



University of Kansas School of Nursing
Faculty Research Interests



The Office of Grants and Research at the University of Kansas School of Nursing (KU SON) coordinates research activities on behalf of the School's faculty researchers. Currently, faculty research is broadly organized into two areas of emphases:

Health Behavior and Symptom Management Research is central to nursing science and nursing practice. KU SON views symptom management as an integral part of health behavior research because actions to manage symptoms are conceptualized as healthy behaviors. Health behavior and symptom management research encompasses work with individuals, families, and communities, and may include work at the cellular level. It covers the continuum from promoting healthy lifestyles to facilitating a comfortable end-of-life experience. Research in this area includes understanding the individual, family, and community barriers to good health practices, motivations for engaging in healthy or health risky behaviors, and the complexities of managing a variety of symptoms from acute and chronic illnesses. Study designs may be qualitative or quantitative—ranging from select bench science aimed at identifying mechanisms underlying symptoms, to descriptive studies for characterizing and understanding a particular health behavior or symptom, to randomized clinical trials of interventions for promoting healthy behaviors, reducing or eliminating health risky behaviors, and/or managing, ameliorating or alleviating specific symptoms. Health behavior and symptom management research assumes a base of scientific evidence for the link between the health behavior or symptom management action under study and a positive health outcome.

Clinical and Organizational Systems Research is central to nursing science and nursing practice within health care delivery, whether in institutional or community-based settings. KU SON views communication and information research as an integral part of clinical and organizational systems research. We believe this research is necessary for understanding the impact and effectiveness of macro-processes and functions, of decision-making, and of organizational dynamics within complex practice environments for improving patient and client care and satisfaction as well as staff satisfaction. Clinical and organizational systems research is conducted in a variety of settings—including primary care, acute care, public health, long-term care, and home care organizations. Studies may be quantitative or qualitative in nature and may use naturalistic and descriptive approaches, appreciative inquiry and action research, program evaluation, or experimental methods. Research in this area assumes a base of scientific evidence for the link between characteristics and processes within health care delivery organizations and positive patient and client outcomes.

The purpose of this document is to highlight selected research interests and accomplishments of KU SON faculty members. If you would like to reach a KU SON faculty member to further discuss their research interests, please use the contact information as listed on the back cover of this publication.



Lauren S. Aaronson, RN, PhD, FAAN

Professor, School of Nursing and Department of Health Policy and Management, School of Medicine

Dr. Aaronson has numerous interests in health behavior and symptom management research: she currently is Principal Investigator on a sub-contract with KU-Lawrence and senior Co-Investigator on the grant, "Exercise Trial for Wheelchair Users," which is funded by the National Institute of Child Health and Development at the National Institutes of Health. Aaronson also has conducted research on the promotion and support of breastfeeding among adolescents; symptom responses to exercise in rheumatoid arthritis; nursing factors in pregnancy health behavior and outcome, and studies of fatigue in healthy persons and those with chronic fatigue syndrome. Dr. Aaronson also serves as the deputy director of the Heartland Institute for Clinical and Translational Research.



Sandra L. Bergquist-Beringer, RN, PhD

Associate Professor

Dr. Bergquist-Beringer's program of research focuses on pressure ulcer risk and prevention across healthcare settings. She also has evaluated a pressure ulcer education program; conducted studies on pressure ulcer process and outcome indicators for quality of care; administered surveys to assess adoption of evidence based practice, tool validation and wound assessment and measurement. Research methodologies include epidemiological research, quantitative methods including regression analysis, research with large data sets and qualitative methods (focus groups and content analysis).



Wanda Bonnel, PhD, ARNP

Associate Professor

Dr. Bonnel's current educational research interests focus on best practices in online education. This work includes two funded projects from the National League for Nursing. The first study included development of a conceptual model emphasizing new ways of envisioning online course feedback to students with an emphasis on course design strategies. The second study further details this conceptual model using multi-site descriptive methods to identify faculty best practices in providing online course feedback. Bonnel also has served as Principal Investigator for two federally funded training grants from Health Resources and Services Administration to: (1) initiate an online Nurse Educator Certificate, which led to collaboration in the implementation and evaluation of a multidisciplinary web-based Health Professions Educator Certificate; and (2) a Career Ladder grant focused on developing clinical leaders and educators via accessible online RN to BSN and graduate programs. Dr. Bonnel also has interests in evidence-based practice; role development among geriatric clinical educators, patient education, and health.



Kelly A. Bosak, PhD, ARNP, BC

Assistant Professor

Dr. Bosak's research interests include: (1) conducting clinical trials to test lifestyle interventions in sedentary adults, and specifically perimenopausal women with the metabolic syndrome; (2) the development of persuasive intervention strategies to prevent cardiovascular disease and type 2 diabetes delivered by interactive technology (mobile devices); with the ultimate goal of translating interventions to clinical practice. Bosak completed her PhD in Nursing in 2007 at the University of Nebraska Medical Center, where her dissertation focused on clinical trial methods to develop a physical activity intervention specifically targeted to reduce coronary heart disease risk in adults with the metabolic syndrome.



Marge J. Bott, RN, PhD

Associate Professor

Dr. Bott currently is part of a National Institute of Nursing Research project that is examining end-of-life care in nursing homes. She also was recently funded as Principal Investigator on a Kansas Department on Aging contract studying culture change (resident-centered care) and turnover in nursing homes, and as a Co-Principal Investigator on an NINR funded study that examined the MDS care planning process in nursing homes to identify associations with resident outcomes as well as estimate costs and assess efficiency. Bott previously has worked on NINR projects focused on nurse managers, nurse retention, and patient outcomes and behavior and cognitions for resisting the urge to smoke. Other project collaborator and data analysis roles include: The National Database of Nursing Quality Indicators and nursing facility survey and facility characteristics. She also has expertise in various types of data management, including working with large databases, and data analysis procedures including structural equation modeling.



Diane Boyle, PhD, RN

Associate Professor, School of Nursing and Department of Health Policy and Management

Dr. Boyle's current research activities include a role as Co-Investigator on the National Database of Nursing Quality Indicators, an American Nurses Association-sponsored repository for longitudinal data from more than 1,500 hospitals across the United States on nurse staffing, nurse turnover, and nursing sensitive patient outcome indicators. Additional data collected by NDNQI also includes an annual RN Job Satisfaction survey from nurses employed in all unit types. Boyle also is Co-Investigator on a pilot study to examine the effect of intensive care unit physical design on nurse-physician collaboration. Other research interests include RN job satisfaction and turnover; nurse sensitive quality indicators; patient outcomes; and nursing workforce characteristics; ICU physical design; and nurse-physician communication.



Juliana J. Brixey, PhD, MSN, MPH, RN

Associate Professor

Dr. Brixey's research interests focus on clinical informatics and patient safety, including the redesign of infusion pump interfaces, developing a taxonomy of medical errors, understanding how organizations make decisions to purchase medical devices such as infusion pumps, and developing an ontology to record and classify healthcare errors and near error conditions. Brixey's dissertation research focused on how interruptions and distractions change workflow.



Helen Connors, PhD, Dr.PS (hon), RN, FAAN

E. Jean M. Hill Endowed Professor

Dr. Connors is a recognized leader in educational innovations and strategic partnership. Her research focus is on evaluating the outcomes of innovative educational and technology-based practice programs; she has garnered grants totaling more than \$5 million to support these efforts. Connors currently is Project Director for the HRSA-funded Faculty Development Collaborative: Integrating Technology into Nursing Education and Practice Initiative. She also serves in a leadership role on a DHHS Office for National Coordination for a Health Information Technology funded project for advancing health informatics and Chairs the e-Health Advisory Council for Kansas.



Elaine Williams Domian, ARNP, PhD

Clinical Assistant Professor

Dr. Domian's research foci and interests are in qualitative research, specifically ethnography. Her focus of research is on pregnancy outcomes for minority women and health care needs of vulnerable populations- specifically women and children. Domian's dissertation was an ethnographic study of contextual factors in the pregnancies of Hispanic females and their families in northern New Mexico. She has also worked as a consultant on a qualitative NINR-funded research project that studied interventions with children with chronically ill or disabled siblings, and was an onsite program coordinator for a grant that provided health services to low-income children at two preschool centers. Domian also is pursuing a new field of research related to mothers at risk for child abuse and neglect.



Nancy Dunton, PhD

Research Professor, School of Nursing and Department of Health Policy and Management

Dr. Dunton's research interests focus on health systems research, especially the effects of nurse staffing on quality of care in acute and long term care settings. She currently is funded by the American Nurses Association as Principal Investigator on the National Database of Nursing Quality Indicators, an American Nurses Association-sponsored repository for longitudinal data from more than 1,500 hospitals across the United States on nurse staffing, nurse turnover, and nursing sensitive patient outcome indicators. Dunton's previous research has focused on nursing home quality, the outcomes of welfare reform, outcome indicators of children's well being and the use of Census data and administrative data systems.



Debra J. Ford, PhD

Research Assistant Professor

Dr. Ford's research focuses upon strategies used by organizations to influence public policy, with a specific focus on health policy; group communication processes in public-private partnerships; and the scholarship of teaching and learning. She recently co-authored Organizational Rhetoric: Situations and Strategies, a textbook on organizational rhetoric.



Nelda S. Godfrey, PhD, ACNS-BC, ARNP, CNL

Clinical Associate Professor

Dr. Godfrey and her colleague, Nancy Crigger, are co-authoring a book entitled The Making of Nurse Professionals: A Transformational Ethical Approach, to be published in August 2010. Additional research interests include leadership theory and application, healthcare ethics in the public square, and philosophic inquiry.



Edna Hamera, PhD, APRN

Associate Professor

Dr. Hamera's current research interest is centered on a psychiatric rehabilitation approach to weight loss. Hamera has also studied symptom use and self-regulation in Type II Diabetes; substance abuse/use and self-regulation in schizophrenia; and the use of contextual cues to remove environmental barriers for people with psychiatric disabilities. Hamera's other research foci include skills training and shared decision making in schizophrenia and other individuals with severe and persistent mental illness.



Karen L. Miller, RN, PhD, FAAN

Dean and Professor

Dr. Miller currently is funded by a Health Care Foundation of Greater Kansas City & REACH Foundation Grant Project related to cultural competency curriculum enhancement. Miller's previous research focused on the effects of a policy for managing children's pain and work sampling validations of pediatric patient classifications. Dr. Miller has been a member of the Commission on Workforce for Hospitals & Health Systems of the American Hospital Association. She recently completed a four-year term on the National Advisory Council on Nurse Education and Practice of the U.S. Department of Health and Human Services, and she has served on the National Advisory Council of the National Institute of Nursing Research of the National Institutes of Health (NIH). Miller is Immediate Past President of the Board of the Friends of the National Institute of Nursing Research and is on the review/editorial board for IMAGE: Journal of Nursing Scholarship the online Journal of Nursing Education. She also serves on numerous corporate boards of directors, most notably the University of Kansas Hospital Authority.



Geri Budesheim Neuberger, RN, EdD

Professor

Dr. Neuberger is nationally recognized for her research on arthritis. Currently, her research is focused on a National Institutes of Health grant involving exercise among people who use wheelchairs. Neuberger previously was the principal investigator of a grant that examined symptom responses to exercise in rheumatoid arthritis. Other previous research includes studying the correlates of fatigue in people with rheumatoid arthritis, and the determinants of exercise and aerobic fitness in outpatients with arthritis.



Leonie Pallikkathayil, RN, DNS,

Associate Professor

Dr. Pallikkathayil has focused much of her academic and research efforts on fatigue, suicide, and self destructive behaviors. Pallikkathayil recently completed a National Institutes of Health funded grant to study the experiences of fatigue in healthy individuals. Other current research interests include chronic mental illness, and decision making and lifestyle modifications of individuals with psychiatric disorders.



Janet D. Pierce, DSN, ARNP, CCRN

Professor

Dr. Pierce is studying hemorrhagic shock and the effects on both the diaphragm and the lung using an animal model. Other research plans include investigating the effects of various oxygen concentrations on diaphragm and lung function following hemorrhagic shock and measuring diaphragm and lung apoptosis using fluorescent microscopy and hydrogen peroxide production using digital lazer scanning cytometry. It is the hope of the investigators that they will learn more about how oxygen affects the diaphragm and lung following a hemorrhagic event to understand how to assist patients who experience hypovolemic shock.

**Ubolrat Piamjariyakul, PhD, RN**

Research Assistant Professor

Dr. Piamjariyakul's program of research focuses on health care services delivery to improve outcomes across elders with heart failure. Piamjariyakul currently works on a nurse practitioner heart failure clinic appointment clinical trial grant and on an NINR-funded project related to caregiving in technology home care. Dr. Piamjariyakul also has conducted research identifying factors that result in nurse satisfaction and position retention.

**Sue Popkess-Vawter, RN, PhD**

Professor

Dr. Popkess-Vawter has received funding from the National Institute of Nursing Research for the study of Reversal Theory and motivation for overeating. Popkess-Vawter is in the process of developing an instrument of computerized tension measures to assess overeating, skipped exercise, and poor self-esteem. She continues her practice as a weight management clinical nurse specialist to apply study findings in intervention protocols for individuals and groups, and she is planning studies in weight management to examine spiritually-based interventions for adult women using holistic individual and group rural Telehealth interventions.

**Carol E. Smith, RN, PhD**

Professor

Dr. Smith's current research activities/interests are assisting patients and their family caregivers who manage chronic illnesses such as congestive heart failure and highly technical care in the home. Research subjects are families with adults dependent on mechanical respiratory assistance, total parenteral nutrition infusions or other complex devices and all family members including children. Dr. Smith has developed and replicated structural equational modeling across populations to transform the Caregiving Effectiveness Model into a midrange theory to guide practice. Interventions tested include: CPAP adherence support via in-home Telehealth, computer systems that guide symptom monitoring, and use algorithm guides or iPhone interactive technology for daily technology care. Dr. Smith developed interactive patient education on the Internet for adherence to HPN guidelines for reducing infusion catheter sepsis, managing depression, and for monitoring economic and managing human resources of the family.

**Cynthia S. Teel, RN, PhD**

Associate Professor

Dr. Teel is coordinating a study of innovative models for enhancing capacity and quality in undergraduate clinical nursing education programs. Other research interests include testing a Self-Care TALK intervention partnership between nurses and older spouse caregivers of stroke survivors and spouses caring for persons with dementia. Dr. Teel's previous research includes a project with the Kansas State Board of Nursing to describe the clinical educational capacity for pre-licensure nursing students in Kansas. Other studies include the Kansas Memory Assessment Project, dementia diagnosis studies, development and testing of a music and movement intervention to promote older adult health, fatigue in spouse caregivers of persons with dementia, Parkinson's disease, or cancer and non-caregiving older spouses, and an investigation of family caregiver experiences after stroke.

**Karen A. Wambach, RN, PhD**

Associate Professor

Dr. Wambach's research program deals with issues related to breastfeeding promotion and support. Dr. Wambach recently completed an NINR-funded randomized clinical trial that examined the promotion and support of breastfeeding in adolescents. This study tested a comprehensive prenatal, in-hospital, and postpartum intervention composed of lactation consultant and peer counselor education and support to impact breastfeeding decision-making, initiation and duration in teenage mothers fifteen to eighteen years of age. Currently Dr. Wambach and her team are disseminating the results of the study which was very successful in enhancing breastfeeding initiation and duration among teenaged mothers.

**Judith J. Warren, PhD, RN, BC, FAAN, FACMI**

Christine A. Hartley Centennial Professor

Dr. Warren's research activities and interests include (1) designing and testing data structures that support nursing data, information, and knowledge; (2) testing Web 2.0 tools in the classroom and online classroom; (3) developing, modeling, and mapping nursing terminologies to terminologies of other healthcare disciplines to ensure interoperability; (4) testing approaches for developing evidence-based practice protocols; and (5) evaluating the use of the electronic patient record as an educational teaching strategy.

**Kristine Williams, RN, PhD, APRN, FNP-BC**

Associate Professor

Dr. Williams' research program focuses on improving nursing care for older adults who require support in long term care settings, specifically focused on communication, cognition, and caregiving issues. Dr. Williams is currently funded by the National Institutes of Nursing Research in support of a study using behavioral and psycholinguistic analyses of video-recorded caregiving interactions to determine the impact of nursing staff elderspeak communication on problem behaviors of care recipients with dementia.

**Phoebe Daus Williams, RN, PhD, FAAN**

Professor

Dr. Williams' current research involves calibration of the Therapy-Related Symptom Checklist for Children (TRSC-C). An adult version of the scale (TRSC) has been developed and used in studies in the USA, China, Hong Kong, Thailand, and Manila. Williams also has conducted an NIH-funded large randomized controlled trial study on interventions for siblings and parents of children with chronic illness. Williams previously has conducted research that examined hospitalized child parent stress and sleep onset latency, as well as research on mothers' developmental timetables for young children in southeast Asia, and a National Institute of Mental Health-funded, camp-based experience for siblings of children with chronic disease.

**Anita L. Wingate, RN, PhD**

Associate Professor

Dr. Wingate's research interests focus on factors relative to fatigue and quality of life in oncology patients, and issues of nursing education related to predicting determinants of academic success, such as NCLEX pass rate and nursing program completion.

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