University of Tennessee

Assessment of Rural Library Professionals' Role in Community Engagement in the Southern and Central Appalachian Region: Mobilization from Change Agents to Community Anchors (CA2CA@SCA-RL)

ABSTRACT

"Assessment of Rural Library Professionals' Role in Community Engagement in the Southern and Central Appalachian Region: Mobilization from Change Agents to Community Anchors" (CA2CA@SCA-RL) at the University of Tennessee's (UT) School of Information Sciences (SIS), led by Dr. Bharat Mehra, PI, and Dr. Vandana Singh, co-PI, is a one-year planning proposal (Continuing Education Project Type) that meets the requirements specified in the IMLS' Laura Bush 21st Century Librarian– FY 2017 Guidelines (Community Anchors Project Category). The project will begin on July 1, 2017 and end on June 30, 2018. Project personnel will partner with state, county, university, and other types of libraries in the Southern and Central Appalachian (SCA) region to research community engagement efforts and create a strategic action plan for rural libraries to further community-centered activities and processes. Based on quantitative and qualitative feedback collected from rural library staff about their perspectives and experiences in community engagement processes, project personnel will develop a *Community Engagement Framework & Strategic Action Plan* in collaboration with an advisory board of library professionals who will provide feedback in project planning, design, and implementation. Participating partners represented in the advisory board include: 1) Blount County Public Library, Maryville, Tennessee; 2) Clinch River Regional Library, Clinton, Tennessee; 3) Library of Virginia, Richmond, Virginia; 4) Sevier County Public Library System, Sevierville, Tennessee; and 5) Wiggins Memorial Library, Buies Creek, North Carolina.

CA2CA@SCA-RL will serve as a pilot experience and assessment test-bed to expand using similar strategies for rural environments nationwide based on availability of additional funding in the future. The SCA region is an ideal location to conduct this preliminary research on community engagement needs because the Appalachian region as a whole has traditionally faced challenging economic, social, and cultural conditions that have adversely affected the population living in these areas. Very little research has focused on how the library can play a central role in community engagement and building sustainable economic viability of communities in this region. Proposal activities build on insights developed during previous IMLS grants to UT-SIS that involved 1) training rural library paraprofessionals in the SCA region to become change agents while completing an online master's degree with a specially-tailored curriculum focusing on information technology and rural management and 2) exploring the role played by rural public libraries in small business economic development and revitalization in Tennessee. This grant will assess and analyze in a bigger conceptual and geographical context SCA rural libraries' community engagement in various spheres of activities (e.g., agriculture support, diversity, education, environment, health, law and justice, manufacturing, information technology, youth and other groups), including the economy.

This planning grant will help the research team continue to support rural Appalachian librarians and others as they extend their roles to make a difference in the economic, social, and cultural fabric of the region in various community-centered domains. By focusing on the case environment of the SCA region, the research team will examine how to develop valuable resources and share best practices for a systematic and strategic approach to reach out to communities and mobilize rural librarians as community anchors. The overall project includes the following phases: *Phase 1:* Collect quantitative and qualitative feedback from rural librarians in the SCA region about their perspectives and experiences in community engagement and what past/current role rural libraries have played in these community-centered processes; and *Phase 2:* Develop a *Community Engagement Framework & Strategic Action Plan* for rural libraries in its conceptualization/operationalization based on results of the research above and feedback collected during a CA2CA@SCA-RL summit with at least 20 rural librarians/key SCA partners.

Narrative

"Assessment of Rural Library Professionals' Role in Community Engagement in the Southern and Central Appalachian Region: Mobilization from Change Agents to Community Anchors" (CA2CA@SCA-RL) at the University of Tennessee's (UT) School of Information Sciences (SIS), led by Dr. Bharat Mehra, PI, and Dr. Vandana Singh, co-PI, is a one-year planning proposal (Continuing Education Project Type) that meets the requirements specified in the IMLS' Laura Bush 21st Century Librarian– FY 2017 Guidelines (Community Anchors Project Category). The project goal is to research community engagement efforts using quantitative and qualitative assessment datasets collected from rural library staff and create a strategic action plan for rural[1] libraries to further community-centered activities and processes in the ten states of the Southern and Central Appalachian[2] (SCA) region. Proposal activities build on insights developed during previous grants awarded to UT-SIS, which include: 1) two IMLS grants[3] that involved training rural library paraprofessionals in the SCA region to become change agents while completing an online master's degree with a specially-tailored curriculum focusing on information technology and rural management (Mehra et al., 2014); and 2) a recent IMLS-funded research planning grant[4] that explored the role played by rural public libraries in small business economic development and revitalization in Tennessee (Mehra, Bishop & Partee II, 2017). This grant builds on those efforts to assess and analyze in a bigger conceptual and geographical context SCA rural libraries' community engagement in various spheres of activities (e.g., agriculture support, diversity, education, environment, health, law and justice, manufacturing, information technology, youth and other groups), including the economy.

This project, which will last from July 1, 2017 through June 30, 2018, will serve as a pilot experience and assessment test-bed to expand using similar strategies for rural environments nationwide based on availability of additional funding in the future. The overall project includes the following phases:

Phase 1: Collect quantitative and qualitative feedback from rural librarians in the SCA region about their perspectives and experiences in community engagement and what past/current role rural libraries have played in these community-centered processes;

Phase 2: Develop a *Community Engagement Framework & Strategic Action Plan* for rural libraries in its conceptualization/operationalization based on results of the research above and feedback collected during a CA2CA@SCA-RL summit with at least 20 rural librarians/key SCA partners.

1. <u>STATEMENT OF NEED</u>

The Appalachian region has traditionally faced challenging economic, social, and cultural conditions that have adversely affected the population living in these areas (Appalachian Regional Commission, 2013; Bishop, Mehra, and Partee II, 2016; Eller, 2008; Kotch, 2005; Mehra et al., 2012; Scruggs, 2010; Skinner and Slifkin, 2007). For example, according to the Appalachian Regional Commission's (ARC) (2017) study entitled

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[1] The U. S. Census Bureau defines "rural" as areas with fewer than 2,500 people and open territory (Economic Research Service, 2007). *The Encyclopedia of Rural America* defines the related concept of "nonmetropolitan" counties to include the spread of housing developments outside the boundaries of metro areas that have no cities with as many as 50,000 residents (Rathge, 1997), in addition to being non-urbanized (OMB, 1998). The U. S. Census Bureau (2010) considers rural areas anything not deemed an Urban Area (which is defined as having a population density of at least 1,000 people per square mile and surrounding census blocks with an overall density of at least 500 people per square mile). The word "rural" in this proposal is used to encompass all these meanings.

[2] The Appalachian Regional Commission (ARC), identifies *Central Appalachia* to include: West Virginia's nine southernmost counties, eastern Kentucky, Virginia's southwestern tip, and the northwestern portion of Tennessee's Appalachian area, while *southern Appalachia* includes: most of Appalachian Virginia and Tennessee as well as the western Carolinas and the northern parts of Georgia, Alabama, and Mississippi. This proposal focuses on roughly the SCA region in the United States.

[3] http://scholar.cci.utk.edu/itrl/ and http://scholar.cci.utk.edu/itrl2/

[4] http://www.sis.utk.edu/previous-research-programs

"County Economic Status and Distressed Area in Appalachia, FY 2017" of the 420 Appalachian counties, 84 counties are economically distressed, and another 114 considered economically at-risk. (See Figure 1.)
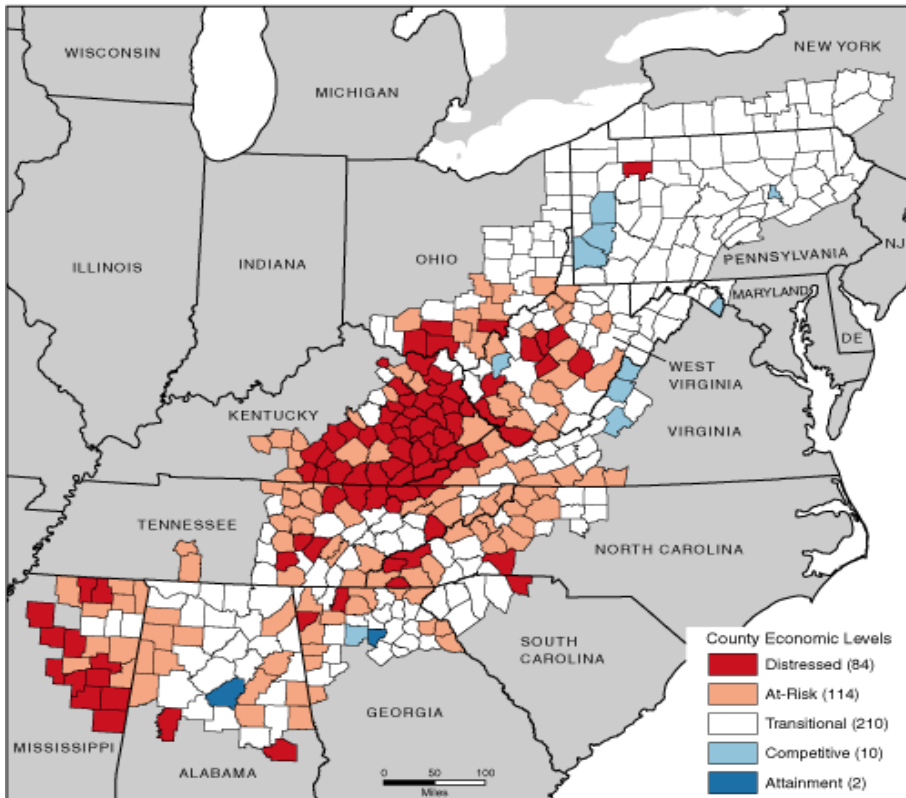
Created by the Appalachian Regional Commission, March 2016
Data Sources:
Unemployment data: U.S. Bureau of Labor Statistics, LAUS, 2012–2014
Income data: U.S. Bureau of Economic Analysis, REIS, 2014
Poverty data: U.S. Census Bureau, American Community Survey, 2010–2014

Effective October 1, 2016
through September 30, 2017

Figure 1. County Economic Status in Appalachia, FY 2017

Rural residents in the Appalachian region additionally face limited financial opportunities, extreme information poverty and unemployment, low levels of information literacy and educational attainment (Mehra, Bishop, & Partee II, 2016; Spatig et al., 2009), a lack of access to adequate economic resources and information technology (Mehra, Singh, and Parris, 2010), and other unique debilitating environmental circumstances (Bardwell et al., 2009; Black, Mather, and Sanders, 2007; Herzenberg, Price, and Wial, 2005; Kusmin, 2008; Lichter and Campbell, 2005; Mehra, Black, Singh, and Nolt, 2011a; Schwartz, 2004). The region's labor force participation is low, at 59.5 percent compared with 64.2 percent nationally (ARC 2015). Forty-two percent of residents in the Appalachian region are living in rural areas, compared with 20 percent of the national population (ARC, 2015). Further, according to the *U.S. Census Bureau, 2007-2011 American Community Survey*, two-thirds of Appalachian counties had populations of fewer than 50,000 people, and 125 counties had fewer than 20,000 residents. According to the Institute of Museum and Library Services (IMLS) Public Library Data Files[5], 352 of the 420 Appalachian counties are considered rural.

Rural public libraries, which are surprisingly understudied compared with public libraries as a whole (Real, Bertot & Jaeger, 2014), have a strong potential role to play in both the community engagement and sustainable economic viability of the Appalachian region (Ezzell, Lambert, and Ogle, 2012; Mehra, Black, and Lee, 2010). The Fels Institute of Government (Diamond, 2010) reported in a national study that the library created more than $30 million worth of economic value to the city in fiscal year 2010. It is unsurprising that a large city public library would have such influence, and urban conditions are very different than in rural areas. However, the results suggest an extremely valuable direction for public libraries, especially in rural Appalachian counties, to position themselves as leaders in efforts to improve their communities economically and socially. Moreover, if Appalachian public libraries can help their communities develop economic and other community assets to extend themselves (ARC, 2004; Mehra, Black, Singh, and Nolt, 2011a) they can play a significant leadership role in the planning and implementation efforts (Mehra et al., 2010) to achieve the goals and objectives identified in the ARC's Strategic Plan 2016-2020 to foster community engagement, economic revitalization, and enhance workforce skills through training and education. Libraries can be of particular use is helping to

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[5] https://harvester.census.gov/imls/data/pls/index.asp

bridge the "Digital Skills Divide" (Burning Glass Technologies, 2015) that exists nationally and is more pronounced in the Appalachian region (ARC, 2015).

Important findings of a UT-SIS study by the P.I. (Mehra, 2012), which documented the perspectives of Appalachian rural librarians regarding the information seeking practices and use of high-speed broadband by small businesses and community non-profits in the region, included the need for: (1) An expanded potential role of Appalachian rural libraries as intermediaries to facilitate meeting the needs of small businesses when 48 percent of current users need help from others with new information and communication technologies such as broadband and its applications and devices (Horrigan, 2008; Mehra, Black, Singh, and Nolt, 2011b); (2) Development of appropriate strategies and tools to create stronger partnerships and assist small businesses in creating better management, awareness, and education during difficult times; and (3) Competitive efforts in securing federal, state, and local resources for services to small businesses and community nonprofits that also includes going beyond access (e.g., training, education, information literacy, specific resources). An in-depth literature review regarding research work with rural libraries of the SCA region shows that UT's research team, are among the leading and most-cited researchers in this area.

This planning grant will help the research team continue to support rural Appalachian librarians and others as they extend their roles to make a difference in the economic, social, and cultural fabric of the region in various community-centered domains. By focusing on the case environment of the SCA region, the research team will examine how to develop valuable resources and share best practices for a systematic and strategic approach to reach out to communities and mobilize rural librarians as community anchors.

Community Engagement with Library Stakeholders in the SCA Region

Community engagement, which encompasses both community building and community development, can be defined as "the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people" (CDC, 1997, p. 9). Community building, a subset of community engagement, is a process that emphasizes communities working together to identify and solve problems, and involves the cultivation of valuable relationships and sustained stakeholder engagement (Saegert, 2004). Similarly, community development, as defined by the United Nations, is "a process where community members come together to take collective action and generate solutions to common problems." As noted in the Laura Bush 21st Century Librarian Program FY17 solicitation, library professionals can become community anchors in these processes by facilitating lifelong learning, enhancing civic and cultural engagement, and supporting economic vitality of their communities. In past projects, the principal investigators have helped to create community "change agents" through distance education programs for paraprofessionals in rural libraries. The framework and strategic plan developed as a result of this project will help these change agents, and others who are acting in the same capacity, to advance their roles and become anchors of engagement and development in their communities. The process of building this community engagement capacity can be seen as a continuum of different levels of involvement, with increasing levels of involvement occurring as long-term partnerships are formed between researchers and community stakeholders to address factors of social and economic concern. CA2CA@SCA-RL involves each stage of this continuum, with the final result being sustainable improved outcomes for the community. The presence of these community anchors will have a positive impact on the respective rural communities and its residents. From the perspective of the library staff, the community development initiative will empower them and enhance their skills as they participate as integral stakeholders in this entire process. Their growth into their new role of Community Anchor will bring positive impacts to both their personal professional growth and the wider community. Figure 2 selectively diagrams the process of how CA2CA@SCA-RL will further community engagement through the framework and strategic plan.

Information science professionals in particular are uniquely positioned to play a key role in outlining and encouraging the community engagement efforts of rural public (and other) librarians (Mehra and Singh, 2014; Mehra, Bishop & Partee II, 2016). According to the Higher Education Network for Community Engagement (2007): "Increasingly, higher education institutions are intentionally connecting academic work to public purposes through extensive partnerships that involve faculty and students in active collaboration with communities. This idea of 'community engagement' is renewing the civic mission of higher education and transforming academic culture in ways that are both exciting and challenging." As part of the planning grant activities, project personnel will develop additional partnerships with colleagues from the UT extension program to further strengthen their panel of community engagement expertise, the first step towards this is the involvement of these colleagues in the Advisory Board for CA2CA@SCA-RL.

Figure 2. CA2CA@SCA-RL conceptual diagram of community engagement.

The following aspects of CA2CA@SCA-RL are significant in enabling researchers and rural public libraries to play a leading role in community engagement efforts in the SCA region (Mehra, Bishop, and Partee II, 2016):

Practical Concern: CA2CA@SCA-RL develops a practical solution, through the distribution of its *Community Engagement Framework & Strategic Action Plan,* to address the slow cultural and economic growth and revitalization of the SCA region.

Tangible Product: An ongoing gap analysis based on feedback from library stakeholders in the target region will provide a blueprint for changes in direction for library services, and offers a ground-zero perspective that can ultimately benefit local, regional, and national communities in economic crises.

Local Partnerships and Collaborations: CA2CA@SCA-RL has an advisory board of 10-15 experienced and dedicated library professionals in the SCA region, and will devote part of its activities to exploring partnerships with additional collaborators. By including the advisory board and community members in the development of the *Community Engagement Framework & Strategic Action Plan*, CA2CA@SCA-RL strengthens community ties between rural libraries and institutes of higher education in the target region.

Building upon Past Work

Over the past ten years, the Bill & Melinda Gates Foundation and OCLC's WebJunction project has supported and served libraries to amplify their value in their communities. Their mission is to "promote learning for all library staff by providing an open, affordable online learning community"[6]. WebJunction focuses on developing resources, services, training, technologies, skill-building, and management competencies from the librarian perspective. CA2CA-SCA-RL extends this community-centric approach by proposing collection of the library community's feedback to develop what will be valuable to them. The Association of Rural and Small Libraries (ARSL) is making significant efforts to "provide a network of people and materials to support rural

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[6] http://www.webjunction.org/about-us.html

and small library staff, volunteers, and trustees to integrate the library thoroughly with the life and work of the community it serves"[7], again from a library-centric point of view with limited insights into the community's point of view about the value and deficits in the library and information services being provided. The American Library Association too has developed resources, webinars, and programs for librarians and library staff from a system/institution-centric perspective[8]. In 2012-2013, Mehra participated in a Roadmapping committee organized by the Tennessee State Library and Archives to develop the 2013 Tennessee Standards for Non-Metropolitan Public Libraries[9] and help guide public libraries to plan adapt to the changing needs of library users and stakeholders. This planning proposal extends some of those efforts in reaching out to the rural library community to achieve positive impact on library professionals' careers and their respective communities.

2. PROJECT DESIGN

GOAL: The project goal is to research the role SCA rural libraries play in community engagement processes in the region and potentially mobilize rural librarians as community anchors by proposing a community engagement framework prototype and action plan based on stakeholder perspectives and experiences from rural library staff (including library assistants, managers, directors, paraprofessionals, and others).
The program objectives to achieve this goal are:

Objective 1: To implement a quantitative survey (print and online) to collect feedback from SCA rural librarian staff stakeholders about their experiences in community engagement processes and the past/current role the rural libraries have played in community-centered activities.

Objective 2: To conduct qualitative interviews/focus groups-with SCA rural librarian staff stakeholders about their role as community anchors to conceptualize and draft a community engagement framework prototype identifying particular community domains of potential actions, resources, and best practices.

Objective 3: To develop a *Community Engagement Framework & Strategic Action Plan* for rural libraries and finalize its design based on feedback from key stakeholders and partners from state, county, university, and other types of libraries in the region represented in an advisory board.

The data collected during this planning grant will serve as a pilot project to expand using similar strategies in rural communities at a national level based on availability of additional funding in the future. The project employs a mixed-methods approach of both quantitative and qualitative inquiry methods for data collection and data analysis of feedback from rural librarians in rural counties in the SCA region. In addition, the question-based surveys include open-ended qualitative feedback, and quantitative feedback will be collected during the narrative interviews (e.g., demographic information, agency history, etc.). The online and print question-based surveys will be developed using online survey software (Qualtrics). The surveys will provide an initial assessment of the role of SCA rural librarians in community engagement processes and community activities, identifying key challenges, opportunities, outcomes, and impact. The research team will also incorporate external data on organization type and demography to determine the effect of these variables on the number and level of services provided. For the qualitative data collection and analysis (building on select results from the question-based surveys), the research team will conduct narrative interviews and focus groups with public library staff. These interviews and focus groups will have open-ended questions regarding their existing and potential roles in community engagement, and the resulting data, together with the data from the surveys, will be used to develop the *Community Engagement Framework* and draft the *Community Engagement Strategic Action Plan*. The assistance of state library data coordinators will be elicited to encourage library director and staff participation in the study. Public library directors in rural communities have a vested interest in sharing their successes and challenges with the greater library community. The potential of survey and interview

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[7] http://www.ala.org/groups/affiliates/affiliates/arsl

[8] http://www.ala.org/advocacy/advocacy-university/rural-library-resources

[9] http://tn.gov/tsla/lps/lib_standards.htm

findings to help justify future public library funding and assist other public libraries in community engagement has been incentive enough to encourage participation in past studies.

CA2CA@SCA-RL is a unique example of action research as defined in terms of collaborations between a "professional action researcher and members of an organization or community seeking to improve a situation" (Greenwood and Levin 1998). The research team will use the data to provide much-needed assistance to rural libraries as they implement community engagement efforts in the SCA region. Stephen Kemmis and Robin McTaggart (1988) identified the object of action research as social practice and its transformations along with the changes that occur in the social institutions and relationships that support it. Action research characteristics fitting this proposal include varied levels of participation in research and action, learning in collaboration, community inquiry into everyday experiences and potential impact, use of mixed methods, and situated nature of applications and concrete outcomes (Mehra, 2006; Rahman, 2008; Stringer, 1999).

The research subjects include members of public libraries representing each of the ten states in the SCA region. In Months 1-4, an online survey will be developed and distributed to members of the state library associations and other SCA librarians through the state listserv. They will be asked to forward the message to others working in libraries in the region. The researchers anticipate receiving approximately 50-100 responses. At least 30 SCA rural librarian staff stakeholders will be interviewed during Months 5-8 (face-to-face, phone, or virtual synchronous via voice-over-Internet-protocols). During Months 9-12, the project will focus on obtaining community agency feedback on the draft of the *Community Engagement Framework & Strategic Action Plan*. The use of quantitative and qualitative datasets with librarian staff will provide complementary datasets: the former will help with identifying broader patterns and trends, while the latter will give insights into detailed and nuanced experiences and complexities associated with those experiences. Gap analysis will be on-going throughout the grant period, in terms of a domino effect where analysis of feedback during Phase 1 will inform developments in Phase 2 and subsequent analysis will inform the final development of the *Community Engagement Framework & Strategic Action Plan*. The final phase will involve writing, publishing, presenting and disseminating the results of the research. Along with the dissemination of the research results, the research team will develop a full grant proposal to be submitted to IMLS after completion of the planning project. Table 1 shows a timeline of select activities flexibly designed for further adjustment.

Time Period and Select Activities	Expected Results
Phase 1a: July-October 2017 Quantitative survey (print & online) to collect feedback from 50-100 SCA rural librarians. • Teleconference with advisory board, as needed. • Hire and train graduate research assistant. • Develop survey and seek IRB approval. Send survey to SCA rural librarians; begin analysis of results (Objective 1). • Form content of interviews and focus groups. • Plan CA2CA@SCA-RL Summit.	Provides an initial assessment of the role of SCA rural librarians in community engagement processes, community-centered activities, and needed mobilization efforts identifying key challenges, opportunities, outcomes, and impact.
Phase 1b: November 2017 - February 2018 Qualitative interviews/focus groups with 30 SCA rural librarian staff. • Teleconference with advisory board, as needed. • Conduct interviews and focus groups (Objective 2). • Begin development of framework and action plan; send to advisory board for feedback. • Continue to plan summit logistics.	Develop a *Community Engagement Framework* with particular community domains of potential actions, resources, and best practices. Draft a *Community Engagement Strategic Action Plan* based on feedback collected so far.

Phase 2: March-June 2018 Community agency feedback on the draft of the *Community Engagement Framework & Strategic Action Plan* collected during a CA2CA@SCA-RL Summit with at least 20 SCA rural librarians and key partners. • Third teleconference with advisory board, as needed. • Hold CA2CA@SCA-RL Summit. • Revise *Community Engagement Framework & Strategic Action Plan* based on community agency feedback (Objective 3).	Refine and finalize design of a *Community Engagement Framework & Strategic Action Plan* based on feedback collected about its conceptualization and operationalization, and associated details.

Table 1: Timeline-Select Activities of the CA2CA@SCA-RL.

Principal Investigators

Dr. Bharat Mehra, P.I., is an associate professor in UT-SIS. His research involves representing diversity and intercultural issues in LIS and furthers social justice and social equity agendas to meet the needs of minority and underserved populations. He has collaborated with diverse racial/ethnic minorities, international and cross-cultural communities in the diaspora, sexual minorities, rural communities, and others, to represent their perspectives while shaping the design of community-based information systems and services. Recently, his research on rural libraries in the SCA region has resulted in three externally-funded IMLS grant programs to improve technology literacy and management training and work with economically depressed communities (see description above). Mehra has headed several publications/presentations focusing on rural communities. Specifically, he has applied conceptual frameworks in LIS (e.g., human information behavior, information seeking and use, social informatics, etc.) in combination with interdisciplinary approaches from critical theory, feminist and cross-cultural studies, postcolonial literature, and community informatics or the use of information and communication technologies (ICT) to enable and empower disenfranchised communities to bring changes in their socio-cultural and socioeconomic circumstances. His contributions are helping to re-conceptualize the LIS professions in an expanded capacity to partner with people on the margins of society to bring significant changes in their everyday lives. His strength is in using qualitative and mixed methods (e.g., interviews, focus groups, action research, and participant observation, with select quantitative statistical analysis) in LIS research. He has used various qualitative approaches (e.g., critical research, situated user-centered evaluation, grounded theory practice, service-learning, needs assessment and community analysis, content analysis, narratology/storytelling, scenario-building, etc.). Information-based outcomes in his critical research in rural and other settings have included changes in information system delivery and library service design, institutional policy development, knowledge representation of marginalized domains, curriculum planning on social justice topics, development of culturally responsive information resources, print/electronic access to appropriate information collections, development/use of community-based social and digital technologies, amongst others.

Dr. Vandana Singh, Co-P.I., is an Associate Professor in the School of Information Sciences at the University of Tennessee. Her research focusses on use of technology in various settings and includes Computer Supported Cooperative Work, Human Computer Interaction and Information Systems, Online Communities and Software Development. She has been involved in both the ITRL research projects with Dr. Mehra and worked on the Information Technology aspect of the rural librarians' skill development. Her research has been funded by federal agencies such as National Science Foundation (NSF), IMLS and the United States Geological Society (USGS). Her research has been published in top LIS journals, national and international conferences and books. Her research publications have been awarded several awards at different venues, including best research paper awards. She has worked closely with libraries implementing Open Source Software, librarians interested in developing technology skills. She teaches in the area of Information Technology, including latest software

applications (Open Source and Proprietary), Web Design and Development and User experience and Usability. Her research and teaching inform each other to help professionals develop skills to positively impact their work environment. An integral part of her teaching and research is the online delivery of courses and she uses quantitative and qualitative methods to understand technologies and people's usage of technology.

Partners

A key strength of this proposal is its potential library-community embeddedness represented in the involvement of diverse stakeholders as grant partners/advisory board members. Grant partners have been selected for their expertise and wide network of contacts as well as their ongoing collaborations with the research team. They are represented in the CA2CA@SCA-RL Advisory Board and will lead efforts with others in project planning, design, and implementation.to assist in developing data collection protocols, distributing the surveys to rural and state library staff stakeholders, recruiting participants and identifying interviewees, giving feedback on drafts of the *Community Engagement Framework & Strategic Action Plan,* and evaluating select grant outreach and engagement activities. The communication will be primarily via email/phone/person and time commitment will vary as per their specific expertise. The CA2CA@SCA-RL partners include (alphabetical list): 1) Blount County Public Library, Maryville, Tennessee; 2) Clinch River Regional Library, Clinton, Tennessee; 3) Library of Virginia, Richmond, Virginia; 4) Sevier County Public Library System, Sevierville, Tennessee; 5) Wiggins Memorial Library, Buies Creek, North Carolina.

Advisory Board

A diverse Advisory Board has been established for CA2CA@SCA-RL, including stakeholders from multiple states and faculty investigators from extension departments. The faculty investigators bring their expertise and past experience in the application of research activities in a community context, the design of community information systems and services tailored to diverse rural communities, and the use of information-related work towards social justice and social equity agendas. The library practitioners represented in the CA2CA@SCA-RL Advisory Board will insure that the grant activities are tailored to real-life rural library experiences and ground-zero realities and complexities in local and regional communities. The state library representations (see letters of support from Chuck Sherrill, Sandra Treadway, and Cindy Church) will have their library development staff provide data and make connections with libraries in their constituencies, in addition to the other activities. The University extension and technical services representatives will bring their knowledge of sociology and community development/community engagement models to the project. The CA2CA@SCA-RL Advisory Board includes (alphabetical list):

Frances Adams O'Brien is the Librarian in the Research and Information Center, UT's Municipal Technical Advisory Service (MTAS). MTAS provides technical assistance to Tennessee's municipal governments, offering services in areas of finance/accounting, human resources, information technology, and legal assistance.
Cynthia Church is the Continuing Education Consultant at the Library of Virginia.
Dr. Joseph L. Donaldson is Assistant Professor in the 4-H Youth Development (Agricultural Leadership, Education and Communications) in the UT Extension at the Institute of Agriculture.
Casey Fox is Library Fund Development Manager at the Knox County Public Library in Knoxville, Tennessee.
Matthew Jordan is the Director of the Clinch River Regional Library in Clinton, Tennessee.
Dan Maynard is a Business Librarian and Algernon Sydney Sullivan Foundation Faculty Fellow in the Wiggins Memorial Library at Campbell University in Buies Creek, North Carolina.
Charles A. Sherrill is the State Librarian and Archivist at the Tennessee State Library and Archives. TSLA promotes library development throughout the state, and will assist in distribution of the survey and identification of interview participants
Sandra Gioia Treadway is the Librarian of Virginia/State Archivist
Rhonda Clement Tippitt is the Director of the Sevier County Public Library System in Tennessee.

KC Williams is the Director of the Blount County Public Library (BCPL) in Maryville, Tennessee. BCPL is a significant supporting organization of the Blount County Partnership, which provides adult programming in workforce development, and partners with the local department of labor career coach and small businesses.

As ARSL members, the faculty researchers will tap into the association networks to elicit their representation on the CA2CA@SCA-RL Advisory Board. Efforts to include other rural librarians in the ten SCA states will be made to have them join as advisory board members that will have a membership of 10-15. As is evident from this listing of the Advisory Board, these board members bring with them very unique and relevant skill sets for the success of CA2CA@SCA-RL. This effort of bringing together all these members by the research team is in itself a useful collaboration opportunity for all involved. These stakeholders, staff of rural libraries of the SCA and the UT extension team have never collaborated before and so the process of establishing new networks and partnerships has already begun.

Budget: TOTAL = $48,708. Graduate Research Assistant (10hr/week for one year) for assistance in data collection, data analysis, and website development, under training of faculty = $20,063 (includes tuition, stipend, and health insurance) [CA2CA@SCA-RL work will further GRA's prof. career and training in community engagement/outreach librarianship]; Summer salary for PI and Co-PI = $5,950 with corresponding summer fringe benefits = $1,242; A stipend for 10-15 Advisory Board members (experts) including the five partner representatives = $5,000; Incentives for 30 participants during interviews/focus groups = $1,500; Incentives for 20 participants during the Summit = $2,000 (Boxed lunches during Summit = $400).

3. DIVERSITY PLAN

Rural libraries are emerging as strong potential community anchors to further community engagement and achieve sustainable community growth in rural areas in the SCA region (Mehra et. al, 2011b). In order to form effective collaborations with library stakeholders in this region, however, researchers need to understand the specific cultural dynamics of the communities these institutions serve. Historically, the Appalachian region has experienced debilitating economic, social, and cultural circumstances that have adversely affected the people living in these areas (ARC, 2016; Bishop, Mehra, & Partee II, 2016). SCA rural residents encounter limited financial opportunities, significant information poverty/unemployment, low information literacy and educational attainment, lack of access to IT resources, and other unique environmental challenges (Mehra, Bishop, and Partee II, 2016). Traditionally, rural demographics and the libraries that serve them have been slighted when it comes to staffing, budgets, and current technology. By creating a strategic action plan for rural libraries to further community engagement in this region and sharing it widely with library and education stakeholders, this project will help to identify and address these unmet library service needs. The *Community Engagement Framework and Strategic Action Plan* will provide guidance to those library professionals who need assistance in filling gaps in their services. Mobilization and empowerment of the involved librarian staff will be an added benefit of this project. Besides providing assistance to underserved communities in the SCA region as a whole, part of this project will focus on addressing the needs of diverse individuals and communities who may be particularly neglected by the rural communities around them. As part of the "Bible Belt" in the United States, areas in the SCA regions' racialized history and overwhelmingly conservative politics have sometimes resulted in neglectful or even hostile cultural conditions toward those who are different (Fisher & Smith, 2012; Ludke & Obermiller, 2012; Mehra & Gray, 2014). At the same time, the Appalachian region is becoming more diversified—for example, Appalachia's Hispanic population more than doubled between 2000 and 2010, a percentage increase nearly triple the national growth rate (Pollard & Jacobson, 2011). Questions in the surveys and interviews will focus on identifying and outlining the community engagement needs of members of the population who may be particularly underserved, such as ethnic minorities, LGBT individuals, recent immigrants, non-English speakers, and others. A section of the Community Engagement Framework and

Strategic Action Plan will be devoted to the needs of these individuals in a community engagement context, taking into context the unique environment of the SCA region.

4. NATIONAL IMPACT

According to the most recent data on rural public libraries from IMLS' Public Library Survey, there are 8,956 public libraries in the entire United States, almost half (46.8%) of which are rural libraries (Swan, Grimes & Owens, 2013). This same study found that although per capita revenue had decreased over a three year period, visitation and circulation had increased for small and rural libraries. The SCA region is an ideal location to study how libraries can lead community engagement in rural communities, since over 2.5 million people reside in rural areas of the Appalachian region (ARC, 2017). The CA2CA@SCA addresses an urgent need for rural librarians and others to further community engagement processes in the SCA's ten states. It collects data to strengthen the response of public libraries during harsh economic conditions and financial downsizing in rural SCA areas. This planning grant will help plan similar efforts relevant to rural areas nationwide in identifying systematic and strategic mechanisms to integrate the role of public libraries' involvement in the everyday lives of local and regional communities to participate more fully in a community-based ecosystem that fosters information literacy and economic growth.

CA2CA@SCA-RL will have multiple levels of impact including: *(1) Rural Library Level:* The benefits of the grant help translate collected data from rural librarians towards development of a framework and strategic action plan to consolidate their role as community anchors in community engagement. It will consist of valuable information, strategies, and best practices to enhance their roles in community engagement. *(2) Rural Community Level:* Participation in this grant will provide skills enhancement and networking opportunities to the library staff and will help in empowering them to become community anchors for their communities. The real impact at the community level will be observed as a result of the work done as a follow-up to this planning grant. *(3) Educational Program Level:* Action research experiences in CA2CA@SCA-RL will be integrated into the LIS classroom/curriculum and shared at local, regional, and national levels to help train future LIS professionals to provide better services. *(4) National level:* Research results will be shared in conferences and meetings of professional associations and published in professional peer-reviewed journals. The blueprint of the *Community Engagement Framework & Strategic Action Plan* will provide initial versions of a product to be developed further and include appropriate resources and best practices. These experiences will serve as a pilot experience to expand using similar strategies nationwide based on future availability of additional funding.

Expected outcomes of the CA2CA@SCA-RL include: *Outcome 1: Providing generalizable data on how rural libraries can empower and engage communities.* By providing rural librarians and others with data on how real-world library practice empowers communities, this research planning project will inform key community members on how they can achieve economies of scale, better services, and more robust community technology infrastructure to facilitate successful economic recovery and more resilient communities. *Outcome 2: Developing/testing the Community Engagement Framework & Strategic Action Plan based on datasets systematically collected from rural library communities.* CA2CA@SCA-RL gives a ground-zero perspective of translating research into action that benefits local, regional, and national communities experiencing economic crises. *Outcome 3. Laying the foundation for advancing study of the expanding role of public libraries in community engagement:* Project personnel will prepare publications and presentations for public library research and practice-oriented journals. Focused attention will be paid to presenting in conferences of interest to rural librarians. By reaching out to multiple communities that might benefit from the findings, we will increase transparency and provide baseline data that will potentially be useful to all rural public library outlets in the United States.

Assessment of Rural Library Professionals' Role in Community Engagement in the Southern and Central Appalachian Region: Mobilization from Change Agents to Community Anchors" (CA2CA@SCA-RL)

Schedule of Completion

CA2CA@SCA-RL PLANNING GRANT (2017-2018)

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Teleconference with advisory board, as needed.	■				■				■			
Hire and train graduate research assistant.	■											
Develop quantitative survey and secure IRB approval.	■	■										
Send survey to SCA rural librarians; begin analysis of results.			■	■								
Form content of interviews and focus groups based on results of survey.				■	■							
Plan CA2CA@SCA-RL Summit.			■	■	■	■	■	■	■			
Conduct interviews and focus groups; begin analysis of results.					■	■	■	■				
Begin development of framework and action plan; send to advisory board for feedback.							■	■				
Hold CA2CA@SCA-RL Summit.										■		
Revise *Community Engagement Framework & Strategic Action Plan* based on community agency feedback.											■	■
Disseminate research results; send final report to IMLS.											■	■
Ongoing gap analysis of results.			■	■	■	■	■	■	■	■	■	■

DIGITAL PRODUCT FORM

Introduction
The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (i.e., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products can be challenging. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

Instructions
You must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

PART I: Intellectual Property Rights and Permissions

A.1 What will be the intellectual property status of the digital products (content, resources, assets, software, or datasets) you intend to create? Who will hold the copyright(s)? How will you explain property rights and permissions to potential users (for example, by assigning a non-restrictive license such as BSD, GNU, MIT, or Creative Commons to the product)? Explain and justify your licensing selections.

A.2 What ownership rights will your organization assert over the new digital products and what conditions will you impose on access and use? Explain and justify any terms of access and conditions of use and detail how you will notify potential users about relevant terms or conditions.

A.3 If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

Part II: Projects Creating or Collecting Digital Content, Resources, or Assets

A. Creating or Collecting New Digital Content, Resources, or Assets

A.1 Describe the digital content, resources, or assets you will create or collect, the quantities of each type, and format you will use.

A.2 List the equipment, software, and supplies that you will use to create the content, resources, or assets, or the name of the service provider that will perform the work.

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to use, along with the relevant information about the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

B. Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

C. Metadata

C.1 Describe how you will produce any and all technical, descriptive, administrative, or preservation metadata. Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

C.2 Explain your strategy for preserving and maintaining metadata created or collected during and after the award period of performance.

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content, resources, or assets created during your project (e.g., an API [Application Programming Interface], contributions to a digital platform, or other ways you might enable batch queries and retrieval of metadata).

D. Access and Use

D.1 Describe how you will make the digital content, resources, or assets available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).

D.2 Provide the name(s) and URL(s) (Uniform Resource Locator) for any examples of previous digital content, resources, or assets your organization has created.

Part III. Projects Developing Software

A. General Information

A.1 Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve.

A.2 List other existing software that wholly or partially performs the same functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

B. Technical Information

B.1 List the programming languages, platforms, software, or other applications you will use to create your software and explain why you chose them.

B.2 Describe how the software you intend to create will extend or interoperate with relevant existing software.

B.3 Describe any underlying additional software or system dependencies necessary to run the software you intend to create.

B.4 Describe the processes you will use for development, documentation, and for maintaining and updating documentation for users of the software.

B.5 Provide the name(s) and URL(s) for examples of any previous software your organization has created.

C. Access and Use

C.1 We expect applicants seeking federal funds for software to develop and release these products under open-source licenses to maximize access and promote reuse. What ownership rights will your organization assert over the software you intend to create, and what conditions will you impose on its access and use? Identify and explain the license under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software licenses). Explain and justify any prohibitive terms or conditions of use or access and detail how you will notify potential users about relevant terms and conditions.

C.2 Describe how you will make the software and source code available to the public and/or its intended users.

C.3 Identify where you will deposit the source code for the software you intend to develop:

Name of publicly accessible source code repository:

URL:

Part IV: Projects Creating Datasets

A.1 Identify the type of data you plan to collect or generate, and the purpose or intended use to which you expect it to be put. Describe the method(s) you will use and the approximate dates or intervals at which you will collect or generate it.

A.2 Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

A.3 Will you collect any personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).

A.4 If you will collect additional documentation, such as consent agreements, along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

A.5 What methods will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

A.6 What documentation (e.g., data documentation, codebooks) will you capture or create along with the dataset(s)? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

A.7 What is your plan for archiving, managing, and disseminating data after the completion of the award-funded project?

A.8 Identify where you will deposit the dataset(s):

Name of repository:

URL:

A.9 When and how frequently will you review this data management plan? How will the implementation be monitored?