Regional Institute on Aging Sixth Year Highlights 12/13

The Regional Institute on Aging (RIA) is a virtual research organization designed to serve the citizens of metropolitan Wichita, Sedgwick and the adjacent counties, and, eventually the surrounding Midwestern states. This annual report presents highlights of work in competitive research programs, community based programs and projects, university and community services, and collaborative work with KU School of Medicine.

Competitive Research Programs:

(External) NIA MSTEM: Advancing Diversity in Aging Research (ADAR) through Undergraduate Education (R25): Beginning in late 2011 and continuing until submission in May 2013, the Director was a key organizing member of a major application submitted to the National Institutes of Health, National Institute on Aging (NIA) for the above noted R25, a research education program application. She led the campus wide effort to build interest and momentum and to recruit senior WSU faculty (Drs. Chaparro and Whitman) to serve as Principal Investigator and Co-Investigator with her (as Co-Investigator).

The purpose of this NIA announcement is to support undergraduate competency in pre-medicine, science, technology, engineering and mathematics, to enhance rates of successful transition to graduate and professional schools, and to diversify the health care and research work forces to more closely mirror the demographics of the U.S. population.

The application was submitted on May 25, 2013 to the NIA. The following are the specific aims:

- 1. Recruit program participants from area high schools, WSU and BCC who have interest in or are majoring in NIA MSTEM disciplines.
- Recruit faculty mentors from NIA MSTEM disciplines and provide them with training and support to effectively mentor program participants to graduation.
- Support and retain program participants through (a) summer bridge programs; (b) intensive multi-component advising; (c) research experiences; (d) financial support; (e) professional/scientific socialization, including training in the responsible conduct of research; and (f) completion of minor in aging studies.
- 4. Assist program participants with application, acceptance, and enrollment in NIA MSTEM graduate or professional programs with an emphasis on aging-focused programs (Ph.D.), geriatrics (M.D.), or combined programs (Ph.D./M.D.)
- 5. Evaluate the impact and outcomes of all program components and use those results to refine and fine-tune recruitment, selection, support and

retention efforts to enhance participants' experiences and to increase the likelihood of success in undergraduate, graduate, or professional training.

The application presented a five year plan at a direct cost of \$1,443,848. It was reviewed on December 9 and 10, 2013.

(2/2014 update: The summary statement was received by Dr. Chaparro. The application was scored a "4," which puts it in the "very good" range. It is not expected that the application will be funded in view of the stringency of funding at the federal level. Therefore, the plan is to revise the application, address the concerns, and resubmit for the October 2014 deadline.)

(Internal) Opportunities for Undergraduate Student Participation in Aging Research

The Regional Institute on Aging announced the Cassat Pilot Research Program: Undergraduate Student Participation in Aging Research in December 2012. This pilot research program was supported by the gift from the estate of Evelyn Cassat. The purpose of this pilot research program was to provide investigators with short-term funding to collect preliminary data that will underpin research grant applications in human aging research. A special feature of this announcement was the requirement for each principal investigator to make provisions for significant undergraduate student participation in the funded pilot research project.

During the summer 2013, three pilot research projects were funded up to \$10,000 each for direct research and personnel costs for 12 months. Those receiving the awards were: Moriah Beck, Ph.D. (Department of Chemistry), Anil Mahapatro, Ph.D. (Department of Industrial and Manufacturing Engineering), and Rui Ni, Ph.D. (Department of Psychology).

Community Based Programs and Projects:

Falling Less in Kansas (Falling LinKS): This phase of the Falling LinKS projects focuses on dissemination and implementation. The Research and Implementation Team includes: Drs. LaDonna Hale, Teresa Radebaugh, Michael Rogers, Nicole Rogers, Ms. Rosemary Wright, and Ms. Karen Kendrick and Mr. Shannon Riley from Envision.

A revision of the Toolkit was completed in 2013. The major goals of that revision were to improve the images and to offer customization of the cover. Those interested in ordering Toolkits from the Envision Everyday store can now choose from the three covers, "the couple in blue," a multi-cultural couple and an image of a wheat field. The images inside the Toolkit have been adjusted. There are also three versions of the "bookmark" available on the Envision website.

Work was initiated on a pre/posttest questionnaire with the goal of capturing information on implementation of the Toolkit in senior centers, churches, other public venues and by K State Research and Extension agents. The questionnaire must be very short because of the time constraints of those implementing the Toolkit in small town and rural settings. We then plan to develop a means for those data to be submitted via the Regional Institute on Aging website for aggregation and analysis, so we can gain a better understanding of the use of the instrument across the state.

The Research and Implementation team submitted a WSU Copyrighted Materials Disclosure Form in the summer 2013. The Office of Research and Technology Transfer is now working to obtain a copyright for the Falling LinKS Toolkit.

To meet the needs of older Kansans, arrangements have been made to translate the Toolkit into Spanish and that work is underway (completed 1/14). During 2014, focus groups of older Spanish speaking adults will be convened to provide information on the usability and acceptability of the Toolkit. Students (CSD, AGE, Social Work, PA, and Nursing) will be recruited for the focus group work. This will be an Inter-professional Education project with funding provided by the College of Health Professions (Drs. Nicole Rogers and LaDonna Hale, leads). The Toolkit will then be revised as necessary based on information gained from the focus groups.

Presentations by Falling LinKS Research and Implementation Team were made to:

2013. Feb. Falling LinKS Presentation for Kansas State University Research and Extension Agents, Manhattan, KS.

2013. March. Regional Institute on Aging, Falling LinKS Research Team. Falling LinKS: Vision Loss and Fall Prevention. 4 hours of CE for low-vision

rehabilitation and education physical and occupational therapists. Wichita, KS. 2013. March. Reno County Department on Aging, Falling Less in Kansas: Preventing Falls in Reno County. Hutchinson KS.

2013. April. Older Kansans Information and Referral Service Association Bi-Annual Retreat, Falling Less in Kansas: Preventing Falls in Reno County. Hutchinson, KS.

2013. April. Falling LinKS Toolkit. K State Research and Extension. Manhattan, KS.

2013. April. Falling LinKS Toolkit: Development and Implementation in Rural, KS. Quinter, Hays and Oakley, KS. (Oakley presentation was for annual conference, "Full Circle Aging."

2013. October, Kansas State Research and Extension, Falling LinKS Implementation in Rural Kansas, Manhattan, KS.

Plans for 2014 include the focus groups described above, development of training and train the trainer programs for implementing the Toolkit in various

settings, finalizing the pre/posttest questionnaire and developing an online portal for collecting information about Toolkit use.

A special effort will be undertaken in 2014 to engage Emergency Medical Services around the state as EMS workers often have first contact with an older adult who has fallen. This relationship may allow easy access to the older adult who has fallen for introduction and implementation of the Falling LinKS Toolkit.

The Consequences of Intense Energy Exploration in Small Town Kansas:

Based on ideas conceived by Richard Muma, Ph.D., conversations began in early 2013 about the implications of intense energy exploration for small towns and rural areas of Kansas. What are the public health consequences to the people in the areas where intense fracking, and traditional oil and gas exploration, are underway? Are there unique consequences for the older adults in the area? The long range objective is to understand the impacts of intense energy exploration on the residents of small towns and rural area so that community preventive measures may be developed and instituted to reduce the negative consequences.

We contacted Deb Sellers, Ph.D., KSU Research and Extension, and Rick Scheidt, Ph.D., KSU College of Ecology. Dr. Scheidt is well known for his research on small towns and rural Kansas and the "meaning of place" for older adults. Dr. Sellers worked with agents across Kansas in their training and programming needs. Ms. Joan Kahl, KSU Research and Extension, an expert on focus groups, was also recruited to the team.

This two university team quickly established an excellent collaborative framework, defined the research issues, identified the questions, planned the methodology, recruited participants in a small town, and convened focus groups to help develop an understanding of the issues confronting residents of the explored area. Anthony, Kansas, was chosen as the locus for research as energy exploration was underway and, therefore, residents had some experience to report.

A total of four focus groups were conducted over a period of 5 months and included: senior center participants, business leaders, the Chamber of Commerce board, and members of the ministerial alliance. A thematic analysis of the focus group transcripts has been completed with the assistance of Rosemary Wright, graduate student, Department of Psychology. A paper is currently under development by Dr. Muma, lead author. After the summary data analysis is completed and the paper finalized, next steps for this productive WSU/KSU collaborative research effort will be determined. Two possible next steps (1) identify a small town "naïve" to intense energy exploration but on the verge of its introduction and follow the residents through the cycle, and (2) return to Anthony for additional focus group and key informant interviews to further clarify and elaborate the impact of the energy business upon the residents.

Older Adult Pet Adoption Program! (OAPA!)

This collaborative community based research program with Prairie View, Inc., Caring Hands, Harvey County Department on Aging, and the Regional Institute on Aging continues. The challenges are to get information to older adults and to find volunteers to serve as the "supporters" of the pet adopter. The Director presented at the Hesston Sr. Center, accompanied by a staff member from Caring Hands and "Traveler," on the benefits of pet ownership for older people and the many dogs and cats in need of loving homes.

Faculty and Student Research Development

The Director continues to serve as a mentor to both faculty and graduate students with research interests related to aging across colleges at WSU. She served on one dissertation committee during this reporting period.

In May 2013, she was the key note speaker for GRASP and spoke to the, primarily, student audience on ".so you want to be a scientist?" From the abstract: What makes a good scientist? How do you know if you have the "right stuff?" Is raw intellect the magic ingredient? Will blow-the-top-off grade point averages and GRE scores get you there? What about training? Of course, you have to have some measure of intellectual ability and elasticity. You must train to learn the state-of-the-art, state-of-the-science in your chosen discipline. These are givens. But, there are many more characteristics that combine to make a scientist. And, some are probably not what you think. Do you have them?"

The Director assisted Ms. Sue Nyberg, Department of Physician Assistant, to build a relationship with Regent Park as the site for the "Senior Mentor" Project for physician assistant students.

University and Community Service

The Director was asked to serve as a Trustee for the Presbyterian Manors of Mid-America, Inc. From the <u>www.pmma.org</u> website: "Presbyterian Manors of Mid-America is in the nation's top 20 largest nonprofit senior living organizations, providing more than 60 years of service to Kansas and Missouri. PMMA is headquartered in Wichita, Kansas, and employs 2,200 compassionate people who work relentlessly to provide vibrant, quality living to more than 2,400 seniors in 18 communities." Terms for Trustees are typically 10 years.

Additionally, the Director serves on:

- Wichita Medical Research and Education Foundation Board;
- Center for Community Support and Research Advisory Committee;
- External Advisory Committee, University of Kansas Alzheimer's Disease Center.

 Internal Advisory Committee, KSU/WSU, COBRE, "Cognitive and Neurobiological Approaches to Plasticity," (C-NAP), submitted 2/14.

The Regional Institute on Aging collaborated with Exploration Place and the Central Plains Area Agency on Aging to create an exhibit on "10 Steps to a Healthy Aging Brain" (based on material from the Alliance for Aging Research) for the Mindbender Mansion exhibit, Exploration Place, fall 2013.

The Director served as a member of a search committee for the Bioengineering Program, College of Engineering.

In 2012, "Changing the Conversation" a cooperative project of the Kansas Sampler Foundation and the Regional Institute on Aging was launched. Kansas is a state of many natural resources. It is home to hardworking industrious people. However, one "natural resource" has not been tapped to its fullest potential nor have the continuing contributions of this "natural resource" been widely heralded. The resource is older Kansans.

The website highlights stories of older people who have quietly, with little fanfare, made a difference in their communities and in our state. These are not the 'usually visible' people, but regular people leading regular lives, while making important differences and continuing to enrich the lives of the people and communities around them. In 2013, three new stories were added to the website: Linda Laird, the Lindquists and Ralph Vogel.

Collaboration with University of Kansas Medical School-Wichita.

Wichita Women in Science:

Wichita Women in Science continued largely unchanged from the description provided in the Annual Report 2012. The purpose of Wichita Women in Science (WWiS) is to provide a neutral forum for women scientists, clinical investigators and senior science administrators to meet and establish relationships which then serve as the foundation for building new research collaborations. WWiS is an informal organization. The group meets monthly. The mailing list currently contains approximately 80 names and adds new names monthly. While not focused exclusively on aging, WWiS has proved a very effective, inexpensive networking tool for the region. It has also proved very useful for distributing information via its email list.

WWiS was created in 2010 by the Director, RIA, and the Associate Dean for Research, KU School of Medicine- Wichita.

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