Medical Biochemistry Course." *Proceedings of the Association for the Development of Computer-Based Instructional Systems*. 31:107-111.
- Harding, S.P., Baggott, J., Dennis, S., and Baggott, G.T. (1989) "Metabolism Tabulated: A Hypermedia Template for Drill and Review of Tabular Information." *Proceedings of the Symposium for Computer Applications in Medical Care*, 13:1035-1036.
- Baggott, J. and Dennis, S.E. (1989) "Development and Use of a HyperCard Stack to Replace a Medical Basic Science Lecture Sequence." *Proceedings of the Fourth Annual Information Technology in the Health Sciences Conference*, 4:105 (abstr.)
- Dennis, S.E. and Baggott, J. (1989) "An Integrated Medical Biochemistry HyperCard Series." *Proceedings of the Fourth Annual Information Technology in the Health Sciences Conference*, 4:109 (abstr.)
- Dennis, S.E., Baggott, J., and Baumlin, K.M. (1988) "Patterns of CAI Use by Medical and Graduate Students in a Medical Biochemistry Course." *Proceedings of the Association for the Development of Computer-Based Instructional Systems*. 30:128-135.
- Dennis, S.E. (1988) "Development of a Computer-Assisted Instruction Program Generator." *Proceedings of the AAMSI Congress 1988*. American Association for Medical Systems and Informatics. 1-7.

~~Dennis, S.E. (1987) "Medical university library evaluates Medline CD-ROM." *Information Today* 4(5):2, 35.~~

~~Professional Activities and Committee Memberships:~~

~~Medical Informatics MBL/NLM Course Fellow—Marine Biological Laboratory, Woods Hole, MA. Sponsored by the National Library of Medicine. Certificate, Spring Course, 2009.~~

~~MidContinental Region Chapter of the Medical Library Region, Education Committee, 2008–2010.~~

~~Medical Library Association, Search Committee for the MLANet Editor position, 2006.~~

~~MidContinental Region Chapter of the Medical Library Region, Nominating Committee, 2005–2007.~~

~~National Network of Libraries of Medicine (NN/LM) Distance Learning Task Force, 2004–2005.~~

~~Medical Library Association, Task Force to Develop MLA's Center of Research and Education (CORE), 2002–2005.~~

~~University Libraries Representative. Library Policy Advisory Committee. University of Utah. 2000–2003.~~

~~Bookstore Advisory Committee, University of Utah, 1997–1999.~~

~~Educational Computing Committee, School of Medicine, University of Utah, 1996–2001.~~

~~Consultant:~~

~~University of Nebraska, Omaha, NE. Digital Library Imaging project, 2002–2004.~~

~~National Library of Medicine, Bethesda, MD. Ethermed Project. 1999–2003.~~

~~Hahnemann University / Medical College of Pennsylvania School of Medicine and University of Medicine and Dentistry of New Jersey, Philadelphia, PA. EnviroDx Project. 1995–2002.~~

~~University of Illinois at Chicago, Chicago, IL. Environmental Health Multimedia for Public Health Officers, 1997–1999.~~

~~Selected Workshops and Classes Taught:~~

~~American Society for Pharmacology and Experimental Therapeutics Experimental Biology 2010 Annual Meeting, Anaheim, CA, April 25, 2010. "Applying Web 2.0 Technologies in Teaching Pharmacology."~~

~~Distance Classes Taught via Adobe Connect to MidContinental Region members, December 4 and 14, 2010. "PubMed Update."~~

~~Distance Class Taught via Moodle to MidContinental Region and Pacific Southwest Region members, October 2009—January 2010 (10 weeks). “13 Things Web 2.0 Technologies.” (MLA CE accredited).~~

~~Distance Class Taught via Adobe Connect to MidContinental Region and Pacific Southwest Region members, August 27—September 3, 2009. “Podcasting for Advocacy.” (MLA CE accredited).~~

~~International Association of Medical Science Educators Annual Meeting, Leiden, Netherlands, June 30, 2009. “Health Education Assets Library: Issues surrounding formatting and publishing reusable learning objects.”~~

~~Distance Class Taught via Blogger.com to MidContinental Region and Pacific Southwest Region members, February—April 2009 (10 weeks). “13 Things Web 2.0 Technologies.” (MLA CE accredited).~~

~~California Library Association Annual Meeting, San Jose, CA. November 17, 2008. “Introduction to Blogs and Wikis.”~~

~~Society for Public Health Education Annual Meeting, San Diego, CA. October 23, 2008. “Geeks Bearing Gifts: Technology for Health Educators.”~~

~~Distance Class Taught via Blogger.com to MidContinental Region and Pacific Southwest Region members, October—December 2008 (10 weeks). “13 Things Web 2.0 Technologies.”~~

~~MidContinental Region Medical Library Association Annual Meeting, Cody, WY. October 7, 2008. “Introduction to Blogs and Wikis.” (MLA CE accredited).~~

~~Distance Class Taught via Adobe Connect to MidContinental Region and Pacific Southwest Region members, September 18, 2008. “Microblogging Using Twitter and FriendFeed.”~~

~~Association for Medical Education in Europe (AMEE) Annual Meeting, Prague, Czech Republic. September 1, 2008. “Keeping Up With Your Students: Five “Web 2.0” Technologies and How You Can Use Them for Teaching and Learning.”~~

~~Association of State and Territorial Officers, Senior Deputies Meeting, Elkhorn Lake, WI. July 8, 2008. “Tools of the Trade: Using the Power of Technology to Forge and Frame Executive Decisions and Actions.”~~

~~Medical Library Association Annual Meeting, Chicago, IL, May 21, 2008. “Introduction to Blogs and Wikis.” (MLA CE accredited).~~

~~Distance Classes Taught via Adobe Connect to MidContinental Region and Pacific Southwest Region members, April 14 and 15, 2008. “Personalized Google (iGoogle) / Google Gadget.”~~

~~Annual Meeting of the Association of the North American Neuro-Ophthalmology Society (NANOS), Orlando, FL, March 9, 2008. "Web 2.0: What is it?"~~

~~Health Education Association of Utah, Spring Conference, March 7, 2008. "Unwrapping New Technology Trends."~~

~~Distance Classes Taught via Adobe Connect to MidContinental Region and Pacific Southwest Region members, August 24, 27, and 28, 2007. "Introduction to RSS."~~

~~Slice of Life Conference, Salt Lake City, UT. June 26, 2007. "Web 2.0 Technologies: What Are They and How Can They Be Used for Teaching and Learning?"~~

~~Distance Classes Taught via Skype/Festoon and Macromedia Breeze to MidContinental Region members, February 2007. "Introduction to Blogs and Wikis" (MLA CE accredited).~~

~~Distance Classes Taught via Macromedia Breeze to MidContinental Region members, October 4, 25, and November 4, 2006. "RSS: The New Current Awareness Service."~~

~~Utah Health Sciences Libraries Consortium (UHSLC) Meeting, August 28, 2006. "Navigating the Network Jungle."~~

~~MidContinental Region Medical Library Association Annual Meeting, Salt Lake City, UT. September 18, 2005. "Technology Marathon: Setting the Pace. Videoconferencing and VoIP."~~

~~Slice of Life Annual Workshop, Portland, Oregon. June 15, 2005. "Introduction to Blogging."~~

~~Slice of Life Annual Workshop, Portland, Oregon, June 14, 2005. "Can You Hear Me Now? Videoconferencing for Communication, Distance Education, and Telehealth."~~

~~University of Missouri at Columbia, Columbia, MO April 25-26, 2005. "Videobroadcasting Using the Mobile Unit."~~

~~Slice of Life Annual Workshop, Amsterdam, Netherlands. June 29, 2004. "Introduction to Metadata."~~

~~Slice of Life Annual Workshop, Amsterdam, Netherlands, June 28, 2004. "Can You Hear Me Now? Videoconferencing for Communication, Distance Education, and Telehealth."~~

~~Pediatric Academic Society Annual Meeting, San Francisco, CA. May 4, 2004. "Using Digital Technology To Support Teaching and Programs."~~

~~Creighton University, Omaha, NE. March 8-11, 2004. "Videobroadcasting Using the Mobile Unit."~~

~~Slice of Life Annual Workshop, Philadelphia, PA. June 25, 2003. "Introduction to JSP."~~

~~Slice of Life Annual Workshop, Philadelphia, PA. June 25, 2003. "Introduction to Metadata."~~

~~Slice of Life Annual Workshop, Toronto, Canada, June 18, 2002. "Introduction to JSP."~~

~~Slice of Life Workshop, Toronto, Canada, June 19, 2002. "Building Multimedia Databases."~~

~~University of Oklahoma Technology Conference Pre-Workshop, March 16, 2001. "Introduction to HTML."~~

~~University of Oklahoma Technology Conference Pre-Workshop, March 16, 2001. "Building Dynamic Web Pages."~~

~~Slice of Life Annual Workshop, Munich, Germany, July 31, 2001. "Introduction to ASP."~~

~~Slice of Life Annual Workshop, Tampa, FL, June 23-24, 1998. "Introduction to HTML," and "Introduction to Style Sheets."~~

~~Medical Library Association South-Central Chapter Continuing Education Annual Meeting, Dallas, TX, April 22-23, 1998. "Introduction to HTML," "Advanced HTML," "Introduction to Forms and CGI," and "Introduction to Style Sheets."~~

~~Mercer University School of Medicine, Macon, GA, September 6, 1996. "Introduction to HTML" and "Advanced HTML."~~

~~MidContinental Chapter of the Medical Library Association (MCMLA) Annual Meeting, Salt Lake City, UT, September 26, 1996. "Finding Information on the Web."~~

~~Metronetwork Libraries, Oklahoma City, OK, November 21-22, 1996. "Introduction to HTML" and "Advanced HTML."~~

~~Medical Library Association National Meeting, Seattle, WA, May 23, 1997. "Creating Dynamic Multimedia Web Sites."~~

~~Slice of Life Annual Workshop, Chicago, IL, June 23-24, 1997. "Creating Dynamic Multimedia Instructional Web Sites: Tips, Techniques and Tools."~~

~~Slice of Life 8th Annual Workshop, Chicago, IL, June 25, 1997. "Evaluation of Web Page Software for Easy Construction."~~

Selected Presentations:

~~Medical Library Association Annual Meeting, Washington, DC, May 25, 2010. "Biomedical Informatics & Medical Librarianship: Reflections on the Woods Hole Experience." (poster)~~

~~Joint Meeting of the MLGSCA/NCNMLG, Glendale, AZ, January 28, 2010. "Evaluating an Online Self-Discovery Web 2.0 Class."~~

~~MidContinental Medical Library Association Chapter Annual Meeting, Breckenridge, CO, September 23, 2009. "Evaluating an Online Self-Discovery Web 2.0 Class."~~

~~International Association of Medical Science Educators Annual Meeting, Leiden, Netherlands, July 1, 2009. "How Can Web 2.0 Technologies be Used Effectively in Medical Education?" Focus Session~~

~~Medical Library Association Annual Meeting, Honolulu, HI, May 19, 2009. "Evaluation of 13 Things": A Learning 2.0 Self-Discovery Class." (poster)~~

~~Medical Library Association Annual Meeting, Honolulu, HI, May 19, 2009. "Increasing Access to Learning Resources Using a Standards-based Approach." (poster)~~

~~Association for Medical Education in Europe (AMEE) Annual Meeting, Prague, Czech Republic. September 2, 2008. "The IAMSE / HEAL Collaboratory: Working Together To Add User-Generated, Web 2.0 Content to a Digital Repository."~~

~~Medical Library Association Annual Meeting, Chicago, IL, May 18, 2008. "High Tech High Touch: Sharing Staff at a Distance."~~

~~Library and Information Technology Association (LITA) National Forum, Denver, CO. October 5, 2007. "Using the Access Grid Videoconferencing System for Collaboration and Training: An Experiment with Distributed Personal Interface Grids (PIGs)."~~

~~International Association of Medical Science Educators Annual Meeting, Cleveland, OH, July 23, 2007. "The Health Education Assets Library."~~

~~Medical Library Association Annual Meeting, Philadelphia, PA, May 20, 2007. "A Multimedia Digital Repository Needs Assessment and Evaluation: Comparing 2003 and 2006."~~

~~Medical Library Association Annual Meeting, Philadelphia, PA, May 21, 2007. "Changing the Way We Do Distance Education: Experiences with the Access Grid and Personal Interface Grid to Deliver Online Seminars".~~

~~Medbiquitous Annual Conference, Baltimore, MD, April 17, 2007. "Implementing SCORM and Healthcare LOM in a Multimedia Digital Library: Lessons Learned from the HEAL Project."~~

~~Library and Information Technology Forum (LIFT), Spencer S. Eccles Health Sciences Library, University of Utah, February 7, 2007. "RSS: The New Current Awareness Service."~~

- ~~Library and Information Technology Forum, Spencer S. Eccles Health Sciences Library, November 9, 2005. "Current Video Technologies."~~
- ~~Library and Information Technology Association (LITA) Forum, San Jose, CA, October 2, 2005. "Streaming Media On the Go: A Portable, Affordable, "Mini" Mobile Videobroadcasting Unit for Live Broadcasts and Archiving Events."~~
- ~~Medical Library Association Annual Meeting, San Antonio, TX, May 17, 2005. "A New Publishing Model for Digital Educational Materials: Peer Review for the Health Education Assets Library (HEAL)."~~
- ~~Medical Library Association Annual Meeting, San Antonio, TX, May 16, 2005. "Exploring the Videoconferencing Wilderness: "Mixing and Matching" Video Hardware and Software for Remote Communication and Distance Education."~~
- ~~Library and Information Technology Forum, Spencer S. Eccles Health Sciences Library, November 17, 2004. "The World's Your Office: Realtime Collaboration."~~
- ~~2nd Annual Biennial Distance Education Conference, Omaha, NE, September 24, 2004. "Health Education Assets Library." (Invited Presentation)~~
- ~~Medical Library Association, Washington, DC, May 25, 2004. "Have mobile videobroadcasting unit, will travel: training librarians to offer "any place, any time" classes and events via streaming video." (Poster)~~
- ~~Medical Library Association, Washington, DC, May 25, 2004. "Librarians empowering health science educators: collection development in an international multimedia digital library." (Poster)~~
- ~~Hawaii International Systems Software Conference (HICSS), Waikoloa, HI, January 8, 2004. "An Indexing Standard for Sharing Health Education Multimedia Resources: The Health Education Assets Library (HEAL) Metadata Schema."~~
- ~~Creighton University Invited Presentation, Omaha, NE, December 10, 2003. "Health Education Assets Library: The HEAL Project."~~
- ~~Slice of Life Annual Workshop, Philadelphia, PA, June 28, 2003. "Medhome."~~
- ~~Health and Science Communication Association (HeSCA) Annual Meeting, Bethlehem, PA, June 21, 2003. "Creating an International Multimedia Repository: Presenting the Health Education Assets Library (HEAL)."~~
- ~~Medical Library Association, San Diego, CA, May 5, 2003. "Building a Federation of Partners to Create a National Multimedia Library."~~

- ~~Medical Library Association, San Diego, CA, May 5, 2003. "Building an International Multimedia Digital Library."~~
- ~~AAMC Group for Information Research Annual Meeting, Pasadena, CA, March 17, 2002. "Health Education Assets Library: The HEAL Project."~~
- ~~University of Oklahoma Technology Conference, March 15, 2001. (Invited Presentation) "Innovation and the Team Concept: The Knowledge Weavers Project."~~
- ~~Slice of Life Annual Workshop, Munich, Germany, August 2, 2001. "Health Education Assets Library: The HEAL Project."~~
- ~~Annual Meeting of the Association of American Medical Colleges, Chicago, October 2000. "Curriculum Development Tool for Case Based Health Sciences Education." (Poster)~~
- ~~Annual Meeting of the Association of American Medical Colleges, Chicago, October 2000. "Metadata Standards for Educational Multimedia."~~
- ~~National Science Digital Library Conference, National Science Foundation, Washington, DC, September 21-24, 2000. "Multimedia Database Repository Using XML and IMS." (Poster)~~
- ~~Slice of Life Annual Workshop, June 26, 2000. "Metadata Standards for Educational Multimedia."~~
- ~~Slice of Life Annual Workshop, Philadelphia, PA, June 24, 1999. "The Knowledge Weavers Project: Tools, Templates and Outreach."~~
- ~~Slice of Life Annual Workshop, Tampa, FL, June 27, 1998. "Information Management Tools for Health Sciences Education."~~
- ~~Slice of Life Annual Workshop, Chicago, IL, June 27, 1997. "The Digital Slice of Life: Repurposing for CD and WWW Distribution."~~
- ~~Slice of Life Annual Workshop, Chicago, IL, June 27, 1997. "Automatic Generation of Web-Based Course Materials Using Online Templates."~~
- ~~Slice of Life Annual Workshop, Chicago, IL, June 26, 1997. "Multimedia Techniques for Delivering Case Based Instruction on the Web: The EnviroDx Project."~~
- ~~ED-MEDIA '96—World Conference on Educational Multimedia and Hypermedia. Association for the Advancement of Computing in Education, Boston, MA, June 20, 1996. "Building a Multimedia Database for the Health Sciences."~~
- ~~2nd International World Wide Web Conference, Chicago, IL, October 18, 1994. "Panel: Medical Education on the World Wide Web."~~

~~2nd International World Wide Web Conference, Chicago, IL, October 17, 1994. "NetBiochem."~~

~~Slice of Life Annual Workshop, Salt Lake City, UT, June 25, 1994. "The Slice of Life World Wide Web Server."~~

~~Slice of Life Annual Workshop, Salt Lake City, UT, June 24, 1994. "Use of NCSA Mosaic to Present a Locally Modifiable Medical Biochemistry Lecture Sequence."~~

~~Second Annual Conference of the Association of Applied Interactive Multimedia, Savannah, GA, July 30, 1993. "The Integrated Biochemistry Learning Series."~~

~~New Educational Strategies conference of the Basic Sciences of the Association for American Medical Colleges, Charleston, SC, June 30, 1993. (Invited Presentation) "Effects of components of a large, computer based learning program on examination scores in a medical biochemistry course."~~

~~Slice of Life Annual Workshop, Charlottesville, VA, June 25, 1993. "Effect of computer based learning on examination performance in a Medical Biochemistry course."~~

~~Symposium for Computer Applications in Medical Care (SCAMC), Washington, DC, November 3, 1990. (Invited Presentation) "Microcomputers in Libraries: Panel Discussion."~~

~~First Annual Educational and Research Conference of the American Medical Informatics Association, Snowbird, Utah, June 23, 1990. "An Integrated Medical Biochemistry Series."~~

~~Fifth Annual Information Technology in the Health Sciences Pre-Conference, Memphis, TN, May 2, 1990. (Invited Presentation) "An Integrated Medical Biochemistry Learning Series."~~

~~Innovations in Medical Education (IME) of the American Association of Medical Colleges, Washington, DC, October 29-30, 1989. "An Integrated Medical Biochemistry Series."~~

~~Interactive Healthcare '89 Conference, Alexandria, VA, June 6, 1989. (Invited Presentation) "Guide and HyperCard Comparison."~~

[May 2010]

JAMES W. HONOUR

Wyoming Liaison, NN/LM MCR
Coe Library
University of Wyoming
Laramie, WY 82071

Phone: (307)766-6537

Professional Experience:

- Organize and lead annual symposium for health information professionals at the University of Wyoming Libraries.
- Attend and present NLM resources at meetings of Wyoming health care professionals
- Provide online instruction for health science and public librarians on NLM resources and health topics.
- Promote NN/LM training and events using blogs, email lists and employee Intranet.
- Update and maintain web pages on the MCR website.
- Manage NN/LM memberships for Wyoming, including consultations and visits throughout the state. Monitor and manage DOCLINE accounts for Wyoming member libraries
- Provide consultations on MCR funding resources.
- Provide orientation for reviewers of proposals; manage and facilitate proposal review process
- Research and Reference literature searches in medical, nursing and allied health databases.
- Clinical library database literature search instruction to clinical and allied health staff, and library orientation presentations experience including online catalog, online bibliographic databases, Internet resources and other information retrieval systems.
- Strong team player with extensive customer service skills. Collaborative efforts include consultant for Orthopedic and Oncology Departments internal libraries, and liaison with hospital Education Coordinator to facilitate library learning resources for nurses.

Employment History:

2008 Regional Medical Librarian, NN/LM MCR, Coe Library, University of Wyoming
Laramie, Wyoming

2008 Library Consultant. National Jewish Medical and Research Center,
Denver, Colorado

2006-2007 Reference Librarian. Exempla Lutheran Med. Center and Denison Library
(UCDHSC,) Wheat Ridge and Denver, Colorado.

2000-2006 Library Technician Exempla Healthcare Libraries (Lutheran and St.
Joseph's,) National Jewish Medical and Research Ctr, and AMC Cancer Research
Ctr. Wheat Ridge, Denver, and Lakewood, Colorado.

Presentations:

- *MCR Website.* Breezing Along with the RML, April 2010.
Online; Reviewed highlights of the MidContinental Region's website.
- *National Institutes of Health,* Breezing Along with the RML, November, 2009.
Online; provided overview of the NIH and several of the individual institutes.
- *NLM Consumer Resources,* Spotlight! on NLM Resources, October, 2009
Online; presented features and functions of Genetics Home Reference, My Family Health History and Information RX.
- *Institutional Resources,* Pre-conference, Wyoming Library Association, September, 2009.
Provided training in PubMed and the Cochrane Library.
- *A 10-Step Approach to Service Continuity Planning,* MCMLA conference, Breckenridge, Colorado, September, 2009.
Collaborative training with National Network librarians to familiarize participants with the 10 Step Approach promoted by the NN/LM Emergency Preparedness & Response Toolkit. Promoted use of Step # 7.
- *Pandemonium? : Programming the Prescription,* Breezing Along with the RML, August, 2009. Online; Reviewed the programming done, in the NN/LM MCR, for emergency preparedness training.
- *NLM Drug Resources,* Spotlight! on NLM Resources, April 2009.
Online; Presented functions of MedlinePlus, LactMed, DailyMed.gov, DrugInformation.gov
- *Leveraging Biomedical Information,* UW Faculty Library Council, March, 2009
Described organizational structure and mission of the NN/LM and work of Wyoming Liaison in Wyoming. to UW faculty
- *NLM Resources,* Fall Into Health, Wyoming Union-UW Campus, October, 2008

Provided orientation of NLM resources for health sciences students at fall fair of health care organizations.

- *Library Within the Library*. UW Libraries Forum, September, 2008.
Description of organizational structure and mission of the NN/LM and work of Wyoming Liaison in Wyoming to UW library staff and faculty.
- *Are We on the Frontier? Breezing Along with the RML*, July, 2008
Online; Discussed definitions of the frontier, issues with rural healthcare and online resources for librarians.

Education:

MLIS, Master of Library and Information Science. Univ. of Denver, Denver, Colorado

BA, Bachelor of Arts. Western State College of Colorado, Gunnison, Colorado
Elementary Education and History

Professional Memberships:

- Secretary, Academic and Special Librarians Section, Wyoming Library Association 2009-present
- Education Committee, MCMLA, 2009-present
- WYLD Shared Purchases Committee, 2009-present
- Cancer & Environment Work Group, Wyoming Comprehensive Cancer Control Consortium, 2008-present
- Medical Library Association, 2006-present.
- Colorado Council of Medical Librarians (CCML,) 2002-2008
- Membership Committee, CCML, 2007- 2008
- Chair, Membership Committee, CCML, 2008
- Library Cooperation Task Force, CCML, 2005-2007
- Convener, Medical Paralibrarians Special Interest Group, CCML, 2005-2007

Awards and Accomplishments:

- Recipient, Individual White Rose Award for customer service, Exempla Lutheran Medical Center, 2007.
- Recipient, Staff White Rose Award for customer service, Exempla Lutheran Medical Center, 2006.
- Awarded scholarship by Rocky Mountain Chapter, Special Libraries Association, 2004.
- Recipient, Outstanding Customer Service Award, National Jewish, 2003.

BARBARA BOWERS JONES

J. Otto Lottes Health Science Library
 University of Missouri – Columbia
 Columbia, MO 65212
 573-884-5042
 jonesbarb@health.missouri.edu

Professional Experience

2006-present

Library Advocacy/NN/LM Missouri Liaison, Librarian III, University of Missouri.

- Provide training in National Library of Medicine resources to NN/LM MCR Network members, health care professionals and community based organizations in Missouri.
- Exhibit and present at local, state, regional and national conferences on topics related to health care information.
- Manage Library Advocacy project, including the development of yearly activity plan and logic model for all NN/LM MCR staff.
- Contribute to NN/LM MCR publications (including quarterly newsletter and weekly news release).
- Develop and maintain web resources on library advocacy for health science libraries.
- Provide consultation services to NN/LM MCR Network members on library programs, collaborations with outside agencies and grant funding.

2003-2006

Network Membership Liaison/NN/LM Missouri, Librarian III, University of Missouri.

- Developed and coordinate MCR Regional Licensing Consortium to provide member libraries with access to electronic resources at reduced cost.
- Managed Network Membership project, including the development of yearly activity plan and logic model for all NN/LM MCR staff.
- Managed DOCLINE system for 6 state region.
- Contributed to NN/LM MCR publications (including quarterly newsletter and weekly news release) as well as write informational articles for external organizations.
- Provided consultation services to NN/LM MCR Network members on library programs, collaborations with outside agencies and grant funding.

1997-2003

Librarian. Jefferson Center for Mental Health, Arvada, CO.

Performed all managerial activities including budget development and implementation, supervision, training, long and short range goal setting, collection development, compilation of accurate statistics and bibliographic instructions.

- Generated and completed many large projects including library automation, development of library resources on company intranet, and development of business plan and staff survey for complete renovation of company website.
- Conducted active reference and research services using a variety of sources including print, web-based resources and online and in-house databases. Operated interlibrary loan system which doubled in activity over a six year period.
- Developed job opportunities, information resources and training programs for JCMH consumers. 100% of participants have moved on to more successful positions.
- Wrote and successfully obtained library grant for resources for the Consumer and Family library, resulting in a 10% increase in collection size.

1995 – 1997

Librarian. Steffen, Robertson & Kirsten. Lakewood, CO.

Contract librarian for mining consulting company. Organized library, conducted mediated search projects as requested.

1994-1995

Librarian. Western Area Power Administration, Golden, CO.

- Established library to support corporate operations. Activities included reference, research and interlibrary loan.
- Managed acquisitions, cataloging and records storage.
- Organized and maintained company computer manuals.

1991-1992

Indexer. Stacs Data Services, Inc., Denver, CO.

- Organized and indexed mining company records for inactive storage.

1975-1981

Librarian/Records Manager. Magma Copper Company, San Manuel, AZ.

- Initiated and organized library services including acquisitions, interlibrary loan, and document delivery.
- Instituted company records management system and microfilming program.
- Added new controls for improved maintenance of active records, timely transfer of semi-active records to secondary storage, and development of procedures for the timely and authorized destruction of obsolete records.

1972-1975

Librarian. St. Mary's Hospital and Health Center, Tucson, AZ.

- Increased library services to medical staff by 50%.
- Developed library service to hospital staff.
- Managed all phases of library service including reference, research, acquisitions, cataloging and interlibrary loan.

EDUCATION: Degrees

Masters of Library Science - University of Arizona 1972

Bachelor of Arts (English) - St. Lawrence University 1970

Web Design Certificate - University of Colorado, Boulder 2001

Continuing Education

"Negotiation Skills" Pat Wagner, Presenter, May, 2009 4 MLA CE.

Content: Learn several models for improving sustainable success, whether asking for a promotion, negotiating the library's budget or fighting for the new library building.

"Knowledge Management in Hospitals: the Librarian's Role" Lorri Zipperer, Presenter. April, 2009. 9.5 MLA CE

Content: Explore how the concepts of knowledge management as applied in the corporate environment could be realized in a hospital/health system. Multidisciplinary participants will work together to craft a foundational strategy for adoption of an expanded role for librarians in hospital knowledge sharing efforts to support the clinical environment and its provision of high-quality care.

"Everyday Leadership" Pat Wagner, Presenter. February, 2009

Content: Characteristics of leadership, and strategies for using leadership qualities to influence behavior and programs in the institution.

"Marketing As If Your Library Depended On It". Pat Wagner, Presenter. September, 2007. 12 MLA CE.

Content: Differentiation between marketing, promotion and advertising with emphasis on strategies for gathering and using marketing information. Developed marketing project to determine why hospital librarians choose not to attend programs that have been targeted toward them.

"Reverse Strategic Planning". Pat Wagner, Presenter. Medical Library Association Annual Meeting, Philadelphia, PA. May 19, 2007. 8 MLA CE.

Content: Method of planning based on defining goals and working back to develop steps necessary to achieve the goals. Used this training to restructure responsibilities of Missouri Liaison NN/LM Logic Model in order to achieve goals more efficiently.

“Methods for Strategic Collaboration”. Christine Whitney Sanchez, Presenter. March 5-8, 2007. Content: Explanation of methods of strategic collaboration including Appreciative Inquiry, World Café and Open Space Technology and training in using these techniques. Used this training in conducting Appreciative Technology session with the NN/LM MCR Regional Advisory Board in April, 2007. Results of this session were presented in “Breezing with the RML”, April, 2007, and may be viewed at http://nnlm.gov/mcr/news_blog/?p=412. Also used in planning the NN/LM MCR Regional Advisory Board meeting World Café and Open Space Technology sessions scheduled for October 11, 2007.

“Grant Writing for Success”. Claire Hamasu and J. Randal Johnson, Presenters. March 1, 2007. 6.5 MLA CE.

Content: Development of logic model to define project, and techniques for writing successful grants. Used to develop Request for Proposal for Hospital Libraries which will be offered by NN/LM MCR in Fall, 2007. Also used to assist network members in writing grant proposals.

“Introduction to Blogs and Wikis, Part 1 and 2”. Sharon Dennis, Presenter. February, 2007. 4 MLA CE.

Content: Background on blogs and wikis, and instruction on how to build each. Used to build wiki as operating tool for MCMLA Library Advocacy Task Force.

Bob Pike’s “Train the Trainer Boot Camp”. February 9-10, 2006. The Bob Pike Group.

Content: Training techniques for participation oriented teaching. Techniques used regularly in presentations and classes taught.

“Keeping Patients Safe: Roles for Information Professionals” Educational Webcast. July 14, 2006. 2 MLA CE.

Content: Issues relating to librarians on patient safety, resources for librarians to use with patient safety issues, and strategies for hospital librarians to use to integrate the library in the patient safety process. Used in developing library advocacy materials and justifications for the importance of librarians in hospitals.

“Running with the Squirrels: Providing Library Services for Healthcare Administrators”. Jeannine Gluck, Presenter. July 21, 2006. 8 MLA CE.

Content: Resources appropriate for topics that pertain to healthcare administrators and techniques for developing administrators as library users and supporters. Used in developing library advocacy materials and programs for NN/LM MCR members.

“Tips for Negotiating Electronic Licenses”. Educational Webcast. January 26, 2005.

Content: Issues in licensing electronic resources and strategies to use in licensing process. Used with developing the MCR Electronic Licensing Consortium.

“Focus Group Interviewing: A Qualitative Research Methodology for the Library”.

Claire Hamasu, Presenter. September 17, 2005. 8 MLA CE.

Content: Value of using focus groups for research, and training in conducting focus groups. Used in planning for focus group session with public librarians scheduled for October 4, 2007 at Missouri Library Association annual meeting.

“Evidence-Based Librarianship”. Jon Eldridge, Presenter. September 18, 2005

Content: Definition of evidence-based librarianship, instruction on developing evidence-based study. Used in development of research project studying the value of hospital librarian to the hospital (currently in process.).

“Seize the E-Journal: Models for Archiving”. May 26, 2004 Symposium, Medical Library Association, 4 MLA CE

Content: Panel presentation of pros and cons of open access and electronic journals. Discussion of associated issues and implications for publishers, health care providers and librarians. Applied material in developing and managing MCR Regional Licensing Consortium.

Professional Activities: Professional Organizations

Medical Library Association, 2003-present

- Participation in annual meeting

Midcontinental Chapter of the Medical Library Association, 2003-present

- Government Relations Committee 2009 - present
- Research Committee 2007-2009
- Chair MCMLA Library Advocacy Task Force 2006-present
- Recording Secretary 2007
- Participation in annual meeting

American Library Association, 2007- present

Health Science Library Network of Kansas City, 2004-present

- Participation in annual meeting

St. Louis Medical Library Group, 2005-present

Association of Mental Health Librarians, 1997-2003

- Secretary, 1999-2003.

Missouri Library Association, 2006- present

- Participate in stakeholders planning committee for annual meeting
- Nominating Committee 2007
- Long Range Planning Committee 2008-9

Professional Activities: Library & University Service

Measuring Your Impact: Using Evaluation for Library Advocacy, Health Science Library Evaluation Workshop, December 6, 2008

- Subject matter of class included logic model preparation, program evaluation, library valuation calculators. Attendees included MU Library Management Team, Health Science librarians, representatives from Missouri State Library and Daniel Boone Regional Library System.

“Map to Success: Using Logic Models to Reach Desired Outcomes” University of Missouri Libraries. January 17, 2008.

- Basic presentation of development of logic model to plan library activities. Presented to interested MU librarians at the request of Staff Development Committee.

What Color Are You? Health Science Library Forum. February 15, 2007.

- Organized and presented program for HSL staff on true colors personality types including individual testing and group discussions focused on building constructive work relationships.

Jones B, Anderson K. “Out Amongst ‘Em: Library Services on the Frontier.” Library Issues Forum. University of Missouri – Columbia, Columbia, MO. September 13, 2006.

Content: Present development and operation of two unconventional library programs, Specialized Services Librarian and Missouri Liaison for National Network of Libraries of Medicine.

MU Health Literacy Leadership Team 2007-

- Charge of Committee: Direct and monitor the activities of the groups from the University of Missouri – Columbia that are involved in the state health literacy program funded by the Missouri Foundation for Health. MU groups participating include the Center for Health Policy, School of Journalism, J. Otto Lottes Health Science Library, National Network of Libraries of Medicine, MU Extension and UMSL K-12 Education.

Library Expert Group, Resource Inventory Committee, Health Literacy Missouri Project. 2007 - present

- Charge of Committee: Recommend criteria for collection development, resource categorization, search strategies for collection activities, resource evaluation to Resource Inventory Committee.

Resource Inventory Committee, Health Literacy Missouri. 2009 - present.

- Charge of Committee: Develop the resource inventory database, including submission and evaluation of materials, creating effective web presence and providing training to appropriate audiences.

Professional Activities: Publications, Teaching & Innovation

Publications

Miller LC, Graves RS, **Jones BB**, Sievert MC. "Beyond Google: Finding and Evaluating Web-Based Information for Community-Based Nursing Practice." *International Journal of Nursing Education Scholarship*. In Press

Miller L, **Jones BB**, Graves R, Sievert M. "Merging Silos – Collaborating for Information Literacy." *Journal of Continuing Education in Nursing*, in press.

Kelly, B and **B. Jones**. "Calculators for Measuring the Impact of Health Science Libraries and Librarians" Online presentations to NN/LM Middle Atlantic Region, South Central Region, Southeast Atlantic Region, New England Region, Greater Midwest Region. 2009 – 2010.

Jones, B. "Hospital Librarians' Power Toolkit" Paper Presentation. Midcontinental Region Medical Library Association. September 23, 2009.

Content: Developed toolkit on business practices for health sciences librarians.

Kelly, B. and **B. Jones**. "Infusing health sciences libraries with economic muscle" Paper Presentation. Midcontinental Region Medical Library Association. September 23, 2009.

Content: Analysis of data submitted from use of retail valuation calculator by health science librarians in the U.S.

Kelly, B and **B. Jones**. "Calculators for Measuring the Impact of Health Science Libraries and Librarians" Paper Presentation. Canadian Hospital Library Association. June 2, 2009

Content: Development and use of Retail Valuation Calculator and CBA/ROI Calculator, including analysis of data submitted by US health science librarians.

Miller, Louise C., Rebecca S. Graves, **Barbara B. Jones** and MaryEllen C. Sievert. "Mapping Information Literacy: Using Concept Mapping to Understand Nurses' Sources of Health Information." Poster Presentation. Midcontinental Region Medical Library Association. September 23, 2009

Kelly, B. and **B. Jones**. "Infusing health sciences libraries with economic muscle" Paper Presentation. Medical Library Association, May 18, 2009.

Content: Analysis of data submitted from use of retail valuation calculator by health science librarians in the U.S.

Miller, Louise C., Rebecca S. Graves, **Barbara B. Jones** and MaryEllen C. Sievert. "Mapping Information Literacy: Using Concept Mapping to Understand Nurses' Sources of Health Information." Poster Presentation. Medical Library Association. May 18 2009.

Ward, Deborah H., MaryEllen C. Sievert and **Barbara B. Jones**. "Creating a Framework for Collaborative Regional Library Research." Poster Presentation. Medical Library Association, May 17, 2009.

Kelly, B. and **B. Jones** "Calculators for Measuring the Impact of Health Science Libraries and Librarians" Paper Presentation. Medical Library Association, May 20, 2008.
Content: Development and use of Retail Valuation Calculator and CBA/ROI Calculator.

Sievert, ME, R. Graves, **B. Jones** and L. Miller. "Reaching the Open Spaces: Outreach to Missouri public health and school nurses, using the structured vs personal approach." Poster Presentation. Midcontinental Region Medical Library Association, October, 2008.

"Getting Your License: Presenting Library Research Projects". Liz Burns, Rosalind Dudden, Judy Feintuch, Claire Hamasu, **Barbara B. Jones**, Jeanne Le Ber, Susan Sanders. Poster Presentation. Midcontinental Region Medical Library Association. October, 2007.
Content: Details reasons to do library research, why to report research, how to develop a research project and features 3 regional researchers.

Jones, Barbara B. "Hospital Library Advocacy in the MidContinental Region" Poster Presentation at the Medical Library Association (MLA) Annual Meeting, Philadelphia, PA. May 22, 2007.
Content: Report of results gathered from survey conducted by MCMLA Library Advocacy Task Force (B. Jones, Chair) assessing status of health science libraries in the MidContinental Region. Survey focused on marketing plan and related activities, budget increases or decreases within the past year and librarian relationship with institutional administrators.

Jones, Barbara B. "Increasing the Availability of Electronic Resources to Hospital Libraries" Poster Presentation at the MidContinental Chapter of the Medical Library Association. St. Louis, MO. October 12, 2006.
Content: Report of development of MCR Regional Licensing Consortium, resources included, institutions participating and benefits to participants.

Carlson Gail, Centner Susan and **Jones, Barbara B.** "Collaboration on a State-Wide Level: the Missouri White Paper Project". Poster Presentation at the MidContinental Chapter of the Medical Library Association. St. Louis, MO. October 12, 2006.
Content: Report on focus group activities conducted throughout Missouri on availability and quality of mental health services, oral health care and senior and aging issues. The focus group activity reports were used to create white papers which were distributed to community leaders and the state legislature.

Jones, Barbara B. "Increasing the Availability of Electronic Resources to Hospital Libraries" Poster Presentation at the Medical Library Association (MLA) Annual Meeting, Phoenix, AZ. May, 2006.
Content: Report of development of MCR Regional Licensing Consortium, resources included, institutions participating and benefits to participants.

Wessel, Barbara B. and Wollam, Kathy. "Recognizing and Effectively Managing Mental Illness in the Library." *Colorado Libraries*, Winter, 2004.

Index to Carr, D. D. (Sen. Ed.), 1994, *Industrial Minerals and Rocks*, 6th ed. Littleton, CO, Society for Mining, Metallurgy and Exploration, Inc., p. 1175-1196.

Wessel, G. R. and **Bowers, B. E.**, "Thesis and Dissertation Index of Arizona Geology to December, 1978 (out of state universities)" *Arizona Geological Society Digest*, v. 13, p. 39-46.

Teaching

Kelly, B and **B. Jones**. "Measuring Your Impact: Using Evaluation for Library Advocacy" 6 MLA CE. Colorado Council of Medical Librarians. March 28, 2010. Invited Instructors.
Content: Discussion of logic model development and implementation and evaluation techniques of cost/benefit analysis and return on investment. Includes discussion of Retail Valuation Calculator and CBA/ROI Calculator.

Kelly, B and **B. Jones**. "Measuring Your Impact: Using Evaluation for Library Advocacy" 6 MLA CE. Midcontinental Region Medical Library Association. September 22, 2009. Invited Instructors.
Content: Discussion of logic model development and implementation and evaluation techniques of cost/benefit analysis and return on investment. Includes discussion of Retail Valuation Calculator and CBA/ROI Calculator.

Jones, B. and M. Magee. "Behind Closed Doors: Politics and the Library" 4 MLA CE. Midcontinental Region Medical Library Association. September 21, 2009.
Content: Focus on learning how to effectively influence and manage others' perceptions of you and your ideas, how to change enemies into allies, how to stay in the loop and how to manage outcomes, both short and long term.

Jones, B. "Savvy Senior Health" Sponsored by Missouri State Library. Sessions taught in 2009 in Neosho, Kirksville, Bonne Terre and St. Louis, MO.
Content: Awareness of profile and health information needs of "Baby Boomer" generation, basic health literacy information and review of appropriate websites.

Kelly, B and **B. Jones**. "Measuring Your Impact: Using Evaluation for Library Advocacy" 6 MLA CE. Canadian Hospital Library Association. May 31, 2009. Invited Instructors.
Content: Discussion of logic model development and implementation and evaluation techniques of cost/benefit analysis and return on investment. Includes discussion of Retail Valuation Calculator and CBA/ROI Calculator.

Kelly, B and **B. Jones** "Calculators for Measuring the Impact of Health Science Libraries and Librarians. National Network of Libraries of Medicine Middle Atlantic Region online presentation. April 22, 2009. Invited Instructors.
Content: Development and use of Retail Valuation Calculator and CBA/ROI Calculator.

Jones, B. "Calculators for Measuring the Impact of Health Science Libraries and Librarians. St. Louis Medical Library Group. February 18, 2009. Invited Instructors.
Content: Development and use of Retail Valuation Calculator and CBA/ROI Calculator. Session includes participants bringing data from their library and problem-solving.

Kelly, B and **B. Jones** "Calculators for Measuring the Impact of Health Science Libraries and Librarians. Outreach Evaluation and Assessment Center online presentation. December 8, 2008. Invited Instructors.
Content: Development and use of Retail Valuation Calculator and CBA/ROI Calculator.

Jones, B. "Calculators for Measuring the Impact of Health Science Libraries and Librarians. Health Science Library Network of Kansas City. October 15, 2008.
Content: Development and use of Retail Valuation Calculator and CBA/ROI Calculator.

Kelly, B and **B. Jones** "Measuring Your Impact: Using Evaluation for Library Advocacy" 6 MLA CE. 2007-9 Classes taught in Omaha, NE, Salt Lake City, UT, Columbia, MO, Kansas City, MO, St. Louis, MO.
Content: Discussion of logic model development and implementation and evaluation techniques of cost/benefit analysis and return on investment. Includes discussion of Retail Valuation Calculator and CBA/ROI Calculator.

Kelly B and **B. Jones** "Measuring Your Impact: Using Evaluation to Demonstrate Value". St. Louis Medical Librarians Group. March 22, 2007. 8 MLA CE.

Content: Discussion of logic model development and implementation and evaluation techniques of cost/benefit analysis and return on investment.

Jones, B. "DOCLINE Explained" January 27, 2006. Colorado Council of Medical Librarians Meeting. Denver, CO. 4 MLA CE. Invited Instructor.

Content: Training course on operation of National Library of Medicine DOCLINE (interlibrary loan) system.

Jones, B. "Cruising the Consumer Health Information Highway". Invited Presenter. October 27, 2004. Missouri Library Association Conference, Pre-conference Session. St. Louis, MO. 4 hours.

Content: Discuss evaluation of health information websites, collection building in public libraries, presentation of high quality health websites.

Presentations (Recent Selections)

"Valuating Library Services Calculators" Upstate New York, Southern Ontario Chapter, Medical Library Association Meeting. October 2, 2009. Invited Speaker.

"Calculators for Measuring the Impact of Health Science Libraries and Librarians." Wyoming Library Symposium. July 17, 2009. Invited Speaker

"Full Steam Ahead! Or Using Your Tools: Electronic Resources: Missouri Association of School Nurses. April 19, 2009. Invited Speaker.

"Personal Advocacy: How to Make Sure They Hear YOU!" Wyoming Library Symposium. Laramie, WY. July 17, 2007. Invited Speaker.

Content: Define components of effective project planning, strategize ways to effectively present project and gather support from institutional members.

"Organizational Advocacy: How the System Really Works" Wyoming Library Symposium. Laramie, WY. July 18, 2007. Invited Speaker.

Content: Discuss basics of organizational structure, alignment of library mission and goals with parent institution, sources of institutional power, potential political problems and strategies for successful program development.

Jones B, Champ-Blackwell S. "Maximize Your Impact with Collaboration" Cambio de Colores Annual Conference, Kansas City, MO. April 3, 2007.

Content: Present resources listing grant opportunities, strategies for networking and collaboration development, describe Appreciative Inquiry, World Café and Open Space Technology as methods of program development.

"Channel Markers for Librarians Working With Special Customers." Missouri Library Association. October, 2006.

Content: Describe special needs of patrons with mental illness and present resources which provide in-depth information on mental illnesses.

"Romancing Your Customers" NN/LM-MCR Wyoming Library Symposium. Laramie, WY. July 13, 2006. Invited Speaker.

Content: Present concept of customer relationship marketing and apply it to health science librarianship in order to establish broader and more satisfied user base.

Jones B, Champ-Blackwell S. "Heard It Through the Grapevine.....How Accurate Is It?" Cambio de Colores Annual Conference, Columbia, MO. April 19, 2006.

Content: Explore MedlinePlus Drugs, Supplements and Herbal Information section and contrast with family and home remedies, define criteria for evaluation of health information, present high quality foreign language health information websites.

“Oh, My Aching.....What?” Invited Presenter. September, 2005. Multiple workshops taught in collaboration with Senior Programming, Missouri State Library.

Content: Resources particularly focused on senior citizens and strategies for developing and implementing health programs for senior citizens in public libraries.

“Evaluating Health Information on the Internet and Quality Special Education Internet Resources”. Invited Presenter. June 3, 7, 15, 24, 2005. Leave No School Nurse Behind. Missouri Department of Health and Senior Services. Kansas City, Springfield, Columbia and St. Louis, MO.

Content: Includes evaluation criteria for health information, high quality resources for school nurses such as MedlinePlus and websites focused on developmental disabilities and special needs students.

Go Local in Missouri”. NLM Go Local Panel, Medical Library Association, 2005. May 18, 2005. Invited Panelist.

“Consumer Health Resources for Spanish Speaking Populations” March 31, 2005. Cambio de Colores Annual Conference, Columbia, MO.

Content: Report on experiences developing the Missouri Go Local program in collaboration with Community Connections.

“Are You Frustrated?” Invited Speaker. July 21, 2004. Wyoming Library Symposium, Laramie, WY.

Content: Updates in the National Library of Medicine DOCLINE (interlibrary loan) system.

Innovations:

Develop and coordinate MCR Regional Licensing Consortium to make electronic resources available to hospital libraries at reduced costs. Consortium consisted of one representative from each of the six stated in the MidContinental Region, the coordinator and a representative from Bibliographic Center for Research, the licensing and administrative agent. By May, 2006, licensing agreements had been negotiated with 3 resources, and 23 libraries were participating in the consortium.

Establish and coordinate MCMLA Library Advocacy Task Force to assess status of hospital libraries throughout a seven state region, and to develop programming and resources for health science librarians to use to determine the value of the library to the institution and to advocate for the library program in their institution.

Co-developer of Library Valuation Calculators designed to show the retail value of services provided by the library, cost/benefit analysis and return on investment of library collections.

Develop Advocacy Statement of Responsibility for National Network of Libraries of Medicine MidContinental Region. This Statement sets the policy for the region, defining which issues fall under the purview of the region rather than professional organizations or national agencies.

Awards:

Bernice M. Hetzner Award for Excellence in Academic Health Sciences Librarianship. Midcontinental Region Medical Library Association. September 22, 2009. Joint award with Elizabeth Kelly, MLS, MBA.

Elizabeth A. Kelly
Assessment & Evaluation Liaison
Associate Director, Health Information Resources
Bernard Becker Medical Library
Washington University School of Medicine
Campus Box 8132
660 S. Euclid Avenue
St. Louis MO 63110
Ph: 314-362-2783
Fax: 314-362-3647
Email: Betsy.Kelly@wustl.edu

Washington University School of Medicine, St. Louis, MO

Assessment & Evaluation Liaison, MidContinental Regional Medical Library (MCRML)

2001 – Present

Report to Associate Director, MCRML. Responsible for developing ongoing program of assessment and evaluation for the Region. Develop formal mechanism for evaluating regional programs, conduct review and evaluation of programs, provide regular feedback to NLM about NLM and NN/LM products and services, train RML staff and Network Members in the use of assessment and evaluation tools, ensure assessment and evaluation component in all RML programs and subcontracts

- Developed and administered questionnaire to obtain baseline data about network members in the MCRML; administered periodic questionnaires to update baseline data
- Developed questions and organized focus groups to obtain network members' input concerning MCRML programming and NLM products and services
- Developed online activities reporting system (ARS) to capture work of RML staff and collect data for analysis of effectiveness of RML programs in meeting stated goals
- Co-developed "Measuring your impact: using evaluation for library advocacy", a class for librarians that introduces the basics of planning and outcomes evaluation for programs and services. Class has been taught over 20 times, reaching more than 500 librarians.
- Co-developed Retail Value and ROI calculators for determining library CBA and ROI to demonstrate their value to their parent institutions

Associate Director, Health Information Resources, Bernard Becker Medical Library

2009 –

Responsible for reference services related to clinical research, education and patient care as well as access and interlibrary loan services. Manage a staff of five professional librarians and 10 support staff.

- Established procedures for documenting and reporting the breadth and depth of services provided by Becker librarians to School of Medicine departments through an online reporting system.
- Formalized embedding a reference librarian as a member of the in-patient care team on the medical hospital medical service.

- Awarded a sub-contract from the University of Utah to document the process of integrating a hospital medical library into the emergency preparedness plans of the institution

Associate Director, Instructional Technologies and Library Systems, Bernard Becker Medical Library

1994 - 2008

Responsible for end-user computing services for all students (approximately 1300) in the School of Medicine. Responsible for selection, purchase, installation and management of computers, servers and printers, software in support of teaching, research and patient care. Member of Curriculum Technology Group (CTG), a joint effort of Library and the Office of Medical Student Education (OMSE) for planning, design and implementation of computer solutions for curriculum management and course content delivery systems. Responsible for computer education courses for Washington University faculty and staff. Represent the library on committees developing a new learning-teaching center for the School of Medicine.

- Developed a state of the art computer service with over 200 computers and 5 servers in seven locations. Results include single site for all students for comprehensive assistance with any computer related problem. Instructional Technologies and Library Systems is the destination for 50% of all those entering the library. Computer use averages 13,000 hours per month.
- Working with various Deans, developed computerized student directory for the School of Medicine. Result is faculty and administration ability to identify students by picture, name, advisor, society or class; provides streamlined means of communications with selected students and groups.
- With CTG, developed and implemented curriculum databases for aggregating and evaluating course materials and administering student course evaluation surveys.
- Developed a Computer and Information Technologies Education Series providing 75 or more classes per year taken by 999 University faculty and staff. Results include generation of nearly \$50,000 in annual income for the library and opportunity for building computer skills for all University faculty and staff.
- Developed computerized databases for Education Series class schedules, registration process and staff assignments. Results include consistent generation of income streams from effective management of Education Series and projection services within the School of Medicine.

1979-1994

- Led software development and responsible for daily management of the Library's integrated library system, BACS. Required working knowledge of all operational areas of the library. Responsible for planning and oversight for library network installation, software development, system implementation, documentation and training.
- Responsible for development of local Medline and Current Contents computerized literature index search systems. Resulted in improved access to National Library of Medicine and Institute for Scientific Information index databases and more effective use of indexing resources by faculty, staff and students of the School of Medicine.

- Expanded the use of the BACS system to a consortium of local medical libraries. Resulted in more effective communication among libraries and generated approximately \$60,000 in ongoing annual income.
- Sold the BACS, PHILSOM serials control, and BACS/Medline systems to Mercer University School of Medicine, Macon, GA; sold the BACS system to Pohang Institute of Science and Technology, Pohang, South Korea.
- Responsible for all services provided by Circulation, Photocopy and Interlibrary Loan departments.

Ohio State University College of Medicine, Columbus, OH

Extramural Coordinator; Head, Interlibrary Loan; and Reference Librarian, Health Sciences Library

1976-1979

Reported to the Head of Reference, consulted at hospital libraries in 43 counties in Ohio providing training, grant information and expert advice in the management of hospital based health science libraries. Provided reference service, online searching and administration of interlibrary loan services for the Health Sciences Library.

- Addressed state and professional organizations concerning copyright law and health sciences library services.
- University representative to the National Library of Medicine Regional Medical Library.

EDUCATION

MBA	Washington University, 1999 Concentration in Health Services Management
MLS	Indiana University, 1976
BA	Indiana University, 1971

CONTINUING EDUCATION

Qualitative Data Analysis, Michael Quinn Patton, American Evaluation Association Meeting, November 2003

Return on Investment: Providing a Balanced Viewpoint of Program Success, Jack Phillips, American Evaluation Association Meeting, November 2003

Outcome Evaluation and Consulting Institute, University of Illinois at Urbana-Champaign, July 7 – 18, 2003. Sponsored by the Institute of Museum and Library Services and the Graduate School of Library and Information Science, UIUC

PUBLICATIONS

1. McEnery KW, Roth SM, Kelley LK, Hirsch KR, Menton DN, Kelly EA: A method for interactive medical instruction utilizing the World Wide Web. Proceedings - the Annual Symposium on Computer Applications in Medical Care. 502-7, 1995
2. Frisse ME, Kelly EA, Metcalfe ES: An Internet primer: resources and responsibilities. Academic Medicine. 69(1):20-4, 1994 Jan
3. Salisbury L, Toombs HS, Kelly EA, Crawford S: The effect of end-user searching on reference services: experience with MEDLINE and current contents [see comments]. Bulletin of the Medical Library Association. 78(2):188-91, 1990 Apr.
4. Crawford S, Halbrook B, Kelly E, Stucki L: Beyond the online catalog: developing an academic Information system In the sciences. Bull Med Libr Assoc 1987 July; 75:202-208.
5. Kelly EA: Book Review. Genaway, DC. Integrated Online Library Systems: Principles. Planning and Implementation. White Plains, NY: Knowledge Industry Publications, Inc. 1984 Bull Med Libr Assoc. 1985 July; 73:296-7.
6. Kelly EA, Halbrook B, Igielnik S, Rueby C: BACS: evolution of an integrated library system toward information management. Bull Med Libr Assoc 1985 Jan; 73:9-14.
7. Igielnik S. Kelly E. BACS: Bibliographic Access & Control System. Mug Quarterly 1985 14:29-30.
8. Igielnik S. Kelly E. BACS: an Integrated library automation system with patron access to the CURRENT CONTENTS® and MEDLINE databases. Proceedings of the Ninth Annual Symposium on Computer Applications In Medical Care. IEEE. 1985.
9. Crawford S. Johnson MR, Kelly EA. Technology at Washington University School of Medicine Library: BACS, PHILSOM, and OCTANET. Bull Med Libr Assoc 1983 July;71:324-27.
10. Kelly EA, Fedders C. Instructional support for an online catalog. Medical Reference Services Quarterly 1983 Winter; 2:73-77.
11. Kelly EA. Yedlin DK. Crawford SY. Igielnik S. On-line integrated library system: bibliographic access and control system of Washington University School of Medicine. Bulletin of the Medical Library Association. 70(3):281-8, 1982 Jul.
12. Kelly B. Fedders C, Powderly A, Yedlin D. Bibliographic Access & Control System. Information Technology and Libraries 1982 June; 1:125-132.

PRESENTATIONS:

1. Jones, B, Kelly, B. Calculators for measuring the impact of health science libraries and librarians. Annual Meeting of the Canadian Health Sciences Libraries Association, 2009
2. Dubinsky, E, Kelly, B, Mahoney, R, Olmstadt, W. Blogging the journal club – applying library blog expertise to a virtual journal club (poster). Annual Meeting of the Medical Library Association, 2009 (poster)
3. Kelly, B, Jones, B. Infusing health sciences libraries with economic muscle. Annual Meeting of the Medical Library Association, 2009 and MidContinental Chapter, Medical Library Association, 2009.
4. Jones, B, Kelly, B. A Calculator for measuring the impact of health science libraries and librarians. Annual Meeting of the Medical Library Association, 2008 and MidContinental Chapter, Medical Library Association 2008
5. Kelly, B, Hamasu, C. Demonstrating effectiveness: one RML's story. Annual Meeting of the Medical Library Association, 2008 and MidContinental Chapter, Medical Library Association 2008
6. Kelly, B, Hamasu, C. Logic Models: A tool for planning and evaluating services. Annual Meeting of the Medical Library Association, 2006 and MidContinental Chapter, Medical Library Association 2006
7. Hamasu, C, Kelly, B, Peay, W. Transforming a Regional Medical Library Program. Annual Meeting of the Medical Library Association, 2006 (poster)
8. Prendergast, N, Kelly, B. Outcomes and measurable indicators drive the logic model approach for a liaison program. Annual Meeting of the Medical Library Association, 2006 (poster).
9. Kelly, B, Engeszer, B, Whelan, A. Information Management for the Administration and Delivery Of Curriculum Content. Annual Meeting of the Medical Library Association, 2002.
10. Kelly, B, Igielnik, S, Gunn, P. Capturing electronic resource use cgi "click throughs" (poster). Annual Meeting of the Medical Library Association, 2002. (poster)
11. Kelly B, Cunnius E, Strombom N. The Study Space Project: Collaborative hypermedia in curriculum management. University of Iowa Symposium 99: Educating the University Community in a Dynamic Information Environment. November 11-12, 1999
12. Kelly B. Panel Discussion with Ward D, Allen G, Rickerson G. Using Technology to Support Education. Leaders in Information Resources Professional Development Conference. Anticipating Institutional Challenges: Building Responsive IT Organizations. American Association of Medical Colleges. September 12-14, 1998

13. Kelly B. Integrated and interactive technology in support of the medical school curriculum. Preparing Physicians to use the Digital Library: a Panel Discussion Computers in Healthcare Education Symposium "The Virtual Medical School" Thomas Jefferson University Philadelphia, Pa April 24-26, 1996
14. Stucki L, Kelly E. Integrated library system decision aids for collection development. Annual Meeting of the Medical Library Association, 1991.
15. Kelly E. Igielnik S. Application of online library system data for moving large academic library collections. Annual Meeting of the Medical Library Association, 1990.
16. Salisbury L, Toombs H, Kelly E., Crawford S. End-User searching and reference services: impact and implications. Annual Meeting of the Medical Library Association, 1989.
17. Crawford S. Kelly E., Salisbury L. Evaluating online biomedical databases for end users: BACS/Current Contents® and BACS/MEDLINE. Annual Meeting of the Medical Library Association, 1988.
18. Kelly E., Stucki L, Halbrook B, Gadzikowski C, Salisbury L. Research and Development at the Washington University School of Medicine Library. Poster. Annual Meeting of the Medical Library Association. 1986
19. Crawford S. Kelly E., Halbrook B. Nakeff-Plaat J. The development of a medical center-wide online current awareness service: BACS/Current Contents at Washington University. Annual Meeting of the Medical Library Association, 1986.
20. Igielnik S, Kelly E. BACS: An Integrated library automation system with patron access to the Current Contents and Medline Databases. Symposium on Computer Applications in Medical Care 1985
21. Crawford S, Kelly EA., Yedlin DK. Online Integrated library System: Bibliographic Access and Control System of Washington University School of Medicine library. Annual Meeting of the Medical Library Association 1982

AWARDS

Integrating the library in emergency planning. Subcontract from the University of Utah. 2009

CLASSES DESIGNED AND TAUGHT:

With Maryanne Blake or Barb Jones, Measuring Your Impact: Using Evaluation to Show Value. Taught 2004 - 2009 Denver CO Shrewsbury MA, Des Moines IA, Phoenix AZ, Seattle WA, St Louis MO, Kansas City MO, Houston TX, Little Rock AR, Salt Lake City UT, Omaha NE, Traverse City MI, Columbia MO, Kansas City MO, Winnipeg, Manitoba CA, Breckenridge CO, Denver CO

With Barb Jones, Valuing library services and collections. Teleconference presentations. 2008-2010

Curriculum Vitae
Marty Magee

Name in Full: Martha Louise Magee

Home Address: 8054 Castelar St.
Omaha NE 68124
402-397-4039

Campus Address: National Network/Libraries of Medicine
Education and Nebraska Liaison
McGoogan Library of Medicine
University of Nebraska Medical Center
986706 Nebraska Medical Center
Omaha NE 68198-6706
402-559-7076
1-800-338-7657
mmagee@unmc.edu

Education: Master of Arts in Library Science May 2004,
School of Information Science and Library Technologies
University of Missouri, Columbia, MO
Attended: Sept. 2001 – May 2004
Master of Science in Administration May 1989,
Mendoza School of Business
University of Notre Dame, Notre Dame IN
Attended: June 1986- May 1989
Bachelor of Science in Speech/English May 1972
University of Nebraska at Lincoln, Lincoln NE
Attended: Sept. 1968 – May 1972
Computer Information Management Program, 1999
College of St. Mary, Omaha NE
Attended Sept. 1996 – May 1999

Academic Appointments:
University of Nebraska Medical Center
Assistant Professor -Nov. 2003 to present
National Network of Libraries of Medicine, Education and Nebraska Liaison
Plan and organize outreach activities for health professionals, public health,
public librarians and consumers in Nebraska to educate and provide support on
National Library of Medicine (NLM) products and services.
Exhibit and present NLM resources at state, regional and national conferences.

Develop and coordinate education resources and instruction for the six-state MidContinental Region of the National Network of Libraries of Medicine (NN/LM). Develop and deliver education instruction on topics including: online distance education, webinars, CD production, web pages, and printed materials to promote education opportunities.

Central Community College, Grand Island NE

Adjunct Instructor, Library and Information Services, Sept. 2009 to present

Foundations of Library and Information Services offered twice annually.

Positions Held

Metropolitan Community College, Omaha NE

Adjunct Instructor, Library Technical Assistant program - Sept. 2006 to Aug. 2009

Introduction to Library Science and Information Technology

Veterans Affairs Medical Center, Omaha NE

Library Manager

Solo library manager for medical research library supporting three sites of regional medical staff. Responsible for all facets of operations including mission articulation, marketing, budgeting, collection development, cataloging, reference support, web site development and operations management.

Omaha Public Schools, Omaha NE

Media Specialist, Field Club School and Hartman School, 2001-2002

Media specialist for two elementary school libraries supporting over 1300 students. Taught library classes, grades K-6. Developed library instruction curricula for all levels and collaborated with teachers on inter-disciplinary subject/library projects. Set budget priorities, developed collection, maintained catalog, and tracked circulation.

First Data Resources, Omaha NE

Director of Strategic Projects, Director of Marketing, Director of Project Office, Client Services Team Manager, Sr. Trainer for Client Services - 1990-2001

Duties included research, development and promotion of credit card products, cost reduction Six Sigma reengineering, strategic planning, development of client and department communications, website development for internal and external usage, development and presentation of technical and non-technical training, production of customer product shows for nationwide client base and associated vendors, administration of project management, human resources, computer support for software development department, managed client services teams and client relationships with nationwide bank clients.

Ivy Tech Community College, South Bend, IN

Manager, Admissions and Assessments, 1989-1990

Worked with traditional and non-traditional students identifying basic skills remediation and providing entrance testing, assessment, and career counseling.

South Bend Community School Corporation, South Bend IN
Manager, Computer Based Training - 1986-1989

Managed computer based learning program for upper level elementary students in federally funded Chapter 1 reading program. Developed curricula for enhancing reading comprehension through usage of computers in classroom.

Additional Certifications

Centers for Disease Control - CDCynergy – Library Trainer

Nebraska Teaching Certification for Speech/English with Library Media Specialist
Endorsement - renewed 2002

CPP Certification for Myers-Briggs Type Indicator personality assessment instrument
Six Sigma – Black belt training

Current Memberships

Medical Library Association - 2003 to present

Marketing Round Table facilitator – 2004

Mid-Continental Medical Library Association - 2003 to present

Education Committee 2008, chair 2009-2010

MCMLA/Greater Midwest Conference Facilities Chair 2007

Membership Committee 2003-2006, Chair – 2005-2006

ICON (Medical Library group) -- 2003 to present

Board member 2008 to present

Appointments and Activities

Nebraska State Advisory Council on Libraries – Board member 2005 to present, Chair 2008

Nebraska Library Association – Mentoring Program mentor 2007-2008

Great Plains Public Health Leadership Institute - Board member 2007 to present

Rural Health Association of Nebraska -Board member 2007 to present

Center for Biopreparedness Education - Board member 2009 to present

Committee Activities

University of Nebraska Medical Center -McGoogan Library of Medicine, Library Friends,
2009 - 2010

University of Nebraska Medical Center -McGoogan Library of Medicine, Emergency
Preparedness Committee 2009

University of Nebraska Medical Center -McGoogan Library of Medicine, Faculty Vice-
Chair - 2006-2008

University of Nebraska Medical Center, North Central Association of Colleges and
Schools - Task Force on Service -2007

Selected Presentations at State, Regional, National and International Meetings (2002-present)

- Surviving the Jungle: Consumer Health Resources. Nebraska Southeast Library System annual conference, May 6, 2004.
- Dilbert in the Library. MidContinental Medical Library Association annual conference. Approved by Medical Library Association for 4 CE credits, September 2004.
- The Fear Factor: Traditional and Complementary/Alternative Medical Resources on the Internet. Co-presented at Nebraska Library Association annual conference, October 2004.
- Consumer Health Information Resources. Nebraska Library Media Specialist Training Day, March 19, 2005.
- Building the Evidence Base: Overview of ClinicalTrials.gov. National Institutes of Mental Health Outreach Partners national conference, plenary speaker, April 2, 2005.
- Health Resources from the National Library of Medicine, Developmentally Disabled national conference, April 25, 2005.
- Health Resources for Students, Midwest Internet Institute, May 27, 2005.
- Caring for the Mind: Providing Reference Services for Mental Health Information, Co-presented at Wyoming Symposium, July 11, 2005.
- Public Health Partners, Wyoming Symposium, July 11, 2005.
- Health Resources from the National Library of Medicine. National Rural Health Outreach annual conference, July 25, 2005.
- Community Coalitions for Consumer Health Information. Nebraska Library Association annual conference, September 30, 2005.
- Creating a Camtasia Movie. Approved for two Medical Library Association Continuing Education credits, MidContinental Medical Library Association annual conference, September 16, 2005.
- Thinking Globally, Learning Locally...Online, Wyoming Symposium, July 13, 2006.
- The Powerful Voice of the Internet. Public Health Association of Nebraska annual conference, Sept. 22, 2006.
- Thinking like an MBA, MidContinental Library Association annual conference, October 2004 and October 2006. Approved for Medical Library of Association 4 Continuing Education credits.
- Tech Toys for the Technically Challenged, Wyoming Symposium, July 2007.
- How to Keep Your Ducks in a Row: Project Management , Wyoming Symposium, July 2007.
- Health Information on the Internet and a Little More, Omaha Rotary, September 2007.
- Senior Health, Nebraska Library Association conference, October 2007.
- Health Disparities Resources, Cultural Competency conference, University of Nebraska Medical Center, Jan. 2008.
- Live Links: Online Resources for Public Health from the National Library of Medicine, the Nebraska Library Commission and the Public Health Association of Nebraska, Co-presented. Oct. 2008

- Thinking like an MBA , North Carolina Association of Health Science Librarians, June 2008.
- Consumer Health Classes - Apple a Day, No Comprendre and the ABC's of DNA - Feb. 19-20, 2009.
- Toward a Healthier Nebraska, Public Health Conference, April 8-9, 2009.
- Quality Health Information Resources for Health Professionals and Patients, CIMRO Quality Healthcare Conference , May 2009.
- Money Makes the World Go Round – And Emergency Planning Too!, Wyoming Symposium, July 2009.
- Fast and Free: Health Resources from the National Library of Medicine, AIDS Education and Training Conference, October, 2009.
- Educational Resources for Kids, Nebraska Library Association conference, Oct. 9, 2009.
- Behind Closed Doors: Politics in the Library, Co-presented at MidContinental Medical Library Association, Sept. 2009. Approved by Medical Library Association for 4 CE credits.
- What Physician Assistants Should Know: Free Resources from the National Library of Medicine, Nebraska Physician Assistant conference, April 15, 2010.

Radio and TV Appearances

- Free Medical Library Resources. Community Health Line - KIOS radio, April 2003.
- National Library of Medicine Resources for National Library Month, Valda's Place weekly cable TV show addressing perspectives on health and diversity, April 2006.
- Kim Foundation - Not Alone radio program focused on mental health, on KCRO radio August 2009

Papers and Posters

- Getting HIP: Health Information Partnerships, Co-presented at Medical Library Association Poster Session, May 2006
- Transforming Librarianship: Librarians as Consumer Health Movie Producers. Co-presented at Medical Library Association, Poster Session, May 2006.
- Moving to Moodle: Creating Online Instruction, Poster Session, Medical Library Association, May 2007 and MidContinental Medical Library Association, October 2007.
- Nebraska Notebook, Poster Session, MidContinental Medical Library Association
- Nebraska Notebook Paper Session, Medical Library Association, May 2009.

CD's and Videos

- Search Strategies - CD, on searching for health information, directed at nurses. 2004
- CD and streaming video - Following the Clues: A Visit to the Doctor and the Library, a project of the McGoogan Library of Medicine, of the University of Nebraska Medical Center, directed at children, produced in English, Spanish and Sudanese-Nuer. 2007
- So You Think You Have a Medical Question? – CD of tutorials on health resources for public librarians –Jan. 2007.

Webcasts

- No Fear Factor: DOCLINE, PubMed and MedlinePlus. Teleconference presentation to national consortium of Veterans Affairs medical librarians, April, 2004.
- CD- Demo on "Search Strategies". Live distance presentation. Wyoming Symposium, July 22, 2004
- Education Quick Hits, Teleconference presentation for National Network/Libraries of Medicine, MidContinental Region, April 27, 2006.
- Databases on Display, National Network/Libraries of Medicine, MidContinental Region, March 2007
- MCR University , Breezing with the RML webcast, Jan, 2008
- Managed and presented topics for Spotlight! on National Library of Medicine Resources - monthly broadcast series of the National Network of Libraries of Medicine MidContinental Region, 2009, approved by Medical Library Association for CE credit.
- Nebraska Library Commission NCompass online webcast - Feel the Love - Free Health Resources, Feb. 2009
- Historical Collections and the National Library of Medicine, MidContinental Medical Library Association, April 2009
- Towards a Healthier Region through Web 2.0 Technologies and Education Tools, Great Plains Public Health Leadership Institute, October 2009.
- Fast and Free: Health Resources from the National Library of Medicine Nebraska Hospital Association, NHA online webcast, August 2009
- Project Management: Putting the Puzzle Together, National Network of Libraries of Medicine, Outreach and Education Coordinators, March 23, 2010.
- Free Health Information from the National Library of Medicine, Nebraska Technical College of Agriculture, Veterinary Assistant Program, April 9, 2010.

Distance Education Classes

- Introduction to Library and Information Services, Metro Community College Library Technician Program, 2006 - 2009. Developed class, delivered in multiple platforms: WebCT, Angel, and Blackboard.
- Thinking like an MBA, Medical Library Association Continuing Education Institute, online class, January 2006, July 2006, January 2007, July 2007, January 2008, January, 2009, January 2010. Approved for four Medical Library Association Continuing Education Credits. Developed and delivered on Moodle platform.
- Foundations in Library and Information Services, Central Community College, Library and Information Services program, 2009 to present. Developed and delivered on Blackboard platform.
- Managing Collections in Libraries and Information Agencies, Guest Lecturer on National Library of Medicine, April 2010.

Telehealth Broadcast

- Free Health Information for Health Professionals and Patients from the National Library of Medicine, Nebraska Telehealth Network, April 7, 2010.

Articles

- "Navigating the U.S. health care system: a video guide for immigrant and diverse populations," Journal of the Medical Library Association, July 2007 (v.95, no.3, p. 286-289).
- "It's not Grey's Anatomy or Gray's Anatomy; It's Much More"- School Library Media Activities Monthly, Vol. XXIV, Number 4, Dec. 2007.
- Journal of the Medical Library Association, Book Review - Using Interactive Technologies in Libraries JMLA - April 2008

Suzanne Sawyer

Spencer S. Eccles Health Sciences Library

University of Utah

Salt Lake City, UT 84112

801-587-3412

ssawyer@rml4.utah.edu

Management Skills:

- Ran day to day operations in a retail establishment for 1 year (JoLene Co.)
- Managed all aspects of a classroom environment for 5 years (Alpine and Riverside School Districts)
- Excellent customer service skills exhibited in faculty and parent relationships (Alpine and Riverside School Districts)
- Excellent customer service skills in handling customer complaints and problems (Sears Teleservice)
- Superior phone and computer skills in customer service (Sears Teleservice)
- Excellent Time management and organizational skills
- Expert at planning and meeting deadlines

Instructional Skills:

- Graduate level study in Curriculum design and implementation
- Graduate level study in Educational Technology
- Instructional experience with students of many age groups including adults
- Instructional experience in many subject areas
- Developed and led workshops on various technology applications for colleagues
- Planned and developed instructional materials and methods to meet state core requirements
- Developed and taught classes using various technology applications with students from grades K-6
- Used various methods, including databases, to keep records of student performance
- Used various methods to analyze success of students and instructional methods
- Made adjustments to instructional techniques based on analysis of existing data
- Mentored faculty members in using instructional methods in math and technology

Technology Skills:

- Management and upkeep of a network of 30+ computers
- Management of server software applications
- Development of educational applications using presentations software, internet applications and other technology options
- Maintenance of database applications
- Expert at teaching and assisting others in the use of various technologies
- Excellent abilities with desktop publishing applications
- Knowledge of various spreadsheet applications
- Ability to use various software programs to complete website design
- Maintenance and updating of website
- Ability to master new software applications quickly

Employment History:

NN/LM MidContinental Region
Spencer S. Eccles Health Sciences Library
University of Utah
Project Coordinator
08/2004 –

- Run day to day office operations
- Update and maintain web site
- Layout and editing of publications including newsletter
- Preparation of quarterly reports
- Manage awards
- Make travel arrangements

Alpine School District
Pleasant Grove, UT
Teacher
08/1999 - 05/2003

1 year Technology/Computer Specialist, 1 year 6th Grade, 2 years 3rd Grade

- Taught Utah State Technology Core to 1000 students in grades K-6 weekly.
- Developed year long technology curriculum for students in grades K-6.
- Scheduled computer lab for use by 40+ teachers.
- Taught various computer/technology subjects including: keyboarding, desk-top publishing, multi-media presentations, internet research, spreadsheets, databases and computer based art.
- Developed and completed major technology based projects on each grade level.

- Supported the classroom curriculum on various grade levels using technology applications.
- Technology committee chair - 3 years.
- Supported and assisted faculty members with technology issues.
- Grade Level Math Rep - 2 years
- Taught all 6th Grade subjects including: Language Arts - Balanced Literacy Approach, Shakespeare including producing ?The Tempest?, Math - Standards-based curriculum, Social Studies - Ancient Civilizations, European History, World Wars I & II, Science - Space; Heat, Light and Sound; and Micro-organisms
- Taught all 3rd Grade subjects including: Language Arts - Balanced Literacy Approach, Math - Standards-based curriculum, Social Studies - South America, Communities, Science - Forces and Simple Machines, Electrical Safety, Solar System, Eco-systems
- Supported the main streaming of special ed students in my classroom and the computer lab.

Riverside Unified School District
Riverside, CA
Teacher
07/1998 - 06/1999

Taught 1st and 2nd grade. Taught all subjects including: Balanced Literacy and Standards based Math. Worked with a student population high in minority and ESL students.

Education:

University of North Texas
Denton, TX
Master of Library and Information Science
Expected Graduation: 04/2010

Utah Valley University
Orem, UT
Bachelor of Science in Elementary Education
04/1998
-10 credit hour specialization in Science - Courses included biology, geography, geology, physical science, chemistry, botany and astronomy.

California Baptist University
Riverside, CA
01/1999 - 06/1999
Masters Program in Educational Technology

Courses completed: Curriculum Theory and Development, Computer Education for Teachers, Educational Desktop Publishing

Skills and Tools:

Expertise and familiarity with various computer applications including:

Desktop Publishing	PowerPoint
Quark Express	Windows
Excel	Dream Weaver
Macintosh	HTML
Access	Adobe Acrobat
Microsoft Word	Adobe Acrobat Connect

Licenses and Certificates:

Professional Educator License - Utah - Elementary Education (1-8) (1998-2007)

Additional Skills & Accomplishments:

Dean's List - UVSC
State JC DECA - 2nd place marketing and management - 1984
President - Alpine School District Title 1 Parents Group 1997-1998
Served as an elections judge - Utah County - 2002

SANDY DROLLINGER

10 N. 1900 E, Bldg 589 • Salt Lake City, UT 84112 • sandycui@hotmail.com
Office: (801) 585-5337 Cell: (801) 698-9456

EDUCATIONAL BACKGROUND

Master of Business Administration **2003**
University of Utah, Salt Lake City, Utah

Master of International Business **2001**
University of Sydney, Sydney, Australia

Bachelor of Arts in English **1994**
Xi'an Foreign Studies University, Xi'an, China

PROFESSIONAL EXPERIENCE

ECCLES HEALTH SCIENCE LIBRARY University of Utah, Utah, August 2008- Present

RML Financial Analyst

- Prepares and interprets management information and other financial reports,
- Analyzes and interprets financial documents, statistical data, and historical data,
- Audits and reconciles data and recommends solutions when appropriate,
- Helps preparing the RML budget,
- Responsible for RML projects' daily financial transaction processing,
- Recommends and implements improvements that affect the RML's accounting system,
- Works with other university departments in the preparation and administration of the RML's account,

FOX VALLEY LEATHER COMPANY North Salt Lake, Utah, April, 2004- July, 2008

Corporate Accountant

Responsible for bookkeeping, corporate monthly financial compilation, quarterly and year end tax returns and all other office functions.

- Day-to-day accounting functions, including bookkeeping, A/R, A/P, etc
- Performed all corporate payroll function, including quarterly and annual payroll tax withholding, reporting and returns.

- Compiled all financial and managerial accounting records and reporting data for the corporation.
- Conducted corporate financial analysis and provide recommendations to the management
- Streamlined the accounting procedures to enhance productivity and operational performance

CYTS CHINA SHAANXI OFFICE Xi'an, China

July, 1994- June, 2000

Marketing Specialist

Recruited by the company as the top graduate of the university. Responsible for international marketing and new product development, tour coordination, non-profit cultural exchange programs.

- Successfully sponsored and coordinated the BYU Ballroom Dance Troup Grand China tour Xi'an stop in 2000.
- Orchestrated Yo Yo Ma with Asian Youth orchestra Xi'an performance in 1999
- Developed the American college student exchange program with No 4. Middle school and arranged to have two University of Florida students Mildred Loudor and Kerry teach in Xi'an for 2 months.

OTHER SKILLS

- MS Word, Excel, PowerPoint, Access, SQL, Database design
- MS Navision Accounting Software

Curriculum Vitae

Camille M. Salmond
4363 West 3930 South
West valley City, Ut 84120
801-968-8315
e-mail: csalmond@utah.edu

Education

1981- Middle Eastern classes taken in Israel. Credits from BYU, Provo, UT.
1980- Bachelor of Science. Majoring in Health Education and minoring in reading.
and a Secondary Teaching Certificate. University of Utah.
1976- European History, Classes taken in Europe. Westminster College, Salt Lake City,
UT

Positions

2001-Present, Library Supervisor
1996- 2001, Senior Library Specialist
1991-1996, Library Specialist

Teaching Experience

Online Docline Training Classes
Beginning Docline, Serhold, Routing Tables, and Borrowing and Lending. 2009/10
Docline Update Classes UHSLC Docline 2.7 Update at PCMC March 27th 2006
Student teaching at Valley Jr. High School in West Valley City 1979/80

Professional Affiliations

Utah Health Sciences Library Consortium
Member 1991-present
Treasurer 2008-present
Utah Academic Library Consortium
Resources Sharing Committee 1993-present
Member of MCMLA
Member of ULA
Heart Round Table

Interlibrary Loan Conferences

34th Annual Interlibrary Loan Conference, April 24-25 2003, Denver, Co.
33rd Annual Colorado Interlibrary Loan Conference, May 8-10th 2002, Aspen, Co
32nd Annual Colorado Interlibrary Loan Conference, May 10-11th, 2001, Estes Park, Co
31st Annual Colorado Interlibrary Loan Conference, April 27-28th 2000 Denver, Co
28th Annual Colorado Interlibrary Loan Conference, May 1-2nd, 1997, Boulder, Co
27th Annual Colorado Interlibrary Loan Conference, May 16-17th, 1996, Denver, Co

ILLiad Conferences

Illiad's International Conference. March 12-14th, 2008 @ Virginia Beach, VA
Illiad's International Conference. March 15-16, 2007 @ Virginia Beach, VA
OCLC ILLiad International Conference March 16-17th 2006 @ Dublin, Ohio
OCLC Illiad's International Conference. March 17-18, 2005 @ Dublin, Ohio

Staff Retreats

Staff Retreat - "Planning for Research Success in the 21st Century" February 7th 2007.
BYU Campus, Provo, UT.
Utah Academic Library Consortium Retreats: Springdale, UT, October 21-22, 2004.

InfoFair, Eccles Health Sciences Library, University of Utah

The Air We Breathe, November 7, 2008
From A Distance, April 10, 2007
The Access Horizon, April 25, 2006
Building Partnerships Bridging Disciplines, March 29, 2005
Outreach Within Reach, March 23, 2004
Next Generation Communication, March 25, 2003
Hunting, Gathering and Delivering in the Information Age, March 20, 2002
Genome Research in Healthcare: Cracking the Code, March 22, 2001
Video Visions: Integrating Multimedia in the Curriculum, March 23, 2000
SMART Patients: Consumer Health Informatics, April 16, 1999
Evidence-based Health Care, April 30, 1998
Internet Strategies for Health Data and Education, April 24, 1997
Becoming Digital, April 11, 1996; The Virtual Information Revolution, April 6, 1995
Staying Afloat in a Sea of Information, April 7, 1994
Seamless Information Systems, April 1, 1993
Mastering the Internet Maze, April 2, 1992
Connections for the '90's, April 4, 1991

Priscilla M. Mayden Lectures, Eccles Health Sciences Library, Univ. of Utah:

"Library Transformation: Making it Happen" March 23rd 2007
Next Generation Clinical Information Systems, October 17, 2006
Advancing Education in Healthcare through Technology, October 19, 2004
Information Retrieval: Grand Challenges for the 21st Century, October 2003
Computers, Biology, and the Productivity Paradox, October 22, 2002
Simulations in New Learning Environments, October 18, 2001
Scholarly Communication and Cultural Heritage in the Digital World: New Challenges for Research Libraries, November 9, 2000

MCMLA Conferences

MidContinental Chapter Meeting. Salt Lake City, UT, Sept 17-20, 2005.
 MidContinental Chapter Meeting Kansas City, MO, Sept 30-Oct 1, 2004.
 MidContinental Chapter Meeting Snowbird, UT, Sept 24-28th, 1996.

Continuing Education

“Cataloging: Where are we now? Where are we going?” Feb 19th 2010.
 “Targeting the Ages: Programming that Hits the Mark” Feb, 2009.
 “The relevance of libraries in a Digital Age” May 11th, 2007.
 “Web Conference on Library Education” April 27th, 2007.
 “The Best from the Web” - Soaring to Excellence series, April 6th 2007.
 “Next Generation Librarianship: “Where Do We go from Here”? Feb 9th 2007.
 “Dealing with Difficult People” Jan. 31st 2005.
 “A Technology toolkit: Survival Basics for Everyone, Jan 23, 2004.
 College of DuPage- “Soaring to Excellence” 2005 Academic Year
 College of DuPage- “Soaring to Excellence” 2004 Academic Year
 College of DuPage- “Soaring to Excellence” 2003 Academic Year

Utah Library Association

“The Times they are a Changin” Ogden, UT, May 11-13th, 2004.
 “Who are our Students?” Nov. 16th 2003.
 “Catch the Big Information Fish @ Your Library Sandy, Ut May 7-8th 2003.

Presentation & Posters

Infofair Demo “Get It” booth, HSEB. April 2006. (Presentation)
 UHSLC Docline 2.7 Update at PCMC March 27th 2006. (Presentation)
 Utah Health Info Direct (UHID) Pilot Project: Customizing ILLiad to Meet the Needs of Specialized Clientele. ILLiad International Conference, OCLC, Dublin, OH, March 16, 2006.
 Gregory JM, Bramble J, Patrick S, Reid A, Craigle V, Salmond C, Birks A. Utah Health Info Direct (UHID) Pilot Project: Customizing ILLiad to Meet the Needs of Specialized Clientele. ILLiad International Conference, OCLC, Dublin, OH, March 16, 2006, [Poster].
 Gregory JM, Salmond CM, Birks AB. Empowering ILL: Using ILLiad Interlibrary Loan Management Software in DOCLINE/Loansome Doc Libraries. Medical Library Association. Washington, DC, May 25, 2004. [Poster]
 Made a video (Docline 2.0 training) for Region 4, November 2003.
 Also gave this presentation to UHSLC at the consortium meeting at NPS Pharmaceuticals, on Oct 27th, 2003.
 Wyoming Symposium- Laramie, WY. (Docline Training) July 10-11th 2003..

Continuing Education

**MLA training “Web 2.0 Principles and Best Practice: Discovering the Participatory Web”
March 2008.**

**MLA training “Survival of the Fittest: Strategies to Prove Your Library’s value” March
7th, 2007.**

NLM Training: PubMed, Sept 17th 2005.

NN/LM Docline Training, University of Utah, March 2nd, 2001.

NLM Training: “The Effects of E-Journals on Your Library” Nov. 15th 2000.

Using Adobe Photoshop to Edit Scanned Images, Eccles Library, July 7th, 2000.

OCLC Preview of the New FirstSearch, Westminster College, Sept. 28th 1999.

Power Point, Eccles Health Sciences Library, Aug 11th 1999.

Internet Navigator, Modules 1-5, Eccles Health Sciences Library, June, 1999.

MLA Evidence-Based Health Care in Action teleconference, Sept 19th 1998.

“Am I a Crook” Copyright Issues on the Internet, April 1998.

Basic Training for Supervisors, University of Utah, July 30th, 1996.

Employee Relations, Training and Staff Development, University of Utah, July 22nd, 1996.

OCLC Update, Bibliographic Systems and Services, Westminster College, May 28th 1996.

OCLC Passport Software for Windows Overview, March 7th, 1996.

OCLC ILL Update, University of Utah, November 28, 1995.

OCLC Prism Service: Union List Overview, Oct. 6th, 1995.

OCLC Update, Westminster College, SLC, UT June 8th, 1995.

OCLC Prism: Services: Interlibrary Loan, Feb 23rd 1995.

Union List Overview, Utah State Library, Oct 6th 1994.

OCLC Prism: Services: Union List Overview. Oct 6th, 1994.

OCLC Prism: Search Adv tech, July 7th 1994.

Docline Training certificate March 2, 1991.

Last updated 10/1/2010

Part III: Facilities, Resources and Institutional Commitment

Facilities, Resources and Institutional Commitment

A - Overview

The Spencer S. Eccles Health Sciences Library and its many partners, offer a mission-based academic health sciences information and university learning environment rich with advanced informatics opportunities. Eccles Library faculty are nationally renowned for their ability to creatively apply technologies to library services, education and research support. Located at the foothills of the Wasatch Mountains in Salt Lake City, Utah, the Eccles Library is the only academic health sciences library in the state. It services the School of Medicine, and the Colleges of Nursing, Pharmacy, and Health. It also serves as the library (along with its Hope Fox Eccles Clinical Library and soon to be Hope Fox Eccles consumer library) for University Health Care, the Huntsman Cancer Institute, the Moran Eye Center and Research Park. The Library supports vigorous and innovative information programs including advanced virtual services, comprehensive digital collections, and a dynamic and a curricular-integrated information management educational program. It also has created multiple information subject portals and educational web-based instructional programs including Neuro-Ophthalmology Virtual Education Library (NOVEL) (<http://library.med.utah.edu/NOVEL/>), Utahealthnet (<http://Utahealthnet.org>), Utah Womens' Health Information Network - UWIN (<http://library.med.utah.edu/uwin/>) and Health Education Assets Library (HEAL) (<http://www.healcentral.org/>). In addition, Eccles Library was the home for Slice of Life (<http://slice.utah.edu/sol/aboutus/index.html/>) and the Knowledge Weavers Project (<http://library.med.utah.edu/km/digitalcollectkw.php>).

B - Institutional Description and Environmental Context

State of Utah

Utah is a large western state, measuring approximately 300 miles from east-to-west and 400 miles from north-to-south. As a primarily rural state, Utah's average population density is 25 people per square mile. Of Utah's 29 counties, 25 are classified as rural or frontier. Only 24 % of the state's population lives in these 25 counties, although they comprise 96% of Utah's total landmass, meaning that 76% of the population lives on about 4% of the land. As a result, the vast majority of Utahns live in an urban environment along the Wasatch Front. For those not living in the northern metro corridor, the rugged topography and long distances between communities create geographic and economic barriers to health care access. In some areas, people may have to travel in excess of 100 miles by car one-way for health care and there are communities on the Navajo reservation located three hours by car from the nearest health care facility.

Utah is served by twelve local health districts coordinated through the Utah Department of Health. Each rural district encompasses between three and seven counties. Each district covers a large geographic area, ranging from 8,400 to 17,500 square miles. To put these sizes in perspective, the total combined area of New Hampshire and Vermont is 18,800 square miles.

Utah's population reflects other Western states where resources spent on personal health care per capita are lower than those in other parts of the country.

The state of Utah has invested in a high speed electronic infrastructure which has placed it among the "most-wired" in the country, addressing the challenges of the digital divide in this rural state. The Utah Education Network (UEN) utilizes a well developed IP network which offers Internet connectivity to even its most remote campuses and students. The Utah Telehealth Network currently reaches the most rural areas of the state containing 6% of the population, while encompassing 41% of its landmass.

In addition, the 2.74 million citizens of Utah are served by 116 libraries/bookmobiles. For FY09, this represented daily statistics of 50,000 walk-in visits, 14,000 reference questions answered, and 111,000 materials circulated from Utah public libraries. Despite the rural location of most of Utah's public libraries, they provide high speed Internet access to their patrons throughout the state. Even the smallest one-librarian locations house multiple computers served by T1 to broadband access and all libraries provide connectivity to their resources from their web sites or that provided by the Utah State Library Division. Over 12,000 Utah residents connect to the Internet daily, and therefore have access to library resources and services throughout the state. Many use PublicPioneer, pioneer.utah.gov - Utah's Online Library, with 937,000 items and 416,000 visits experienced in FY09. This resource offers downloadable resources, new fiction and non-fiction, and multi-language learning materials for use with MP3 players.

Salt Lake City, Utah

http://www.visitsaltlake.com/visit/salt_lake_community/



"Combining the amenities of a major metropolitan area with the friendliness of a small, western city, Salt Lake City is an ideal location. A beautiful, safe, and vibrant city, Salt Lake combines unparalleled access to natural recreation, a bustling economy, dynamic nightlife, remarkable history, warm hospitality, and Utah's Greatest Snow on Earth."™

Salt Lake lies in a mountain valley with the Wasatch Mountains to the east and north. The Oquirrh (pronounced "oaker") Mountains border the western edge of the valley. Salt Lake's official elevation is 4,330 feet/1,320 meters above sea level. The city is situated on land once

covered by the prehistoric Lake Bonneville. The eastern and northern portions of the city are located on a series of terraces, or former beaches, which are known locally as "the benches."

University of Utah



The University of Utah is the state's oldest and largest institution of higher education and is a major research university. The University offers over 100 undergraduate and 90 graduate degree programs to over 28,000 students. The University of Utah is one of the state's largest employers and is ranked as one of the top public research universities in the nation.

For additional information on the University of Utah, see <http://www.utah.edu>.

University of Utah Health Sciences Center

The University of Utah Health Sciences Center serves the people of Utah and beyond by continually improving individual and community health and quality of life. This is achieved through excellence in patient care, education, and research; each is vital to its mission and each makes the others stronger.

Mission

- We provide compassionate care without compromise.
- We educate scientists and health care professionals for the future.
- We engage in research to advance knowledge and well-being.

Vision

- A patient-focused Health Sciences Center distinguished by collaboration, excellence, leadership, and respect.

Values

- Compassion, Collaboration, Innovation, Responsibility, Diversity, Integrity, Quality and Trust

University Health Care

University Health Care (UHC) combines excellence in education, research and clinical care and provides compassionate, state-of-the art care to its patients.

They educate to produce competent and caring practitioners, educators and scientists for the state of Utah and beyond. University Hospital remains a major regional referral hospital serving over five million people in Utah and the surrounding states of Idaho, Nevada, Wyoming, Montana and New Mexico.

University Hospitals & Clinics logs more than 850,000 inpatient and outpatient visits annually, and every day more than 10,000 people pass through the front doors of University Hospital. It is the state's largest provider of ambulatory care services, with 80 general and specialty clinics for outpatients. The center has over 900 board-certified physicians who specialize in its clinics and centers including clinics for family practice, pediatrics, obstetrics, gynecology, internal medicine, orthopedics and podiatry.

UHC patients continue to receive the best quality care during their visits. Over the years, the Center's reputation of excellence has grown throughout the Intermountain West and beyond as they have been recognized as one of America's Best Hospitals for the 13th year and counting in addition to receiving many honors and recognition.

- **Specialties:** The Intermountain West's tertiary care referral center is known for programs in orthopedics, stroke, ophthalmology, cancer, new born intensive care, radiology, fertility, cardiology, genetic related diseases and organ transplant. The hospital is also a nationally verified Level I Trauma Center.
- **University Hospital's Intermountain Burn Center:** The only burn treatment facility in the region, has more than 5,000 clinic visits annually and admits more than 300 critically ill burn patients of all ages from Utah and the Intermountain West
- **The AirMed patient-transport service:** Includes three helicopters and two fixed-wing airplanes and completes more than 1,800 missions yearly in Utah and neighboring states.

CTSA Award

University of Utah has been funded a CTSA grant award giving it an opportunity to become part of a large research consortium. The research consortium is funded through the NIH Clinical and Translational Science Awards (CTSAs) and is anticipated to transform how clinical and translational research is conducted, ultimately enabling researchers to provide new treatments more efficiently and quickly to patients. Beginning with 12 academic health centers located throughout the nation, the consortium will ultimately link 60 institutions together to energize the discipline of clinical and translational science. The library was consulted and contributed to the grant proposal. The CTSA has an active Community Engagement section that is involved in the design and implementation of significant community outreach to both the lay population as well as community-based practicing providers who might be interested in research. The Spencer S. Eccles Health Sciences Library director serves as a member of this core. She also is spearheading development of MyRA (My Research Assistant) that will be both a physical and virtual collaborative space for the CTSA Award research partners. The physical space will be housed within the Eccles Library. A needs assessment and MyRA recommendation white paper have been created in support of MyRA.

Brain Institute

The University of Utah Brain Institute was established in 2005 to be a coordinating center for neuroscience research in Utah. It's made up of more than 140 investigators at four universities and a core staff that helps facilitate collaboration among researchers. Brain Institute investigators are working to discover, develop, and deliver new treatments for a host of brain disorders, such as multiple sclerosis, autism, and Alzheimer's disease.

USTAR

The Utah Science Technology and Research initiative (USTAR) was established by the Legislature in 2006 to encourage academic researchers to commercialize technology and ideas for the creation of Utah companies and jobs for economic development. The University has its own USTAR center with world-class researchers in areas ranging from the neurosciences and imaging technology to biomedical engineering and nano-technology.

Huntsman Cancer Institute (HCI)

Established in 1995, Huntsman Cancer Institute (HCI) serves the needs of cancer patients and their families with research, education, and treatment. HCI is a nationally recognized cancer research center that also offers patient care for all types of cancer, as well as education and outreach for ways to prevent and treat cancer. HCI was founded on the principle of translational research, which means that basic scientists, clinical researchers, and cancer patients are brought together in an environment that allows for rapid translation of laboratory discoveries into effective new treatments in an atmosphere of hope and compassion.

Moran Eye Center



The Moran Eye Center includes three fully equipped operating rooms, a clinical floor with 25 exam rooms, minor procedure rooms, laser suites, a pharmacy, and the Utah Lions Eye Bank. The Center and its 12 community clinics received more than 100,000 patient visits this last year by individuals from 42 states and 10 countries. Since 1993, the number of faculty at the Moran Eye Center has nearly doubled to 43. The Moran Eye Center is world renowned for research, education, and clinical expertise in the areas of artificial vision, ophthalmic genetics, retinal cell communication, retinal cell transplantation and vision restoration.

Spencer S. Eccles Health Sciences Library



The Eccles Health Sciences Library faculty and staff have a national reputation for their leadership with technology, for their distributed regional medical library model, and for their

team approach to achieving state-of-the-art user services. In addition, they are very integrated into the health sciences mission.

The library's commitment to outreach services extends back to the late 1960's when the Intermountain Regional Medical Program funded a librarian as part of their outreach program. During the 1970's, the library received several grants for outreach and hospital library development. With grant support, the library founded the Utah Health Sciences Library Consortium which continues to be an effective venue for cooperation. The award of the MidContinental Audiovisual Resource Sharing project in 1978 provided the library with the opportunity to enhance audiovisual services to the MidContinental Region. In 1985, the library received funding from the Midcontinental Regional Medical Library to implement a mini-computer based, interlibrary loan and email reference service for members of the Utah Health Sciences Library Consortium. In 1993, the library was able to fund a full-time Outreach Librarian with ongoing funding. The Outreach Librarian developed very effective relationships with the Utah State Public Health Department and with the Utah Area Health Education Center. For her outreach efforts, she received the Michael E. DeBakey Library Services Outreach Award in 1999.

Recent outreach efforts have expanded services to include public libraries and consumers. The development of the Utah Consumer Health Information Network (UCHIN) (<http://uchin.med.utah.edu/>), was led by the library's Clinical Librarian. This site was used by the Utah State Library Division as their gateway to health information. The State Library's web site is used by many rural public libraries as their homepage. In addition, the library received funding to develop digital audio files of health information brochures in 24 languages developed by the Utah State Department of Health. These files have now become part of the EthnoMed site at the University of Washington (<http://ethnomed.org/>).

In 2003, the library recruited a public librarian, who had been the Assistant Director of the Salt Lake City Public Library, to lead a public library outreach project funded by a LSTA grant. This project, the Utah Consumer Health Information Initiative was recognized by The National Commission on Libraries and Information Science (NCLIS) for one of its 2004 NCLIS Blue Ribbon Consumer Health Information Recognition Awards. This grant also provided a very useful needs assessment that led to a successful NLM proposal – Utah Consumer Health Infrastructure – which was funded January 2005.

The Spencer S. Eccles is nationally recognized for its leadership in the application of advanced information and communications technologies--beginning with the publication of an index to U. S. Government Documents in the health sciences in 1973 using punch cards, with subsequent migrations to a minicomputer and then to a desktop microcomputer. The index was published for over 20 years. In the 1980s, the library established the first instructional microcomputer facility at the health sciences center. In collaboration with the Department of Family and Community Medicine, the library explored the use of the first generation of portable microcomputers with the department's preceptorship program. In 1989, the library designed the first listserv for health sciences libraries for the Association of Academic Health Sciences Library Directors and moderated the listserv for seven years.

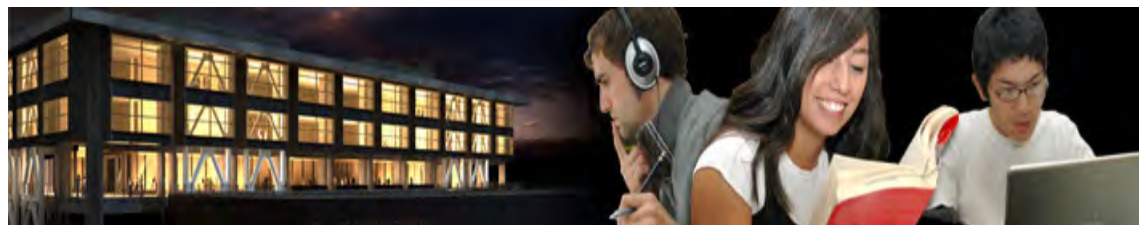
Data networking has been a major focus of development for the library beginning in 1986, when the library was one of the first destinations on the University's first broadband network. The library was instrumental in securing funding for and the coordinating the deployment of the first high-speed network connecting all of the colleges and university in the Utah System of Higher Education. The efforts led to the formation of the Utah Education Network which now serves all of higher education, public education and the public libraries in the State of Utah.

During the last ten years, the library has been exploring the use of digital video technologies. The library now regularly provides Internet broadcasts of major lectures and monthly seminars, including grand rounds in Internal Medicine, Geriatrics and Biomedical Informatics. Videoconferencing technologies have also been implemented using netMeeting, Polycom hardware/software, VRVS, the Access Grid, Macromedia Breeze and most recently Adobe Connect and Wimba. Videoconferencing is regularly employed by the MidContinental Regional Medical Library in operational meetings and special presentations. Complementing the videoconferencing technologies has been the effective utilization of Voice over IP, specifically Skype, as an alternative to analog telephone services.

The Eccles Library is committed to developing its faculty and staff so that they reach their maximum potential. Faculty and staff are generously supported to attend professional and work-related classes as well as professional meetings. Faculty are encouraged to participate in scholarly and professional development activities including professional organization committee work and officer appointments, giving formal presentations and authoring publications. Part of their evaluation is based on such scholarly contributions. In addition, Eccles Library has historically encouraged their own staff, through financial and time support, to pursue academic programs leading to an advanced degree in library science, information science, information systems, archival studies, or related programs, undertaken with the intent to pursue a career in academic librarianship.

Eccles Library faculty are fully integrated with informatics initiatives though out the university. Faculty serve as members of various university informatics committees including the four colleges' curriculum committees. Library faculty also participate in committee meetings dealing with cyberinfrastructure, information and educational technology, community outreach, research, and health literacy, and our faculty are highly visible and active campus members. The Eccles Library faculty and staff also administer and technologically support the university's Health Sciences Education Building which offers an integrated interdisciplinary educational experience for students. One faculty member serves as chair of the Faculty Senate Budget and Planning Committee.

The J. Willard Marriott Library



The J. Willard Marriott Library is the flagship academic library for Utah and the largest state-funded academic library in the five-state region of Idaho, Montana, Nevada, Utah, and Wyoming.

The Marriott Library encompasses 3 million volumes and 514,000 square feet. It is in the final stage of a four year, \$80 million renovation project to improve seismic stability, to create new spaces and services meeting the needs of today's students, and to manage collections and technology more effectively. New spaces include the Grand Reading Room and adjoining Garden Terrace, which foster quiet study and reflection. The Knowledge Commons, an information rich and technology-intensive student center, embodies the integrated 21st century library. Other features include the Automated Retrieval Center for efficient robotic collection management, an expanded café, new high-tech classrooms, and state-of-the-art preservation facilities.

Along with rare books the Marriott Library acquires and conducts oral histories, collects family stories, personal diaries and journals, business papers, and artifacts that make up and document our lives. It recently received NASA artifacts from the family of James Fletcher, former University of Utah president and director of NASA, including models of rockets and satellites, and small flags that have actually been on the moon. We have the third largest papyrus collection in the world. The special collections are a priceless treasure that are held in trust for the people of Utah. This collection is worth more than \$120 million.

With an annual gate count of over one million, the Marriott Library is one of the most widely used buildings on campus. It provides diverse student learning spaces with access to technology, digital and print information resources, unique primary source materials, and expert staff. It houses TACC - The Technology Assisted Curriculum Center that supports faculty, instructors and students with technology-enabled course design, development and delivery services. It is also the home of the Mountain West Digital Library - an aggregation of digital collections about the Mountain West region of the United States. This portal provides free access to more than 290,000 resources in over 340 collections from universities, colleges, public libraries, museums, archives, and historical societies in Utah, Nevada, Idaho, and Hawaii.

The Marriott Library is integral to the teaching and learning mission of the University of Utah and also functions as a center for campus life.

The Marriott Library and the Spencer S. Eccles Health Sciences Library are separate administrative entities. The Eccles Library reports to the Senior Vice President for Health Affairs whereas the Marriott Library reports to the Provost. The budgets are separately planned, negotiated and allocated. However, there are areas where the two libraries as well as the Quinney Law Library work together. These include:

- **Joint Library Policy Advisory Committee – with appointed faculty representatives from each University school/college.**
- **An integrated library system – Ex Libris – the system is supported mainly by the Marriott Library with payment from Eccles Library**
- **An institutional repository (USpace)**
- **Library fee assessed to each student – Eccles Library receives 18% of the total fee collected**
- **Licensing of electronic resources**
- **Utah Academic Library Council - the state-wide higher education consortium. Eccles Library shares state allocations granted in support of this consortium.**
- **Joint committees and task forces:**
 - **University-wide Open Access Task Force**
 - **Cyberinfrastructure Committee**
 - **Data Curation Committee**
 - **Integrated Library System Committee**
 - **Electronic Resource Committee**
 - **Library Personnel Committee**
 - **Knowledge Management Committee**
 - **Scholarly Communications Committee**
 - **Faculty Promotion and Tenure Committee**

Extramural Funding for University of Utah Libraries

Examples of extramural funding obtained to support informatics and library-related projects include:

Eccles Health Sciences Library

Funding Agency	Title	Summary	Date	Amount
National Library of Medicine	Midcontinental Audiovisual Resources Sharing Project	The objective of the project was to establish a regional collection of audiovisual materials for use by health professionals.	1979-1981	\$184,030

Funding Agency	Title	Summary	Date	Amount
National Library of Medicine	Redesign and Standardization of the MEDOC Index	The objective of the project was to redesign the computer programs and the acquisition of the hardware for the local production of the MEDOC Index.	1982	\$68,000
Castle Foundation	Upgrade of the PHILSOM Serials Control System	The objective of the project was the acquisition of hardware that would allow access to and maintenance of the library's serials records online.	1983	\$4,300
National Library of Medicine	Academic Information Management System (IAIMS) Strategic Planning - Phase I	The objective of the contract was the preparation of a long range, strategic plan for the coordinated development and management of information resources in the health sciences at the University of Utah	1983 - 1984	\$92,020
National Library of Medicine	Integrated Academic Information Management System (IAIMS) Strategic Planning - Phase I – Pilot Project	The objective of the project was the continuation of the IAIMS planning and the development a pilot project that demonstrated the application of IAIMS concepts.	1984 - 1985	\$69,015
National Library of Medicine	Utah Preceptorship Network	The objective of the project was to provide portable microcomputers to medical students during their preceptorships. The microcomputers were used for records management, communications, library service and the preparation of a research project.	1985 - 1986	\$69,665

Funding Agency	Title	Summary	Date	Amount
National Library of Medicine	Utah IAIMS Development Project	The objective of the project was to test the concept of the Integrated Academic Information Management for the Health Sciences Center at the University of Utah.	1985 - 1988	\$600,000
MidContinental Regional Medical Library Program	InfoNet Project	This project was designed to develop an automated interlibrary loan and reference system based on the OCTANET system. The InfoNet system was suitable for use by end-users.	1985	\$70,000
Castle Foundation	ILS Microcomputer	This proposal was for the acquisition of a microcomputer to provide circulation system back-up for the Public Services Department.	1986	\$2,300
Health Services Research Administration	Utilization of New Computerized Information Network by Family Practice Training Programs	Response to Request for Proposals from the Health Services Research Administration.	1987 - 1988	\$89,904
State Legislature	Higher Education Telefacsimile Network	This project funded the selection and installation of plain-paper telefacsimile machines in the libraries of each college and university in the State of Utah.	1990	\$122,000
State Legislature	Utah College Library Council CD-ROM Union Catalog	This project was for the selection of hardware and software, the coordination of the preparation of the database of 3,000,000 records and the installation of the system.	1990 - 1991	\$125,000

Funding Agency	Title	Summary	Date	Amount
State Legislature	Utah Library Network	The objective of this project was the installation of a high-speed data communications network the linked the colleges and universities in the State of Utah.	1990 - 1991	\$639,750
State Legislature	Ariel Network	The objective of this project was to install a digital telefax network to enhance interlibrary loan services for the college and university libraries in the State of Utah.	1992	\$69,000
National Science Foundation	Connections to the NSFNET	The project installed high-speed data communications links between the University of Utah, Veterans Administration Medical Center and the LDS Hospital.	1993	\$50,000
Utah System for Higher Education	Internet Navigator	Networked-based, on demand Internet skills course for credit.	1995-1996	\$50,716
National Library of Medicine	A Model Multimedia Support Center	This project involved creating online tutorials for health sciences faculty, delivering workshops related to educational technology, and cataloging re-usable multimedia resources in the library's integrated online catalog	1995-1998 1998-2001	\$516,018 \$435,731
National Science Foundation	Digital Multimedia Library for Health Science Education	This project developed the underpinnings for a national Digital Multimedia Library for health sciences education as part of the National Science Digital Library (NSDL). The result became the Health Education Assets Library (HEAL) multimedia repository.	2000-2002 2002-2004	\$355,678 \$292,448

Funding Agency	Title	Summary	Date	Amount
National Library of Medicine	National Network of Libraries of Medicine. MidContinental Region		2001-2006	\$5,821,314
National Library of Medicine	Health Education Assets Library Services Enhancement	Subcontract to University of Oklahoma	2003-2006	\$35,000
Institute of Museum and Library Services through the Library Services and Technology Act (LSTA)	Utah Consumer Health Information Initiative – Phase 1		2003-2004	\$74,550
National Library of Medicine	Symposium on Community-Based Health Information Outreach		2003-2004	\$154,249
National Library of Medicine	“MLA Health Information Literacy Research Project,”	Unsolicited Contract (Jean Shipman Co-Principal Investigator)	2006-2008	\$250,000
National Library of Medicine	2 nd Year Associate Fellowship, Host Institution		2009-2010	\$7,000

Marriott Library

Funding Agency	Title	Date
State of Utah	Using Ipods & Related Technology	2006-2007
Colorado State University	Western Waters Digital Library	2007-2010
Utah Arts Council	Book Arts Program Summer Workshop Intensive	2007

National Endowment for the Humanities	National Digital Newspaper Program (NDNP)-Phase 2	2007-2011
Institute of Museum & Library Services	Western Landscape Archive	2007-2010
Utah Arts Council	Treasure Chest Program	2007-2008
Utah Arts Council	Book Arts Program 2008 Summer Bookmaking Intensive	2008-2009
State of Utah	Utah American Indian Digital	2008-2009
Utah State University	Ead Digital Mss Registers	2007-2008
Institute of Museum & Library Services	Utah Connecting To Collections	2009-2010
Utah Arts Council	Treasure Chest Of Rare Books	2009-2010

National Network of Libraries of Medicine, MidContinental Region



The Spencer S. Eccles Health Sciences Library has been the contract recipient for the MidContinental Regional Medical Library (NN/LM MCR) for the past 10 years. The MCRML supports collaboration among over 400 network member libraries and information centers in the states of Utah, Colorado, Wyoming, Kansas, Nebraska and Missouri through a distributed state model. This territory includes more than 17 million people with nearly 75% living in urban areas, with a predominance of white individuals (89%) and with 86% having attained at least a high school diploma and over half possess some college education. The Regional Medical Library works through subcontracts with its Resource Libraries in each state to implement the contract's statement of work. There are faculty liaisons located in each of the region's states who have direct knowledge of and contact with their state constituencies. Every subcontract state coordinator has state outreach responsibilities as well as project responsibilities for the region.

The mission of the National Network of Libraries of Medicine (NN/LM) MidContinental Region (MCR) is to advance the progress of medicine and improve the public health by: 1) providing all U.S. health professionals with equal access to biomedical information; and, 2) improving the public's access to information to enable them to make informed decisions about their health. The Program is coordinated by the National Library of Medicine and carried out through a nationwide network of health science libraries and information centers.

Hope Fox Eccles Clinical and Consumer Health Libraries

The Hope Fox Eccles Clinical Library serves as a branch of the Spencer S. Eccles Health Sciences Library. Its mission is to provide quality health information services to the patients, visitors, and staff of University Hospital, as well as the general community. The Clinical Library is located on

the fourth floor (Room 4037) of the hospital. This facility will be closed in the near future and will become a completely virtual collection. A new consumer health information center named after Hope Fox Eccles will open in the lobby of the University Hospital. It will serve patients, their families and the general public and will be a partnership between the Spencer S. Eccles Health Sciences Library and University Hospitals.

Spencer F. and Cleone P. Eccles Health Sciences Education Building (HSEB)



With the opening of the Spencer F. and Cleone P. Eccles Health Sciences Education Building on September 1, 2005, the library assumed administrative responsibility for this state-of-the-art, interdisciplinary educational facility. Begun with \$33 million appropriated by the 2002 Utah State Legislature and supplemented by generous gifts from the Eccles Family, the faculty and staff of the Health Sciences Center and support from donors from the community, the Health Sciences Education Building (HSEB) is five-story facility with 158,000 GSF. Over 65% of the space in the HSEB, is instructional space. In addition, the building includes the Health Sciences Branch of the University Bookstore and the England Hub.

The goal of the Spencer F. and Cleone P. Eccles Health Sciences Education Building is to provide a state-of-the-art, interdisciplinary facility, supporting world-class education programs.

Advanced technologies are integral to instruction throughout the facility. Wireless networking is the core network infrastructure supplemented by over 1,500 hardwired network connections. A custom-designed podium supports complete control of computing, projection, sound, lighting and other presentation hardware. An instructional computing facility includes four computer classroom and a 50 computer, open-access service area. Sixteen 15 person seminar rooms are available for small group instruction. The most technologically intensive area in the HSEB is the Clinical Suite. This facility consists of 18 fully equipped examination rooms which are managed by a system that is capable of real-time digital audio and video recording in each room, saved to a large storage array. The system also handles scheduling and performance of students and standardized patients. The HSEB is connected to and managed by the Spencer S. Eccles Health Sciences Library.

Biomedical Informatics

The Department of Biomedical Informatics was established in 1964 at the University of Utah. The department is internationally recognized as a leader in biomedical informatics research and education. The department has a National Library of Medicine (NLM) training grant to support its educational programs. Master of Science (MS) and Doctor of Philosophy (PhD) degree programs are offered along with short-term traineeships for students and visiting fellows. Research affiliations include the University of Utah Health Sciences Center, Intermountain Health Care facilities, the Veterans Administration Medical Center, HealthInsight (the Peer Review Organization for Utah and Nevada), and the Utah Department of Health. As one of the largest biomedical informatics training programs in the world, the department's faculty and students are a diverse group with a wide range of experience and interests.

Utah Telehealth Network (UTN) and Utah Education Network (UEN)

The Utah Telehealth Network (UTN, <http://www.utahtelehealth.net/>) links patients to health care providers across Utah, the country and the world by using leading edge telecommunications technology. Telehealth provides rural patients and providers with access to services that are usually available only in more populated urban areas. The Utah Telehealth Network uses interactive video to deliver patient care, provide continuing education to health professionals, and to facilitate administrative meetings.

UTN offers a wide range of services in support of its mission to use innovative technology to expand access to healthcare services and resources. Videoconferencing and media services include everything from assistance with getting started, providing real time support with lived videoconferencing and webstreaming, to video-on-demand. UTN guides health care providers through the development of patient care applications and new continuing education programs. A schedule of live and on-demand educational programs is available to health professionals for viewing. Network and security services link Utah's healthcare providers and assure that telehealth and other HIT applications are accessible and secure.

The Utah Education Network (UEN, <http://www.uen.org/>) is a consortium of public education partners, including the Utah System of Higher Education and its ten universities and colleges;

the Utah State Office of Education, local school districts and the Utah Electronic High School and; the state's Library system. The purpose of Utah Education Network (UEN) is to promote higher and public education through the exchange of education programs, courses and information via networking facilities at minimal or no additional cost to these entities. UEN also supports the state and local library systems. Its mission is to network to create educational opportunities, connect citizens, and collaborate with partners, serving Utah communities.

Special Eccles Library Projects

HEAL

The Health Education Assets Library (HEAL) was created in 2000 by a library faculty member in collaboration with faculty from the University of Oklahoma College of Medicine and the UCLA David Geffen School of Medicine. HEAL was funded by the National Science Foundation (NSF) National Science Digital Library (NSDL) and NLM. HEAL is a digital repository containing over 23,000 freely available peer-reviewed multimedia resources related to health sciences education. In 2005 one of the HEAL co-creators developed the American Association of Medical Colleges repository called MedEdPortal, which focuses on complex learning objects. HEAL focuses on raw multimedia assets so that work is not duplicated. The HEAL co-directors are currently working with the International Association of Medical Science Educators (IAMSE) to transfer HEAL to IAMSE's control by early 2011.

HEAL provides access to tens of thousands of images, videoclips, animations, presentations, and audio files that support healthcare education. Faculty may use the web-based interface to search, browse, and download materials. Faculty may also add user reviews and tag resources with keywords. The HEAL website is at <http://www.healcentral.org>.

Outreach

The Eccles Library's commitment to outreach has never been stronger or more active. Activities, collaborations and partnerships have grown to include all aspects of the health sciences, professional and public arena in Utah. Activities and programs are carried out by the Outreach Librarian and in strong partnership with the RML program, public libraries statewide, other health sciences partners and health information agencies statewide. Very active partnerships exist between the Utah Department of Health, The Utah Women's Health Information Network (UWIN), the Center of Excellence in Women's Health (CoE) and members of the Utah Cancer Action Network. Activities include numerous teaching, exhibit and speaking engagements throughout Utah, often using a mobile wireless (laptop) classroom.

Current Outreach Commitment

- Develop, provide and coordinate outreach programs, resources and library services for library constituents/communities
- Anticipate and respond to the health information needs of our communities through outreach, advocacy, service and information access for health professionals, health information providers, community based organizations and citizens of Utah

COMMUNITY PROJECTS AND COLLABORATIONS



TC4C (Tribal Connections Four Corners)-the Outreach Librarian serves as the Utah representative to TC4C. In addition, she has coordinated a TC4C Community Partnership project with the Utah Navajo Health System, Inc.

TC4C Community Partners Project-MCRML funded through Eccles Library "Patient Education in Navajo County"

To provide evidence-based, culturally appropriate diabetes and cardiovascular disease-education materials and training for the clinic communities in order to increase patient understanding of their disease and thus affect improved healthcare in support of the Utah Navajo Health System mission.



<http://Utahealthnet.org>

Eccles Library faculty are the conveners of consumer health information for Utah and have stepped forward in order to provide a statewide consumer health information infrastructure in support of our outreach mission. This was catalyzed with the receipt of three year National Library of Medicine/NIH information systems grant beginning in 2005 entitled "Utah Consumer Health Information Infrastructure" or fondly known as **Utahealthnet** (UHN). Utahealthnet has been presented at statewide, regional and national conferences including several Medical Library Association annual meetings. Utahealthnet conducted a statewide media campaign which generated TV and radio coverage and a web presence on all major media outlets leading to a total of 809,682 hits in FY-2006-07-a four fold increase in use of the consumer health portal.

Utahealthnet is the statewide consumer health information portal which provides free, one-stop access to high-quality health information for residents no matter where they live. Partnerships with the Utah Department of Health and numerous other consumer health information providers create a central resource of authoritative and relevant health information. Internet access

enables continuous online and in person training to health professionals and citizens statewide. The goal of Utahealthnet is to increase access to and understanding of high quality health information, resources, services and programs, in order to empower residents as partners in the improvement of health statewide. The partnerships and central consumer health information resource of Utahealthnet have continued as an Eccles Library commitment beyond NLM funding which ended in 2008.

Listed below are the Library's other current major outreach projects and partnerships:



National Center of Excellence in Women's Health

<http://uuhs.c.utah.edu/coe/womenshealth/>

Center of Excellence (CoE) in Women's Health Demonstration Project-Region VIII-

Although federal funding ended for Centers of Excellence nationwide, the Utah CoE was awarded an NIH/Office on Women's Health ASIST 2010 grant which has become UWIN-Utah Women's Health Information Network. CoE efforts now focus on research on women's health issues in Utah. The Eccles Library has been a full CoE collaborative partner from the beginning of the Center in 2005.

UTAH WOMENS HEALTH INFORMATION NETWORK (UWIN)

<http://library.med.utah.edu/uwin/>



In response to the RFA entitled Advancing Systems Improvements to Support Targets for Healthy People 2010 (ASIST2010), the University of Utah's Center of Excellence (CoE) in Women's Health has further expanded its successful model of multidisciplinary, cross-campus, academic collaborations aimed at improving women's health, to one that includes public health and community partners. The CoE, including the Spencer S. Eccles Health Sciences Library, has partnered with the Utah Department of Health, Association of Community Health Centers (AUCH) and Utah Navajo Health Systems, Inc to build a women's health information infrastructure in Utah during the 3 year grant period. The project, entitled the Utah Women's Health Information Network (UWIN), provides a platform to increase education and improve

health care, using diabetes as the sample disease process. The platform approaches this, and any subsequent disease process, by creating a sustainable and fluid statewide infrastructure for the dissemination of health information and focuses clinical projects across primary, secondary and tertiary prevention of disease.

Public Libraries Partner with Community Health Centers: One of the most important features of the UWIN project model is to partner public libraries with community health centers represented by AUCH. Our society is experiencing an increasing flood of health information on the internet and in the press, but discerning which of numerous websites is authoritative remains a challenge for health professionals as well as the lay public. Many times clinics want to provide patients with good follow-up information about a health condition but lack time and knowledge of evidence-based resources. By partnering clinics with their community public libraries, patients as well as their health care providers can take advantage of the librarians who are trained to provide effective access to appropriate consumer health information statewide. An Information Prescription (Information Rx) model will be used by the clinicians to direct their patients to a neighboring public library for further health information. By using the Eccles Library's consumer health information website for Utah, Utahealthnet <http://Utahealthnet.org>, the InformationRx, Telehealth Seminars, a gender-focused Utah diabetes conference, and a follow-up updated Utah diabetes management handbook, UWIN partners hope to improve understanding for patients with diabetes and for providers who treat them.

The NN/LM MCR Utah/Network Membership Liaison helped develop one of UWIN's training modules, Good Health at Your Library, and assisted in teaching these modules to public library staff participating in the project. The liaison also participated at the monthly UWIN Advisory Board meetings and promoted the project at health practitioner, library professional conferences, and public health fairs. The MCR also provided National Library of Medicine promotional materials to the project.

The coalition recently received a planning grant "Coalition for a Healthier Community -Utah Women & Girls" (UWAG) from the Center of Excellence in Women's Health to build on their UWIN results. The MCR will continue to support the coalition and the libraries participating in the project, if it gets funded.

Eccles Library's Long Time Commitment to Outreach

Eccles Health Sciences Library's (EHSL) involvement in outreach programs began with the Intermountain Regional Medical Program in the late 1960's. With outreach activities largely focused on developing programs and services for health professionals, early efforts aimed at encouraging the establishment of libraries in Utah hospitals, notably in what are now the Intermountain Health Care (IHC) hospitals.

Since that time, numerous other projects have continued to expand Eccles Health Sciences Library's outreach mission.

- **1972**-EHSL founded Utah Health Sciences Library Consortium (UHSLC) -EHSL supports 10 member library catalogs from its online integrated catalog and participates fully in UHSLC activities
- **1992**-first full time Outreach Librarian position-honored in 1999 DeBaKey Award for outstanding outreach librarian by the National Library of Medicine
- **1996**-Eccles Library's previous Director, Wayne Peay instrumental in establishing Pioneer: Utah's Online Library – a statewide resource sharing collaborative for public, school & academic libraries
- **2000**-Utah's first consumer health information database designed for users as well as librarians – The Utah Consumer Health Information Network (UCHIN).
- **24 Languages Project** - 200 consumer health brochures translated by native speakers into 24 languages. This information has become a part of the EthnoMed at the University of Washington.
- **2001-present**-Eccles Library received the contract from NLM to become Regional Medical Library for the MidContinental Region.- This distinction has created numerous collaborative outreach opportunities
- **2005 OPHL**-Online Public Health Library partnership with Utah Department of Health (UDOH) to provide access to UDOH consumer health documents through the EHSL online catalog. OPHL is now the test-bed for public health materials in the EHSL Institutional Repository (IR).
- **2003**- Received Utah Consumer Health Information Initiative LSTA grant. Conducted health information needs assessment and training for all Utah public libraries through EHSL. Established stronger partnerships with public libraries statewide and served as a foundation for future NLM-funded Utahealthnet grant
- **2004** In-state-toll free phone line installed at reference desk
- **2004-Utah Consumer Health Information Infrastructure Project** - EHSL received \$480,000, 3-year NLM grant (2005-2007)- "Utahealthnet" statewide consumer health information portal for Utah
- **2005+** Eccles Library became a primary partner with the **Center of Excellence in Women's Health Region VIII Demonstration Project**.
- **2007+** In turn this broad based health sciences center initiative served as the basis for the subsequent 3 year **Utah Women's Health Information Network (UWIN)** currently in its second year.

ECCLES LIBRARY TRAINING FACILITIES



In addition to the teaching facilities and computer labs located within the Health Sciences Education Building, the Spencer S. Eccles Health Sciences Library also houses a computer lab complete with an instructor station, 14 dedicated computers, and wireless connectivity. The Eccles Library also has a mobile teaching unit with laptops that can supplement the computers available within the training lab.

The lab is located in the lower level of the Library, and will be expanded in size in the near future. This lab can be used by the NLM Training Center and the Regional Medical Library

program for regional training needs. It will also be shared with the CTSA as a MyRA training facility.

The Health Sciences Education Building (HSEB) is five-story facility with 158,000 GSF. Wireless networking is the core network infrastructure supplemented by over 1,500 hardwired network connections. A custom-designed instructor podium within each classroom supports complete control of computing, projection, sound, lighting and other presentation hardware. An instructional computing facility includes four computer classrooms and a 50 computer, open-access service area. Sixteen 15 person seminar rooms are available for small group instruction.

Classroom capacity, room numbers and pictures are listed below:

<ul style="list-style-type: none"> ▪ 40 Person Classrooms: <ul style="list-style-type: none"> - 2938, 2948, 2958 - 3515C - 5100B 	 <p>40 person classroom</p>
<ul style="list-style-type: none"> ▪ 25 Person Classrooms: <ul style="list-style-type: none"> - 2908 - 3420, 3430 	 <p>25 person classroom</p>
<ul style="list-style-type: none"> ▪ 15 Person Classrooms: <ul style="list-style-type: none"> - 2912, 2928, 2929, 2931, 2949, 2957, 2962, 2968, 2969, 2971 - 3515A, 3515D - 4100A, 4100B - 5100A, 5100D 	 <p>15 person classroom</p>

Distance Education

The Spencer F. and Cleone P. Eccles Health Sciences Education Building has two 40-person classrooms that are configured for use in distance education. In addition to the standard

hardware configuration in the teaching podium, rooms 4100C and 5100C have dual projectors to support local and distant projection. Each seat includes power, data and a microphone. Instructors can monitor projection and broadcast on flat screen monitors located at the back of the classroom. The computer laboratory within the Eccles Library can also be outfitted to support distance education using a portable Polycom unit.

Additional distance education facilities and support are available from both Utah Education Network and Utah Telehealth Network (see descriptions above).

**The University of Utah**

Office of the Senior Vice President
for Health Sciences

A. Lorris Betz, M.D., Ph.D.
Senior Vice President for Health Sciences
Executive Dean, School of Medicine
CEO, University Health Care

May 17, 2010

Jean P. Shipman
Director
Spencer S. Eccles Health Sciences Library
10 North 1900 East, Building 589
Salt Lake City, UT 84112-5890
May 18, 2010

Dear Ms. Shipman:

It is my pleasure on behalf of the University of Utah Health Sciences Center to endorse your proposals to the National Library of Medicine (NLM) to serve as the MidContinental Region, National Network of Libraries of Medicine (NN/LM), and as the NLM Training Center for 2011-2016.

The Spencer S. Eccles Health Sciences Library is starting its 10th year as the MidContinental Regional Medical Library for the NN/LM. The distributed model under which it operates has proven to be extremely valuable for assuring that local, state and regional information access needs are effectively and efficiently addressed. Librarians throughout the region receive training, infrastructure support through resource sharing systems, and funding to support their local initiatives through your program. In addition to librarians, health care professionals throughout the region are also benefiting from your expertise, resources and services. Many, who are not affiliated with academic health care centers or hospital libraries, are able to connect with regional libraries that are willing to offer information services through your assistance.

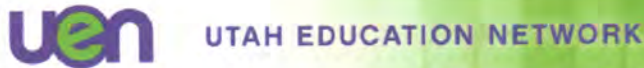
I am also delighted that you are applying to serve as the NLM Training Center for the contract period 2011-2016. Your long-term national acclaim as experts and instructors regarding innovative uses of advanced technologies will not only benefit our regional Network members, but also those throughout the United States. No one conducts distance learning activities with more agility than your staff as they regularly work with online communication tools and distance learning software. You also have experience with managing inter-institutional shared staff and employees working at various physical locations, which should enable you to efficiently work with a team of trainers who travel throughout the country.

I offer my total support for both of your proposals and look forward to continuing to partner with the National Library of Medicine as they ensure that no health care provider is without access to needed information, with the ultimate goal of improving our country's health.

Sincerely,

Lorris Betz, M.D., Ph.D.
ALB/amb

Senior Vice President for Health Sciences
175 N. Medical Drive East
Salt Lake City, Utah 84143-5901



James Hodges, Manager
Utah Educational Network
Eccles Broadcast Center
101 Wasatch Drive
Salt Lake City, UT 84112
(801) 883-4851

Dear Ms. Shipman,

A major charge of the Utah Education Network (UEN) is to promote higher and public education through the exchange of education programs, courses and information via interactive video conferencing (IVC).

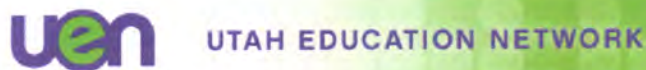
To carry out this purpose UEN has the ability to provide reasonable resources to cooperatively coordinate the distance education and conferencing events planned by the NN/LM Mid-Continental Region. UEN can cooperatively assist with the coordination and scheduling of facilities and technical expertise available for the E-science conference planned in 2012/2013. UEN can cooperatively work with the NN/LM MidContinental Region and partnering sites for this and other events planned for the next contract taking full advantage of our videoconferencing technology and support resources. This will enable successful speaker-to-audience, audience-to-speaker, and audience-to-audience interactions accomplished through H.323 standards based video conferencing technologies.

If you have further questions or inquiries regarding UEN or the services we provide please contact me directly.

Sincerely,

A handwritten signature in black ink that reads "Hodges".

James Hodges
UEN IVC Operations Manager
Utah Education Network Technical Services
801-883-4851
jhodges@media.utah.edu



Part IV: Appendices

Appendix A – Resource Library Descriptions

Health Sciences Library/Learning Center Creighton University Medical Center Omaha, Nebraska

Central to the facilities of the Creighton University Medical Center is the Health Sciences Library/Learning Resources Center (HSL/LRC), which is located in the Bio-Information Center. One of three libraries on campus, this 35,000 square foot facility is available for students, faculty, and staff of the University, the Creighton University Medical Center Hospital staff, and the health sciences community of the Omaha area. The three libraries cooperate closely in programs and collection development. The HSL/LRC is the primary library for the Schools of Medicine, Pharmacy and Health Professions, Dentistry, Nursing, and the Graduate School's Biomedical Sciences program as well as the hospital. The director reports to the Vice President for Health Science, one of two academic vice presidents on campus.

The HSL/LRC brings to Creighton University a gateway to the most modern and innovative learning and research services for the faculty staff, and students of the University. The library is open 105 hours a week. Over 250,000 items of print and non-print materials are available. Access is provided to many bibliographic and full-text databases such as MEDLINE, CINAHL, Micromedex, EBSCOHOST, etc. Access is also provided to over 3,500 electronic health sciences journals and to over 84,000 electronic books. In addition, the Learning Resources Center adds a multimedia dimension to the facility. It provides such resources as licensed web-based software, DVDs, and over 100 anatomical models and simulators. In addition, a state of the art computer lab is equipped with 16 PCs, instructor's station, and projector. There are an additional 30 public access PCs. The library is wireless throughout the building and also provides 174 hard-wired ports for network access. The library maintains a proxy server for the university. Over 500 study seats are available for students, faculty, and staff. There is a teaching classroom and 9 small group learning rooms.

The HSL/LRC is a resource library in the National Network of Libraries of Medicine and houses the Community Outreach Liaison. Library faculty conducts numerous workshops, tutorials, and credit educational courses (required and elective) for the students enrolled in the health sciences schools. The 21 FTE staff of HSL/LRC has much experience working with undergraduate, graduate, and professional students to help them identify and use appropriate resources and search strategies. The library's staff also has expertise in web design, information database selection, and training in the use of the databases. The staff also is experienced in mediated database searching.

**Health Sciences Library
University of Colorado Anschutz Medical Campus
Aurora, Colorado**

The Health Sciences Library at Anschutz Medical Campus is the premier academic health sciences library in the state and region. It is the physical and digital hub of knowledge on campus, coordinating access to information in support of learning, research, clinical care, and service to the community.

Our Mission

The Library serves the University of Colorado Denver's Schools of Medicine, Dental Medicine, the Skaggs School of Pharmacy and Pharmaceutical Sciences, the College of Nursing, the consolidated Graduate School, the emerging Colorado School of Public Health, and works in partnership with the University of Colorado Hospital and The Children's Hospital. The staff of the Library strives to deliver the highest quality services through:

- enhancing access to the knowledge base of the health sciences,
- instructing users in information retrieval and management techniques, and
- acquiring and organizing a specialized collection of electronic and print resources.

Serving Students, Faculty, the Colorado Community and the Region

The Library supports the competency-based curricula of our schools and college, evidence-based patient care as the national standard for clinical practice, and rigorous and accessible research. The Library also supports community service by working with partners in the National Network/Libraries of Medicine (NNLM) program of the National Library of Medicine to improve public access to quality health information, including hosting a Consumer Health Information Liaison who travels the state and provides training in the use of information resources for rural and urban health practitioners and consumer groups.

Colorado's 21st Century Health Sciences Library

The new Library opened in October 2007, and is strategically located on campus, adjacent to the educational quad and at the crossroads of the Anschutz Medical Campus, the city of Aurora Biotech Park, and the Town Center. The Library is the optimal venue for welcoming campus members and the public to the dynamic new Anschutz Medical Campus, and is:

- accessible by the public, who may visit and use library resources such as databases and online journals and consult with librarians;
- a state-of-the-art facility reflecting Colorado's natural environment in its furnishings;
- replete with collaborative workspaces and comfortable quiet study areas;
- outfitted with wireless access points that permit network and Internet connectivity everywhere in the building;
- a focal point for informatics education with hands-on teaching laboratories; and

- a technology hub with two “Information Commons” areas consisting of over 50 computer workstations connected to the campus network and the Internet.

A Unique Asset

Holdings: Faculty, students, and staff have on-campus and remote access to the Library’s digital resources, including databases, online books, and online journals. The Library provides access to over:

- 160 databases
- 32,000 online journals (all subject areas)
- 300 digital books, and
- 185,013 print and non-print book and journal volumes and audio-visual items.

An additional 95,685 volumes are available at the Preservation and Access Service Center for Colorado Academic Libraries (PASCAL) high-density storage facility, also located on the AMC.

Use of Services: The Library provides exceptional-quality customer services including: reference and literature search services; a full complement of instructional courses focusing on searching for and identifying the best evidence; and interlibrary loan and document delivery services.

In 2006, the University of Colorado Regents approved a list of fifteen peers for the consolidated UC Denver. Of those fifteen, data on health sciences library collections is available for fourteen. According to the Association of Academic Health Sciences Libraries (Association of Academic Medical Centers) *31st Annual Statistics 2007-2008*, when compared against our consolidation peers, the Library ranks:

- first for the total number of users served through the library’s educational and outreach services; and
- second for the number of reference questions received.

Information Technology Services: The Library provides access to 50 computer workstations located at two “Information Commons” zones, with three networked printers, one dedicated to student printing. There are two teaching labs, supporting 50 wireless workstations with printing. The Library supports wireless connectivity throughout the building, provides customer support services for wireless device users, provides programming and classes in the use of mobile devices such as PDAs and smart phones, and licenses resources in formats appropriate for mobile devices.

Strategic 2010/2011 Initiatives:

- Library faculty are engaging with leadership in the consolidated Graduate School to assist in the transition to electronic dissertations and theses, with those assets to be made accessible via the Colorado Alliance of Research Libraries’ Alliance Digital Repository.
- The Library has received funding from the UC Denver CTSA grant (Colorado Clinical and Translational Sciences Institute, CCTSI) and is deploying a librarian to develop online and

web 2.0/social media tools in support of bioinformatics learning and teaching. Additional funding in support of CTSA-related activities has been received from the NLM program and will be used to create an online community for information professionals supporting CTSA grants.

- Library faculty are partnering with the broader informatics enterprise on campus and in the region, sponsoring a monthly CCTSI lecture series, and with a faculty member on an NLM-funded informatics grant centered in the School of Medicine's Department of Computational Pharmacology.
- Library faculty are engaging in health information literacy instruction with students enrolled in the City of Aurora's public school system's Health Sciences Academy, under the aegis of the Aurora LIGHTS grant-funded program. Faculty are also working in partnership with librarians in the Aurora Public Library system, lending support by offering instruction in the use of health information systems. The APL system recently closed a significant number of branches due to budget shortfall.

**Archie R. Dykes Library for Health Sciences
University of Kansas Medical Center
Kansas City, Kansas**

The Archie R. Dykes Library for Health Sciences opened in 1983. It contains 63,743 unique print monograph titles, 186,418 print serial volumes, 4,700 non-print volumes, and 25,198 serials titles (450 in print). The library serves the educational and research needs of Medical Center students and faculty KU Hospital health care providers and the public. Membership in a national interlibrary loan program ensures that students and faculty at all Kansas state colleges and universities and health professionals in Kansas have access to this collection, as well as to the collections of other libraries across the nation. Computer searches of more than 100 health-related data bases are available to students, faculty, and Kansas health professionals. The Library is part of the National Network of Libraries of Medicine for the MidContinental Region.

The library includes two classrooms (15 seat and 20 seat) and a 120 seat online testing center facility and 5 seat ADA testing facility. All online secure testing is managed through the library for all schools. Further, the facility is regularly used for large group instruction by librarians. There is ubiquitous wireless access for students, faculty and public including wireless printing. There are 13 study rooms (8 small and 5 large) for use by students. Plans have been presented for enlarging the 15 seat classroom to 33 seat and building a third classroom to seat 18. With the increased number of speciality exams and prep for national exams, the need for additional capacity is apparent.

The library also supports computer application training such as productivity software, computer security (viruses, malware, etc.), EndNote as well as the more traditional “library” resources.

Dykes Library is very involved in engaging public schools and public libraries in our urban community in programs regarding health. During the school year we work with interns in the KU Social Welfare program who engage youth from a nearby middle school in after school activities at Dykes Library – The 39th Street Crew. The public libraries in Kansas City, Kansas are integral to a SEPA program to take genetic information to the community via the public library. There is a Promotores program with El Centro, an agency focusing on the needs and improving the lives of Kansas City, Kansas’s Hispanic residents.

Dykes Library is taking the lead in promoting the research of our faculty and students to the public as well as within the institution. Through the support of the Executive Vice Chancellor/Dean of the School of Medicine, the library is implementing an open source product which profiles faculty and presents published works of that faculty, grey literature in the digital repository and reveals collaborations through authorship and research areas between and among faculty.

Dykes Library personnel have a good working relationship with the Clendening History of Medicine Library & Museum (<http://clendening.kumc.edu/>) also on the campus of KU Medical Center. Clendening actively collects rare books as well as current works in the history medicine, nursing and the allied health professions. Clendening also supports the biomedical ethics and medical humanities curriculum by collecting contemporary secondary works in these areas. Clendening has 21,398 unique monograph titles, 40 currently subscribed to print journal titles, and 27 non-print titles.

The Library has ten professional librarians and 18 unclassified and classified staff. Archie R. Dykes Library is on the World Wide Web at (<http://library.kumc.edu>).

**J. Otto Lottes Health Sciences Library
University of Missouri
Columbia, Missouri**

The J. Otto Lottes Health Sciences Library (MU HSL) was constructed in 1985 to serve the MU Schools of Medicine, Nursing, and Health Professions, as well as to serve the clinical information needs of the University of Missouri Health Care System (UMHC). The system consists of four hospitals and over 40 clinics. The MU HSL has been a Resource Library in the NN/LM Midcontinental Region since the beginning of the RML program in the 1970's.

The MU HSL opens its doors to over 160,000 users per year. Librarians provide tours, orientations, and library instruction to around 1,200 health-related students and faculty each year, and answer over 11,000 questions per year from its service desk. The collection consists of approximately 190,000 volumes which are enhanced by interlibrary loan services. Operating in a primarily electronic service environment, the HSL offers its clients access to over 36,000 journal titles from a broad range of disciplines. The HSL is engaged in the accreditation process for the schools, individual allied health programs, and the School of Medicine residency programs.

As proponents of lifelong learning, the librarians support continuing education efforts of the schools, telehealth, and hospital initiatives ranging from arts in healthcare to clinical effectiveness improvement, and patient education. This past year, the HSL has partnered with the Missouri Humanities Council to offer a free literature in Health Care reading program for a wide spectrum of individuals engaged in providing patient care at UMHC. HSL Librarians engage in information-related projects, including a MedlinePlus project with the Department of Internal Medicine at the Fairview Clinic, an information literacy program for nurses with the School of Nursing, and a project related to evidence-based practice, with the Family and Community Department.

As evidence of its commitment to its state-wide mission, the HSL partnered with the Missouri Area Health Education Centers to develop a state-wide information service for Missouri's health care providers. The MAHEC Digital Library, which got started with NLM funding, now operates with full backing from the MU HSL, and offers reference and interlibrary loan services in addition to access to carefully-selected clinical electronic information resources. The service cannot be free, but the gratis reference services from the MU HSL go a long way to help the MDL meet its service obligations.

In partnership with a number of organizations in the state, the MU HSL worked with a collaborative effort to promote health literacy in our state. The librarians, in partnership with the MAHEC Digital Library staff, designed and built a database of health literacy information resources to support health literacy research and curriculum development.

The MU HSL has developed clinically-focused information services, and currently serves the Departments of Child Health and Internal Medicine. In order to further develop this program, librarians undertook a research study in which they collected information from the clinicians served, in order to evaluate the impact of the library on clinical services. Through a partnership with the NN/LM, the research work has extended to about ten hospitals in the Midcontinental Region. As soon as the studies are completed, the librarians will begin writing up the results for publication in peer-reviewed journals.

As part of its Resource Library role, the MU HSL fully participates in DOCLINE and other activities of the NN/LM. The MU HSL subcontracts with the NN/LM Regional Library staff at the University of Utah, to house a professional librarian who provides outreach trainings to many individuals in the state of Missouri. She reaches physicians, public school nurses, public health departments, federally qualified health center personnel, public librarians, and many others in our state to raise their awareness of access to health information. She works with librarians in the region who wish to participate in our research study, and she has worked tirelessly against the trend of hospital library closure.

The HSL's most recent challenge is to absorb the library of the Missouri Institute of Mental Health. This library, well-known in Missouri for providing services to all mental health agencies in the state, has been closed. The MU HSL is currently in the planning phase of determining how best to meet the mission of the former MIMH Library.

**University of Nebraska Medical Center
McGoogan Library of Medicine
Omaha, Nebraska**

Special, Scholarly, and Artifact Collections

The following collections of scholarly and original materials are available to support regional and national scholarship related to the mission of the National Network of Libraries of Medicine:

Rare Books: The McGoogan Library of Medicine houses approximately 4,438 rare and fine volumes, with a current estimated value exceeding \$3,700,000. These include a medical manuscript by Albertus Magnus from the 1300s; medical incunabula dating from 1453 to 1503, and printed medical works from the 16th through 19th centuries. Bibliographic entries for all titles appear in the library's OPAC. Primary concentrations include general anatomy, obstetrics and gynecology, orthopedics, and military medicine. Works by Newton, Jenner, Darwin, Vesalius, Roesslin, and Hunter are available and include many first editions. One of the few extant copies of Andreas Vesalius' "Cerebrum animalis," also known as the Seventh Plate, is on display. The H. Winnett Orr Collection, on permanent loan from the American College of Surgeons, comprises 2,298 volumes elaborating the development of orthopedics and military medicine but is not restricted to these subjects. Two extensive collections on obstetrics and gynecology are also available – that of Charles and Olga Moon as well as the personal collection of Leon S. McGoogan, M.D., a noted obstetrician-gynecologist who played a key role in the development of the library. These works are housed in two rooms that incorporate state of the art environmental and security protections, are available to scholars by appointment, and are frequently used for teaching purposes.

History of Medicine Publications and Artifacts: This collection includes monographs from 1900 through the mid 20th century, as well as various journals and vertical file materials (clippings, reprints, scrapbooks, reports, and realia), indexed by topic and by individual. The collection also includes equipment, instruments, and objects representing the history and development of the health sciences, especially in Nebraska. Of note are the following artifact collections:

- over 100 moulages (wax anatomical models) made by a medical artist on the staff of the University of Nebraska College of Medicine in the 1930s. The models are based on cases from the University Hospital.
- The Alberts collection of infant feeding devices includes over 150 infant feeders dating from 100-200 B.C. to late twentieth century glass and plastic baby bottles. The collection was assembled by M.E. Alberts, M.D., a 1948 graduate of the University of Nebraska College of Medicine, who practiced pediatrics in Des Moines, IA. The McGoogan Library is currently creating digitized images of the feeders, along with related historical and interpretive material.
- Ten sets of forceps illustrating the development of this important obstetrical instrument over 400 years, from about 1600 to the late 20th century. The collection was assembled by Ralph H. Luikart, M.D. (1889-1982) during his career as a practicing obstetrician and

UNMC faculty member. The Luikart forceps he developed significantly reduced infant cranial injuries during delivery.

Archives of the University of Nebraska Medical Center (UNMC): These include official university records, Board of Regents minutes, personal papers, year books, college bulletins, annual reports, commencement programs, departmental newsletters, masters thesis and doctoral dissertations, nursing research papers, photographs (campus/institutional related, Nebraska doctors, Nebraska hospitals, etc.), monographs, journals and ephemera. The archives currently occupy 3,500 linear feet of shelving and are growing annually.

Nebraska Collection: This collection includes monographs and serials specifically related to the history of medicine in the state, such as the *Nebraska State Medical Journal*, published from 1916-1996.

Art collections:

- The McGoogan Library of Medicine was constructed around a focal piece of art, the mural "Life's Helix" by artist Bill J. Sammon. The three story mural graces the lobby of the library and is an integral part of the library's structure and history. Hammon noted that just as DNA represents the storehouse of man's genetic information, the library represents the storehouse of man's medical knowledge.
- The McGoogan Library possesses and displays the nation's most complete collection of "Impressions in Silver" by Charles W. Guildner, M.D. The majority of the 35 images were gifted by the artist, an alumnus of the UNMC College of Medicine. Guildner's work illustrates Nebraska themes and his images of ranch and farm life build on and extend documentary photographic records begun over a half century earlier by other significant Nebraska artists.
- The library also houses many original paintings, portraits, prints, photographs, and sculpture, some of which are medically related. Native American themes related to healing, the life cycle, and significant events in Native American history are well represented. Most pieces are by regional artists of some note; others are by alumni, students, and/or staff.

Profile of Staff Proficiencies and Skills

The faculty and staff of the McGoogan Library of Medicine are able to offer the following skills and proficiencies in support of the National Network of Libraries of Medicine. Vitae are available on request.

Consumer Health Information Services: The McGoogan Library established one of the nation's first consumer health information services, which has operated continuously since 1985. CHIRS (Consumer Health Information Resource Service) was recognized by NCLIS as a model program in 2006. In addition to providing service directly to customers, the library is expert in planning, evaluating, and creating the multi-type networks it takes to maintain such a service.

Graphic Design and Production: As the old saying goes, a picture is worth a thousand words. Eye-catching graphics are essential for capturing attention in a world in which libraries compete with thousands of other information providers and everyone has become a publisher. The McGoogan Library has particular strengths and graphic design and production and would welcome the chance to put these talents to use in support of the National Network of Libraries of Medicine.

Expert Literature Searching: While the McGoogan Library encourages and supports proficiency in end user searching and use of available Internet resources, at times there is no substitute for an expert literature search by an information professional. McGoogan Library Reference Librarians conduct several thousand searches a year on complex and difficult subjects. Within a half-hour, our librarians can often find information an end user has been unable to locate despite hours of searching.

Education Services: From demonstrations and lectures embedded into UNMC courses to outreach sessions aimed at health professionals and the public, the McGoogan Library is home to a cadre of individuals who teach the effective use of information resources and employ the latest technologies to deliver and support these lessons. All faculty members have instructional expertise but the NN/LM Nebraska Liaison and the McGoogan Education and Reference Departments have particular strengths in user education. The library also welcomes vocational, bachelors, and masters students for structured practicums, delivering well rounded introduction to health science information service.

Management of Special Collections: As described in its profile of special, scholarly, and artifact collections, the McGoogan Library is committed to maintaining and providing special collections for scholarly use. The Head of Special Collections at the McGoogan Library holds degrees in history and was previously employed at the Nebraska State Historical Society. He brings a depth of experience to this area that could also serve as a regional resource.

Facilities Planning for Special Collections: As an institution that houses valuable collections in a variety of media, the McGoogan Library has developed expertise in the design of facilities and space for special collections, particularly print material.

Evidence Based Practice: The McGoogan Library supports evidence based practice initiatives across the academic-clinical enterprise at UNMC and its affiliated hospital. The Nursing Practice Evidence Based Practice Committee reviews its guidelines and order sets on a monthly rotating basis. In support of each review, the library performs an expert literature search in CINAHL, the PubMed and practice guidelines databases and delivers the results to a standards of care analyst. To date the library has conducted over 700 expert searches in support these reviews on topics ranging from chest pain/angina to parent-infant bonding.

To prepare students for a world in which evidence based practice is the norm, the library also integrates evidence based search skills into numerous courses for the Colleges of Medicine, Nursing, and Pharmacy.

Problem-Based Learning and Group Facilitation: Problem based learning (PBL) makes extensive use of evidence based techniques. PBL uses case-based exercises to engage students in learning and requires active and critical information finding on their part. The library partnered with the College of Medicine in the 1980's to develop medical student orientation sessions incorporating many facets of today's problem based learning. As a result, it was well positioned to become an integral part of the PBL curriculum adopted by the College in 1992.

Librarians work in teams with basic scientists and clinicians to introduce students to PBL techniques the first week of class; some librarians continue to facilitate throughout the academic year. All develop effective group facilitation skills that can be applied in many different settings. As students prepare to go out on rotation, the library offers refresher sessions that help them make effective use of resources from a distance and assists them in finding wireless service sites in sparsely developed rural areas.

Scholarly Communication: The library presents substantive classes on copyright several times a year through UNMC's faculty development program and on request by any UNMC or hospital department. The library is the go-to source for answers on copyright questions, maintains a copyright page at its web site (<http://unmc.libguides.com/copyright>), and offers individual copyright consultation as well. It played a key role in the development of a standard UNMC author amendment which was recently adopted by the UNMC Faculty Senate. Use of the amendment is voluntary; it is offered as an effective tool for authors who are uncomfortable negotiating with publishers to retain key rights.

Like other academic health science libraries, the McGoogan Library has been proactive informing its faculties about the NIH Public Access Policy and its requirements. The library worked in collaboration with campus editors, the Compliance Officer, and UNMC Research Administration to develop institutional policy and procedures and provide links to them from multiple web pages. The library also maintains an NIH Toolkit at its homepage (<http://unmc.libguides.com/toolkit>).

Technology, Web Applications, Social Media: The McGoogan Library is a technology leader, having offered the earliest available networked services at UNMC and the first publicly accessible web page. The library masters and applies new technologies as they are introduced such as desktop and mobile web page design and coding, web logs, interactive reference service, and database construction and via Access and Cold Fusion. McGoogan quickly embraced social networking media and currently offers Facebook, Twitter, and mobile messaging applications.

Information Research: McGoogan librarians initiate and participate in research projects as a faculty responsibility and in an effort to identify best practice. They are capable of mentoring and assisting other librarians in the design and conduct of research projects, identifying appropriate methodologies and in some cases, assisting with statistical analysis.

University of Wyoming Libraries
University of Wyoming
Laramie, Wyoming

The University of Wyoming is the state's only provider of baccalaureate and graduate education, research, and outreach services. UW combines major-university benefits and small-school advantages, with more than 180 programs of study, an outstanding faculty, and world-class research facilities all set against the idyllic backdrop of southeastern Wyoming's rugged mountains and high plains. The main campus is located in Laramie, approximately two hours north of Denver. The university also maintains the UW/Casper College Center, nine outreach education centers across Wyoming, and Cooperative Extension Service centers in each of the state's 23 counties and on the Wind River Indian Reservation.

The University Libraries include the William Robertson Coe Library, housing reference, humanities, social science, biological science, engineering, psychology, medicine, and education materials and Emmett Chisum Special Collections; the Library Annex, located in the basement of the Biological Science Building, housing bound journals and government documents; the Brinkerhoff Earth Resources Information Center, located in the S.H. Knight Geology Building; the Learning Resource Center, located in the Education Building; the Rocky Mountain Herbarium Research Collection, located in the Aven Nelson Building; and the National Park Service Research Center collection in Jackson, Wyoming. The UW/Casper College Center is served by the Casper College Goodstein Foundation Library.

The libraries' cataloged collections total nearly 1.5 million volumes, with over 35,000 volumes added annually. 14,000 active periodical and serial titles are supplemented with access to over 57,000 unique electronic journals. In addition, the libraries provide extensive microforms collections and a library of over 169,000 maps, and serve as a depository for United States government publications.

Through participation in the Wyoming Libraries Database (WYLD), Colorado Alliance of Research Libraries ("Alliance"), the Bibliographical Center for Research in Denver, the National Network of Libraries of Medicine, on-line information retrieval systems, and the interlibrary loan network, access is provided to other library resources from throughout the nation and the world.

The mission of the University of Wyoming Libraries is to provide information resources and services to meet the instructional, research, and outreach needs of UW students, faculty, and staff, regardless of location. The Libraries are also open and available within the constraints of available resources to the citizens of Wyoming. The University of Wyoming Libraries are physical as well as virtual places focused on learning in support of the educational, research, and outreach needs of UW students, faculty, and staff, both current and future. To contribute to learning, the Libraries shall:

- Create environments that foster reading, inquiry, critical thinking, and collaboration.
- Collect and organize print, media, and online resources.
- Create, store, and disseminate new information.
- Integrate information literacy skills in the broader educational mission of the University.
- Assist in locating specific information.
- House collections in environments conducive to their use and preservation.
- Collect and provide access to University of Wyoming and Wyoming state publications.
- Establish and maintain cooperative agreements for interlibrary loan, shared purchasing, and services to our constituency.
- Employ current information technology for access and delivery of resources and services.

The UW Libraries are leaders in the provision of distance library services. An active partnership with the Outreach School enables the UW Libraries to offer for-credit, online courses that allow distance and transfer students to complete the information literacy portion of their general education requirements. The Libraries employ a distance services librarian dedicated to working with distance students and faculty to assure equal access to information resources, regardless of physical location.

The UW Libraries have created the Request It Service, which allow UW affiliates to submit requests for needed resources, without regard to location. We have expanded document delivery services while simultaneously simplifying the request process. A single request form provides scanning and delivery services of locally owned articles to user desktops. Locally held print materials are delivered to the campus location of choice. Requests not filled locally are automatically routed into the interlibrary loan system. UW users appreciate the convenience of submitting requests for needed material on a single form. Extensive in-house programming and a shift of staffing resources was required to facilitate the Request It service, which is highly valued by the campus community as a service that facilitates academic work in a meaningful way.

Digitization of print materials and growth of our institutional repository are two of our most important strategic initiatives going forward. Three key partnerships for the UW Libraries are:

- Colorado Alliance of Research Libraries/University of Denver for our institutional repository, the Alliance ADR.
- IMLS Grant/Digital Herbaria Development for the Rocky Mountain Herbarium. The vision of this grant is to create an interstate herbarium collaborative by aggregating and integrating digital content on a large scale, provide access to regional primary scientific data, and serve a national and international audience through the use of standards-based technology.
- Wyoming State Historical Society. The UW Libraries host the web site for the Wyoming State Historical Society. The journal, *Annals of Wyoming*, is edited and published here at UW. Digitizing Annals of Wyoming is a high priority.

Bernard Becker Medical Library
Washington University School of Medical
St. Louis, Missouri

Founded in 1911, the Bernard Becker Medical Library is one of the oldest and most comprehensive medical libraries west of the Mississippi. The Bernard Becker Medical Library serves as an information services hub for the Medical Center and extends its services and resources to the global health science community.

The facility, completed in 1989, integrates biomedical information resources and information technology. The eight-level, 114,000-square-foot structure has capacity for more than 300,000 volumes. The biomedical resource collection includes 33 databases, over 4,600 full-text e-journals, 3,235 e-books and numerous selected web sites. The library also holds 4,500 print journals, 114,000 print books, and 1,500 audiovisual items.

The library's Translational Research Support Division addresses the broader goals of translational biomedicine by providing information resources and expertise that contribute to basic research, health information outreach to consumers and the community, and the publication and dissemination of scientific information. The Division includes two bioinformaticists who provide instruction, consultation services, and support for specialized software and databases for the bioinformatics, genomic, and basic science research community. The Division's public health librarian develops programs to foster consumer health literacy, seeking opportunities to partner with the School of Medicine, Medical Center groups, and local organizations to improve health literacy. The Division also includes a Scholarly Communications Specialist to increase awareness among faculty of the issues and options for disseminating and storing scientific information as the digital age redefines standard publishing models.

The Health Information Resources Division provides a broad range of biomedical information resources and training services covering clinical point of care, evidence-based medicine, and information management. Through this division the library focuses on integrating information management into the curricula of the various educational programs and promoting the effective use of information resources in the school's clinical mission. Librarians in this division focus on each of the school's divisions, departments or programs to meet their specific information needs. Circulation services, interlibrary lending, and document delivery also fall within the scope of services managed by the Health Information Resources Division.

Special Collections (Archives and Rare Books) is a unique and important unit of the library's resources. The Archives preserve and make accessible 811 archival collections, composed of institutional records, manuscripts, visual items and oral histories that document the Medical Center's institutional history, ongoing progress and many significant contributions of its faculty. Among the manuscript collections are papers of William Beaumont, Joseph Erlanger, E.V. Cowdry, Evarts Graham, and Carl Cori. There are nine distinct rare book collections containing over 26,000 volumes available for scholarly use. These acclaimed collections include the Bernard Becker Collection in Ophthalmology, the CID-Max Goldstein Collection in Speech and Hearing, the H. Richard Tyler Collection in Neurology, and the Paracelsus Collection of the St. Louis Medical Society.

Appendix B – Memoranda of Understanding

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

University of Kansas Medical Center, Dykes Library agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML;
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. Institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting;
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system;
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Kansas;
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach;
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center instructors.
7. Share with the region, information and experiences that address the changing roles for biomedical librarians.

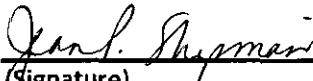
InterLibrary Loan and Document Delivery

1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms;
2. Support document delivery to public libraries in Kansas;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

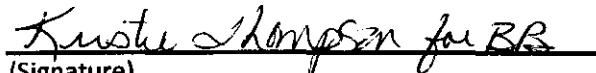
University of Utah
Spencer S. Eccles Health Sciences Library



(Signature)

Jean P. Shipman
Director

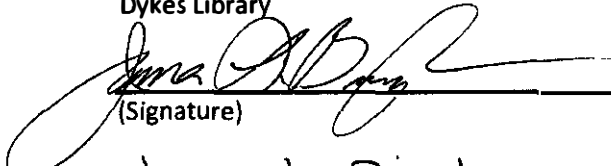
Office of Sponsored Projects



(Signature)

Brent Brown
Director

University of Kansas Medical Center
Dykes Library



(Signature)

James L. Bingham
(Name and Title of Signer) ✓
Assoc Vice Chancellor for
Information Resources

Office of Sponsored Projects

(Signature)

(Name and Title of Signer)

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

Creighton University Health Sciences Library agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML;
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. Institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting;
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system;
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Nebraska;
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach;
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center instructors.
7. Share with the region, information and experiences that address the changing roles for biomedical librarians.

InterLibrary Loan and Document Delivery

1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms;
2. Support document delivery to public libraries in Nebraska;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

University of Utah
Spencer S. Eccles Health Sciences Library

Jean P. Shipman 5/3/10
(Signature)

Jean P. Shipman
Director

Creighton University
Health Sciences Library

A. James Bothmer 4/30/2010
(Signature)

A. James Bothmer
Assistant Vice President for Health Sciences
Director, Health Sciences Library

(Name and Title of Signer)

Office of Sponsored Projects

Kristie Thompson for BB
(Signature)

Brent Brown
Director

Office of Sponsored Projects

(Signature)

(Name and Title of Signer)

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

University of Wyoming Libraries agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML;
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. Institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting;
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system;
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Wyoming;
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach;
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center instructors.
7. Share with the region, information and experiences that address the changing roles for biomedical librarians.

InterLibrary Loan and Document Delivery

1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms;
2. Support document delivery to public libraries in Wyoming;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

University of Utah
Spencer S. Eccles Health Sciences Library

Jean P. Shipman 5/10/10
(Signature)

Jean P. Shipman
Director

University of Wyoming Libraries

Mary M. Farrell
(Signature)

Mary M. Farrell, Dean of Libraries
(Name and Title of Signer)

Office of Sponsored Projects

Kristie Thompson for BB
(Signature)

Brent Brown
Director

Office of Sponsored Projects

(Signature)

(Name and Title of Signer)

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

University of Nebraska Medical Center, McGoogan Library of Medicine agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML;
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. Institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting;
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system;
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Nebraska;
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach;
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center instructors.
7. Share with the region, information and experiences that address the changing roles for biomedical librarians.

InterLibrary Loan and Document Delivery

1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms;
2. Support document delivery to public libraries in Nebraska;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

University of Utah
Spencer S. Eccles Health Sciences Library

Office of Sponsored Projects

Jean P. Shipman 5/10/10
(Signature)

Kristie Thompson for BB
(Signature)

Jean P. Shipman
Director

Brent Brown
Director

University of Nebraska Medical Center
McGoggan Library of Medicine

Office of Sponsored Projects

Nancy N. Woelfl
(Signature)

(Signature)

Nancy Woelfl, Ph.D., Library Director
(Name and Title of Signer)

(Name and Title of Signer)

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

University of Missouri – Columbia, J. Otto Lottes Health Sciences Library agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML;
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. Institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting;
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system;
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Missouri;
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach;
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center Instructors.
7. Share with the region, information and experiences that address the changing roles for biomedical librarians.

Interlibrary Loan and Document Delivery

1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via Interlibrary lending or other legal resource sharing mechanisms;
2. Support document delivery to public libraries in Missouri;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

University of Utah
Spencer S. Eccles Health Sciences Library

Office of Sponsored Projects

Jean P. Shipman 5/10/10
(Signature)

Kristie Thompson for BB
(Signature)

Jean P. Shipman
Director

Brent Brown
Director

University of Missouri - Columbia
J. Otto Lotties Health Sciences Library

Office of Sponsored Projects

Deborah H. Ward
(Signature)

Leeann Davenport
(Signature)

Deborah H. Ward
(Name and Title of Signer)
Director, Health
Sciences Libraries

Leeann Davenport
(Name and Title of Signer)
Submissions Specialist, OSPA

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

Washington University School of Medicine, Becker Library agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML.
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting.
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system.
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Missouri.
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach.
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center instructors
7. Share with the region, information and experiences that address the changing roles for biomedical librarians

InterLibrary Loan and Document Delivery

1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms.
2. Support document delivery to public libraries in Missouri;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

University of Utah
Spencer S. Eccles Health Sciences Library

Jean P. Shipman 5/10/10
(Signature)

Jean P. Shipman
Director

Office of Sponsored Projects

Kristie Thompson for BB
(Signature)

Brent Brown
Director

Washington University School of Medicine
Becker Library

Paul Schoening
(Signature)

Paul Schoening, Associate Dean and Director
(Name and Title of Signer)

Office of Sponsored Projects

(Signature)

(Name and Title of Signer)

**NATIONAL NETWORK OF LIBRARIES OF MEDICINE
MIDCONTINENTAL REGION
RFP NN/LM 2011-2016**

Memorandum of Understanding

Resource Libraries work with the Regional Medical Library (RML) in furthering the goals of the National Network of Libraries of Medicine (NN/LM). They are selected on the basis of the quality and uniqueness of their collections and expertise in meeting the health information needs of the region.

University of Colorado Denver Health Sciences Library agrees to serve as a Resource Library in the MidContinental Region of the National Network of Libraries of Medicine through the term of the University of Utah NN/LM contract with the National Library of Medicine. The current contract period is May 1, 2011 - April 30, 2016. The Resource Library agrees to:

Management of Network Services

1. Coordinate and manage special project for the region and/or state responsibilities of the RML;
2. Provide technology staff and infrastructure to support hardware and software necessary for liaison activities, including, but not limited to, connectivity through Skype, Adobe Connect, and Sharepoint;
3. Participate in regularly scheduled meetings of the Resource Library Directors;
4. Director serves a rotating term on the Regional Advisory Board and participates in appointed workgroup;
5. Institution's liaison assesses their experience carrying out the work of the RML within the Resource Library setting;
6. Provide information about library staff outreach activities for inclusion in the Outreach Activity Report Form (OARF) system;
7. Submit reports and invoices in a timely manner.

Information Services

1. Support reference services for public libraries in Colorado;
2. Develop a service continuity plan;
3. Include NLM resources as part of Resource Library outreach;
4. Participate in the implementation of:
 - a. outreach programs to improve health professional access to health information
 - b. outreach programs to improve the public's access to health information
5. Serve as a health information resource:
 - c. for unaffiliated health professionals
 - d. for the public health department
 - e. for the public
6. Provide the facility and host at least one training visit by the National Library of Medicine Training Center instructors.
7. Share with the region, information and experiences that address the changing roles for biomedical librarians.

InterLibrary Loan and Document Delivery


1. Provide health professionals and other Network libraries with access to journal articles, books and audiovisuals in all formats via interlibrary lending or other legal resource sharing mechanisms;
2. Support document delivery to public libraries in Colorado;
3. Provide document delivery service to unaffiliated health professionals and public users via end-user document requesting service, e.g. Loansome Doc or other NLM supported product;
4. Support DOCLINE libraries in the Region, participate fully in the DOCLINE system;
5. Provide interlibrary loan and document delivery service in accordance with Network policies and procedures; filling requests for other NN/LM libraries on a cost recovery basis;
6. Whenever possible sign license agreements that permit document delivery from electronic resources;
7. Maintain and review institution's holdings data in DOCLINE at least annually. Upgrade all Level 2 holdings created by NLM's Title Change program to Level 3 holdings within 60 days. If batch update is used, rectify reported errors within DOCLINE within 30 days of the batch update;
8. Review and maintain institution record for accuracy and completeness at least annually;
9. Adhere to Network performance standards for fill rate and throughput for interlibrary loan service;
10. Participate in the Electronic Fund Transfer System (EFTS);
11. Participate selectively in a regional program for the retention and preservation of print serials and monographs in multiple U.S. locations.

This agreement may be amended by written mutual consent, or terminated anytime by the Resource Library or the National Network of Libraries of Medicine, MidContinental Region by giving 60 days written notice.

FOR

University of Utah
Spencer S. Eccles Health Sciences Library

Office of Sponsored Projects



(Signature)



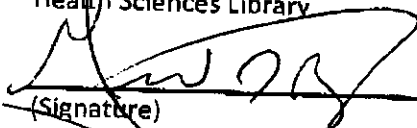
(Signature)

Jean P. Shipman
Director

Brent Brown
Director

University of Colorado Denver
Health Sciences Library

Office of Sponsored Projects



(Signature)

(Signature)



(Name and Title of Signer)

(Name and Title of Signer)

Appendix C – MCR Educational Offerings

The NN/LM MCR expects, in the 2011-2016 contract to present a robust schedule of classes to include a variety of topics as well as audiences.

Webinars - presented on Adobe Connect

On a monthly basis, at least two webinars will be presented to include *Breezing Along with the RML*, and *Spotlight! on National Library of Medicine Resources*

- **Breezing Along with the RML** - Two staff members are featured at each hour-long meeting to present an update on their respective project areas or to introduce a speaker from outside the RML to address a topic in their respective project areas.
- **Spotlight! on National Library of Medicine Resources** - This hour long webinar is usually presented by one coordinator on a particular NLM database, or group of resources around a particular topic area , e.g. mental health resources. The webinar includes interactive activity and exercises, thereby allowing attendees to obtain one hour of MLA CE credit for the event. These webinars are archived after the live presentation and if viewed within three weeks of the original event, attendees may still obtain credit.
- **DOCLINE Series of Online Classes: Beginning DOCLINE; DOCLINE Serial Holdings; DOCLINE Routing Tables; DOCLINE Borrow and Lend; EFTS and DOCLINE: Everything you want to know.** Each class can earn the participant 1 MLA CE credit.
- Each coordinator also maintains a space on the NIH Adobe Connect system in order to present webinar classes. In the past, and projected future, these will include
 - **Emergency Preparedness** - the ten-step program presented in five sessions
 - **Technology: Social Bookmarking, Using Twitter for Information Discovery, Introduction to RSS, and Personalized Web sites with iGoogle.**

Distance Education classes - presented on Adobe Connect, Moodle or in a blended approach of Adobe Connect with Moodle.

These classes take place over an extended period of time, usually several weeks, and will include topics such as:

- **Thinking like an MBA** - an advocacy class focused on library management, specifically on project management.
- **“13 Things” self-discovery class:** a 10-week asynchronous class about Web 2.0 technologies. This will also be presented in two shorter classes: "6 Things" Part 1 and 2.
- **Podcasting for Advocacy**, a 4-hour MLA CE credit class using a blended approach (synchronous sessions with Adobe Connect and asynchronous exercises with Moodle).
- **Introduction to Screencasting**, a 4-hour MLA CE credit class using a blended approach (synchronous sessions with Adobe Connect and asynchronous exercises with Moodle).
- **Introduction to Blogs and Wikis** a 4-hour MLA CE credit class taught using Adobe Connect.

- **Licensing Class - Librarians are from Venus, Vendors are from Mars: Strategies for developing respectful vendor relationships and strong contracts. A 3-hour class taught over 2 sessions using Adobe Connect.**

In-person classes

- **Presentations at state conferences: Each state coordinator is expected to exhibit at four state conferences to include a minority conference, a public health conference, a physician assistant conference and a state library association conference. For each of these, the state coordinator is expected to submit a proposal to be on the program. Our goal is to present at 50% of these major state conferences, which would account for 12 in-person opportunities. Topics presented often address a current issue/ or resources which may include e-science, electronic health records, health information literacy, consumer health, public health resources, emergency preparedness and advocacy topics.**
- **Native American Health Class - SCR and MCR are developing a class to include culturally appropriate resources, as well as a section that focuses on cultural competence when working with American Indian communities. The class will be developed in year 1 of the contract, promoted in both regions and will be added to the NTCC Clearinghouse.**
- **Getting Started with Information Outreach to Minority Communities (<http://nnlm.gov/training/minorities/>). This interactive class provides a background in cultural competence and outreach skills when working with underserved and minority populations in a community. This class is maintained by the Health Information Literacy Coordinator, and is promoted in the region. It requires a minimum of 12 students due to its interactive nature, and is usually offered at MLA or at MLA Chapter meetings due to this class size requirement.**
- **Measuring your Impact - an advocacy class focused on statistical gathering of library data, developed and maintained by the Advocacy Coordinator and the Assessment and Evaluation Coordinator.**
- **Behind Closed Doors: Politics in the Library - an advocacy class developed and maintained by the Education Coordinator and the Advocacy Coordinator. This class will be presented at MLA 2011.**

Consumer Health Classes

- **¿No Comprende? Online Health Resources for English Speakers Serving Spanish Speaking Communities (<http://nnlm.gov/training/nocomprende/>). This 4-hour hands-on class covers resources for learning basic medical vocabulary in Spanish. Participants learn to evaluate and identify health web sites that can be promoted to patrons. This class is advertised through public library listservs, REFORMA chapters and listservs. It will be offered 2-3 times during the contract, depending on requests from librarians in the region.**

- **ABCs of DNA: Unraveling the Mystery of Genetics Information for Consumers** – a consumer health class exploring basic concepts such as genes and chromosomes, genetic disorders, genetic testing, genetic counseling, and the Human Genome Project.
- **An In-depth Look at MedlinePlus** – a consumer health class to develop techniques that unlock the power of MedlinePlus and discover new content areas that will provide answers to difficult health reference questions.
- **Beyond an Apple a Day: Providing Consumer Health Information at Your Library** – this class covers health information literacy, planning consumer health information services, conducting a health information reference interview, resources for consumer health online, collection development, collaboration, community partnerships, outreach and marketing.
- **From Snake Oil to Penicillin: Evaluating consumer health information on the Internet** - this interactive course introduces participants to issues surrounding the quality of health information resources on the Internet.
- **Healthy Aging at Your Library** - this workshop is designed to help librarians assist their older adult patrons find health information. It offers techniques for teaching older adults to use computers and to find health information on the Internet.
- **Prescription for Success: Consumer Health on the Web** – this consumer health class covers the information-seeking behaviors of consumers, the basics of MedlinePlus.gov, DURLINE, ClinicalTrials.gov and other reliable web sites.
- **Will Duct Tape Cure My Warts? Examining Complementary and Alternative Medicine (CAM)** – this session explores the history of CAM and its impact on medical practices. Participants learn how CAM is used, how to avoid bad science and how to look up evidence of the effectiveness of CAM therapies.

New workshops or classes for the next contract will be developed as new issues and topics become apparent. In order to evaluate impact, we will release an annual questionnaire to ask our members about their use of what they have learned.