June 1, 2020

AACN Innovations in Professional Nursing Award
AACN Membership Committee
American Association of Colleges of Nursing
One Dupont Circle NW, Suite 530
Washington, DC 20036-1120

Dear AACN Membership Committee:

Attached you will find the nomination letter for the Collaborations for Advanced Research Methods and Analysis (CARMA) nursing PhD course sharing collaboration between the Sinclair School of Nursing, University of Missouri-Columbia (MU SSON); Department of Family and Community Medicine, School of Medicine, University of Missouri-Columbia (MU FCMD); College of Nursing, University of Missouri-St. Louis (UMSL); and School of Nursing and Health Studies, University of Missouri-Kansas City (UMKC). The results of the CARMA nursing PhD course sharing collaboration project exemplifies the positive impact that interprofessional and inter-campus collaboration can have to stimulate substantive curricular change that not only increases the quality of nursing education programs but also allows students to access faculty expertise in specialized areas. On behalf of the PhD Program Directors and CARMA faculty of these three schools of nursing within the University of Missouri system, we believe that this project exemplifies the required criteria for the AACN Innovations in Professional Nursing Award.

If I can provide you with additional information or answer any questions, please do not hesitate to contact me.

Sincerely,

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June 1, 2020

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American Association of Colleges of Nursing
One Dupont Circle NW, Suite 530
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Dear AACN Membership Committee:

In the current nursing and higher education environment, it is imperative that nursing PhD programs explore creative and innovative ways to provide access to faculty expertise to prepare nurse scientists for the 21st century. There is a critical shortage of PhD prepared nurses to advance the science of nursing and serve as faculty to prepare the next generation of nurses. Indeed, as you know, one-third of all nursing faculty are expected to retire by 2025. That said, public higher education has been challenged with diminishing state financial resources that has resulted in the need to carefully manage course enrollment. The Collaborations for Advanced Research Methods and Analysis (CARMA) nursing PhD course collaboration project provides an excellent model to address these pressing nursing education needs.

In 2015, the Council on the Advancement of Nursing Science published a special issue of Nursing Outlook about emerging areas of science in nursing PhD education. Common weaknesses identified across nursing PhD programs were: 1) Failure to include new research designs for personalized health behavior interventions, 2) Limited depth and breadth of statistical instruction, 3) Lack of faculty expertise in advanced statistical methods, and 4) Lack of faculty expertise in comparative effectiveness and community-based participatory approaches (Henly et al., 2015). Conversations between the nursing PhD Program Directors at MU SSON and UMSL revealed we had similar advanced graduate research and statistical methods coursework needs that were not offered on our respective campuses in an online format and faced comparable faculty, financial, and student resource issues. For example, MU SSON faculty have discussed repeatedly the need for advanced statistical methods course offerings. Since advanced, specialty courses are of interest to only a select cohort of our students, it has not been a fiscally-responsible choice for us to develop and offer structural equation modeling (SEM), hierarchical linear modeling (HLM), or comparative effectiveness research (CER) methods to small numbers of students. When our PhD program was residential, our nursing PhD students could and did take advantage of advanced statistical methods offered by other departments. Once our PhD program became distance-mediated (online), however, that was no longer an option, as these other departments did not offer their advanced statistics courses in an online format.

Accordingly, we pulled together the nursing PhD Director from our sister school at UMKC and the research director for the MU FCMD for discussions. These discussions resulted in the
development of a series of separate, yet intricately-linked, UM System course sharing proposals (2 MU primary; 2 UMSL primary; 1 UMKC primary). These proposals built on the existing strengths of each campus to expand advanced statistical and research methods course offerings for online nursing PhD students at MU, UMSL, and UMKC. Although the courses were designed with nursing PhD students in mind, they are open to interdisciplinary graduate students on all three campuses.

The CARMA nursing PhD course sharing collaboration has been a remarkable addition to the curriculum for all three UM System nursing PhD Programs as well as the Masters in Academic Medicine program (MU FCMD). Major accomplishments of this effort are outlined below.

- The CARMA nursing PhD course sharing collaboration project resulted in:
  - Revision and sharing of four core nursing PhD courses (Intermediate Biostatistics, Quantitative Research Methods, Qualitative Research Methods, Philosophical/Theoretical Basis for Research);
  - Development and sharing of eight advanced research design and statistical methods courses (Advanced Qualitative Methods, CER, Develop/Implement/Evaluation of Health Interventions, HLM, Mixed Methods, Participatory Approaches to Health/Health Systems, Qualitative Systematic Reviews, SEM).

- Addition of the three advanced statistics courses and the health interventions course contributed greatly to the successful funding of MU SSON’s NINR funded T32 Health Behavior Science Training Grant.

- Advanced statistical and research methods courses added to the robustness of the curricula on all three UM system campuses, which in turn has contributed to an increase in PhD applications on each campus. At MU SSON, for example, our 2015-2019 nursing PhD applicant pool has increased 71% over our 2010-2014 applicant pool!

- Offering these advanced statistical and research methods courses has facilitated interprofessional learning for our nursing PhD students. Our CARMA courses have drawn students from various disciplines on all three campuses, including agricultural education, communication, criminal justice, health management and informatics, human development and family science, public health, social work, and rural sociology.

- Since the advanced specialty courses are shared across the three UM campuses, they have sufficient enrollment to be offered on a consistent, predictable, every other year basis.

- Between Fall 2016-Spring 2020, CARMA nursing PhD shared core courses have each been offered four times (once/year) while shared specialty courses have each been offered two times (once every other year) demonstrating sustainability of the project.

- Moreover, between Fall 2016-Spring 2020, CARMA nursing PhD shared courses collectively have enrolled more than 440 graduate students and postdoctoral fellows from MU, UMSL, and UMKC demonstrating a significant impact on professional nursing education offered by the nursing PhD programs in the UM system.
The CARMA nursing PhD course sharing collaboration has also been beneficial for faculty. Faculty have received instructional design training and participated in formative and summative evaluations of the revised and newly developed courses. Moreover, our collaborative CARMA meetings have allowed faculty to share ideas about innovative teaching strategies, textbook and article resources, and peer-to-peer teaching mentoring. For example, we have shared video recordings of guest lectures, allowing faculty to leverage technology and utilize resources to improve teaching and curricular efficiencies.

From an administrative perspective, the CARMA nursing PhD course collaboration has immensely supported our faculty workload and the challenging task of finding experientially qualified faculty to teach within highly specialized and foundational PhD nursing courses. Since our CARMA collaboration began in 2016, all three nursing programs have had dean and associate dean turnover as well as several associate and full professors retire or leave to take endowed chair positions elsewhere. Given the size of our three respective nursing schools, losing senior faculty could have created significant challenges with regard to covering teaching assignments for PhD courses. Because the CARMA nursing PhD course collaboration included courses that were developed jointly and specifically designed to be taught by the campuses on an alternating, rotational basis, we have been able to continue to offer these core and specialty courses even though we still have vacant research faculty positions.

The CARMA nursing PhD course sharing collaboration did not happen without an incredible amount of “behind-the-scenes” advocacy, coordination, management, and leadership. That “behind-the’ scenes” work was not accomplished by the nursing Deans or Associate Deans—it was accomplished by the effective leadership of the PhD Program Directors who engaged faculty on each campus to collaborate to enhance student learning. Daylong workshops were conducted several times a year to facilitate this work. These sessions, built into the collaborative plan, gave faculty opportunities to level foundational courses, agree on content in advanced courses, and plan for consistency across campuses alternating course delivery. The logistics of course sharing came with plenty of challenges: Making sure students knew where to log into their courses; dealing with library access on the different campuses; providing students on all campuses with opportunities to evaluate their courses; and addressing performance issues. However, through all these challenges, our PhD Directors and CARMA faculty never wavered. Their collaborative efforts and determination to ensure the success of this project has been remarkable.

In conclusion, the CARMA shared courses not only better prepare the next generation of nursing scientists for emerging areas of science but also facilitate interdisciplinary learning, while increasing PhD program quality and efficiency to the benefit of our three separate PhD programs. The CARMA nursing PhD course collaboration also serves as a model for collaboration for nursing PhD programs across the country to enhance program quality and increase enrollment to address the nursing faculty shortage we are all experiencing.

Sincerely,

Debre D. Wolfe, PhD

Sinclair School of Nursing
University of Missouri Health System