

School of Nursing

Doctor of Philosophy (PhD)

Research Interests of PhD Council Members

Research Focus

Alcohol use during pregnancy, substance use in rural populations; Postpartum Hemorrhage and PTSD (Susan Albrecht, PhD, RN, CRNP, FAAN)
Genetic, genomic, epigenetic, and protein biomarkers of acute brain recovery (delirium, aneurysmal subarachnoid hemorrhage, and traumatic brain injury). Delirium in the ICU, physical and cognitive recovery in ICU survivors. Gut microbiome-brain interactions in critical illness (Sheila Alexander, PhD, RN, FCCM)
Biomedical modeling, myocardial infarction, ECG detection of ischemia, sudden cardiac death, metabolic syndrome, cardiovascular risk stratification, prehospital care, and firefighters' cardiovascular fitness (Salah Al-Zaiti, PhD, RN, ANP-BC, FAHA)
Cognitive function associated with cancer and cancer therapy and underlying biobehavioral mechanisms. Use of physical activity to improve cognitive function. Adherence to cancer therapy and how disease and treatment-related symptoms influence adherence to therapy. (Catherine Bender, PhD, RN, FAAN)
Smoking cessation during pregnancy and relapse-prevention in young women. Tobacco related health disparities. Childbearing age women and use of non-tobacco products (e.g., electronic cigarettes and maternal mortality/morbidity.) (Betty Braxter, PhD, CNM)
Conduct of clinical trials to establish efficacy of behavioral interventions targeting cardiovascular risk reduction and weight loss; integration of mHealth methods and use of technology in assessment and intervention delivery, use of ecological momentary assessment (EMA) to examine triggers of relapse following intentional weight loss; objective measures of adherence and strategies to improve treatment adherence and long-term engagement. (Lora E. Burke, PhD, MPH, FAHA, FAAN)
Physical function during and after cancer treatment; technologically aided assessment of balance and gait changes during treatment for gynecologic cancer; assessment and intervention to improve patient and caregiver function during treatment for gynecologic cancer. (Grace Campbell, PhD, MSW, RN, CNL, CRRN)
Conducts research in the field of technology delivered interventions in applied behavioral science, with a focus on enhancing reproductive health in ethnically diverse adolescent girls with diabetes. (Denise Charron-Prochownik, PhD, RN, CPNP, FAAN)
Diabetes and other chronic disorders. Factors that influence sleep, sleepiness, and daytime activity in persons with chronic disorders; explicating the relationships between sleep disorders including insomnia, obstructive sleep apnea, daytime sleepiness and functional outcomes in persons with type 2 diabetes. (Eileen Chasens, PhD, RN, FAAN)
Improving long-term physical and psychological outcomes of intensive care unit (ICU) survivors and their family caregivers; Telerehabilitation-based home exercise intervention to improve self-management of exercise and physical activity after lung transplantation (JiYeon Choi, PhD, RN)
Harnessing omics approaches to understand the biological underpinnings of patient outcomes, symptom development, and disease susceptibility. (Yvette Conley, PhD, FAAN)
Psychological, physical, and behavioral health outcomes for women and children in Intimate Partner Violence (IPV) who do or do not seek court-ordered Protection From Abuse; use of technology and social networking in preventing or reducing violent relationships. (Rose E. Constantino, PhD, JD, RN, FAAN, FACFE)
Research focus: Health promotion and illness prevention in families with young children; Family-centered approaches to help families with preschool children adopt and sustain healthy eating, activity, and sleep behaviors. Use of event history calendars as a self-regulation method to decrease obesity in families with young children. (Cynthia A. Danford, PhD, RN, PNP-BC, CPNP-PC)
Human lactation, breastfeeding support interventions addressing physiological/psychological/perceptual barriers to exclusive and continued breast milk feeding, impact of breastfeeding on maternal cardiovascular health, qualitative research, health communication, maternal-infant health (Jill Demirci, PhD, RN, IBCLC)
Health-related quality of life after transplantation; patient engagement; active partnerships between patients and clinicians; mHealth; technology-based self-management, qualitative research, and mixed-methods analysis techniques (Annette DeVito Dabbs, PhD, RN, ACNS-BC, FAAN)
Cancer symptom assessment and management; technology-supported self-management for families facing cancer; implementation of family caregiver support into clinical systems; development and testing of dyadic interventions including dyadic risk assessment and mechanisms of behavior change. (Heidi Donovan, PhD, RN)
Genetic factors in chronic diseases; Microbiology (Janice S. Dorman, PhD, MS)

Nutrition, sleep, and Cardiovascular risk factors in athletes in low-resourced neighborhoods; health promotion in preteen girls. Reproductive Health: Social Media, Puberty and Depression in early teen girls; kinship care of vulnerable populations. (Willa Doswell, PhD, RN, FAAN)
Adherence to treatment regimen in chronic disorders including measurement and intervention; healthy nurse workplace (Jacqueline Dunbar-Jacob, PhD, RN, FAAN)
Gerontology, women's health and urinary incontinence (Sandra Engberg, PhD, RN, CRNP, FAAN)
Sleep in caregivers and children with a chronic illness, stress, symptom management, chronic illness (Christine Feeley, PhD, MSN, RN)
Genomics and proteomics of preeclampsia, women's health, pregnancy complications (Sandra Founds, PhD, FNP, CNM)
Genomics associated with malignant hyperthermia and postoperative pain; Thermoregulation; Simulation; Anesthesia care in low and middle income countries. (Richard Henker, PhD, RN, CRNA, FAAN)
Teaching/learning strategies to support the acquisition of skills, understanding and knowledge relevant to graduate and undergraduate students. Interprofessional collaboration strategies and health policy initiatives. (Rosemary L. Hoffmann, PhD, RN, CNL)
Critical and intensive care, including hemodynamic instability--recognition, prediction, and responses, hemodynamic monitoring, and subarachnoid hemorrhage and neurocardiac injury; machine learning approaches to pattern recognition in electronic health record and monitoring data (Marilyn Hravnak, PhD, RN, ACNP-BC, CCNS, FCCM, FAAN)
The impact of sleep and sleep disturbances on healthy lifestyle behaviors; primary prevention of coronary heart disease (CHD) in high-risk individuals; the genomics of CHD (Christopher Imes, PhD, RN)
Transition to work, Nursing Workforce and job satisfaction (Julius Kitutu, PhD, MSc, MEd)
Big data analysis using various methods including network analysis, text mining, and traditional statistical approaches; structuring and delivering health information through the Internet to diverse groups especially on gynecologic cancer patients and caregivers; Learning health systems (Young Ji Lee, PhD, MS, RN)
Behavioral interventions targeting cardiovascular risk reduction, weight loss, and cognitive functioning for people with serious mental illness; physical activity. (Heeyoung Lee, PhD, PMHNP-BC)
Chronic wound assessment and management, medical image analysis, machine learning and deep learning approach to identify and predict cardiopulmonary and hemodynamic crisis at intra- or post-operative periods from data at AIMS (anesthesia information management systems) (Dan Li, PhD, RN)
Gerontology, provider-patient communication, research ethics (Jennifer H. Lingler, PhD, MA, CRNP, FAAN)
Comorbid sleep disorders and their impact on health outcomes in patients with chronic medical conditions (Faith Luyster, PhD)
Evaluation of emerging technologies designed to enhance health, independence, and quality of life among community-residing older adults and family caregivers (Judith Tabolt Matthews, PhD, MPH, RN)
Mental health outcomes research; bereavement following sudden, unnatural death specifically by suicide ; complicated grief; alcohol and drug use/misuse, Screening, Brief Intervention, Referral to Treatment (SBIRT) for alcohol, tobacco, or other drug use/misuse; opiate epidemic (Ann Mitchell, PhD, RN, AHN-BC, FIAAN, FAAN)
Education of primary care clinicians especially nurse practitioners; focuses on pediatric health, genetics, and opioid and alcohol use. (Donna Nativio, PhD, CRNP, FAAN, FAANP)
Simulation instructional methodologies, translation of simulation outcomes in clinical care, epidemiology of provider injury, patient safety (John O'Donnell, RN, CRNA, MSN, DrPH)
Mental health; Substance use screening; Coping in adolescents, adults, and aging populations; MilTeenChat App for military teens (Kathryn Puskar, DrPH, RN, FAAN)
Biostatistics including longitudinal data analysis, meta-analysis and novel statistical methods in outcome research. (Dianxu Ren, MD, PhD)
The influence of symptoms and distress on racial treatment disparity in cancer care. The patterns of disease, treatment and support needs of women with metastatic breast cancer. The preparation of nurses and advanced practice providers for the delivery of cancer care. (Margaret Quinn Rosenzweig, PhD, CRNP-C, AOCN, FAAN)
Adherence to chronic disorder regimens with a particular focus on adherence to physical activity regimen; use of MHealth and other technology for outcome assessment and self-monitoring during intervention delivery in patients with chronic disorders (Elizabeth Schlenk, PhD, RN, FAAN)
Statistics: modeling and assessment of longitudinal data; regimen adherence using multiple modes of measuring (Susan Sereika, PhD)