



## School of Nursing

## Research Focus

Genetic, genomic, epigenetic, microbiomic, and protein biomarkers of acute brain recovery (ICU delirium, aneurysmal subarachnoid hemorrhage, and traumatic brain injury). Physical and cognitive recovery after critical care. Sheila Alexander, PhD, RN

Biomedical modeling, MI, ECG detection of ischemia, sudden cardiac death, metabolic syndrome, CV risk stratification, prehospital care, and firefighters' CV fitness. Salah Al-Zaiti, RN, CRNP, ANP-BC, PhD

Cognitive function with cancer and cancer therapy and underlying biobehavioral mechanisms. Physical activity to improve cognitive function. Adherence to cancer therapy and how symptoms influence adherence to therapy. *Catherine Bender, PhD, RN, FAAN* 

Smoking and personal vaporizers use among child-bearing age women. Strategies to reduce maternal mortality rate. *Betty Braxter, PhD, RN* 

Efficacy of behavioral interventions targeting CV risk reduction and weight loss; mHealth methods and technology in assessment and intervention delivery, ecological momentary assessment 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 and intervention to improve patient and caregiver function during treatment for gynecologic cancer. *Grace Campbell, PHD, MSW, RN, CNL, CRRN* 

Technology delivered interventions in applied behavioral science, with focus on enhancing reproductive health in ethnically diverse adolescent girls with diabetes. *Denise Charron-Prochownik, PhD, RN, CPNP, FAAN* 

Relationships between sleep disorders including insomnia, obstructive sleep apnea, daytime sleepiness with functional outcomes and health-related quality of life in persons with chronic disorders or in palliative care. *Eileen Chasens, PhD, RN, FAAN* 

Harnessing omics approaches to understand the biological underpinnings of patient outcomes, symptom development, and disease susceptibility. Yvette Conley, PhD

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; technology and social networking in preventing IPV and elder abuse. *Rose E. Constantino, PhD, JD, RN, FAAN, FACFE* 

Family-centered approaches to help children adopt and sustain healthy eating, physical activity, and sleep behaviors to decrease obesity risk. Mixed methodology including use of event history calendars and transformational gaming. Cynthia Danford, PhD, CRNP, PPCNP-CP, CPNP-BC

Human lactation, breastfeeding support interventions, impact of breastfeeding/lactation on maternal CV health, qualitative research, health communication, maternal-child 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* 

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 mechanisms of behavior change. *Heidi Donovan, PhD, RN* 

Nutrition, sleep, and CV 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

Patient adherence to treatment particularly measurement; doctoral education in nursing. 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 chronic illness, stress, symptom management, chronic illness. *Christine Feeley, PhD, RN* 

Genomics and proteomics of preeclampsia, women's health, pregnancy complications. Sandra Founds, CNM, FNP, PhD

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 acquisition of skills, understanding and knowledge relevant to graduate and undergraduate students. Interprofessional collaboration strategies and health policy initiatives.

Rosemary Hoffmann, PhD, RN

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 EHR and monitoring data. *Marilyn Hravnak, PhD, RN, CRNP-CS, CCRN, FCCM, FAAN* 

Impact of sleep and sleep disturbances on healthy lifestyle behaviors; primary prevention of coronary heart disease in high-risk individuals; genomics of sleep and CHD. *Christopher Imes, PhD, RN* 

Transition to work, Nursing Workforce and job satisfaction. Julius Kitutu, PhD

Big data analysis using network analysis, text mining; structuring and delivering health information to diverse groups especially gynecologic cancer patients and caregivers; learning health systems. *Young Ji Lee, PHD, MS,RN* 

Behavioral interventions targeting CV risk reduction, weight loss, and cognitive functioning for people with serious mental illness; physical activity. *Heeyoung Lee, PhD PMHNP* 

Gerontology, dementia, provider-patient communication, research ethics. Jennifer H. Lingler, PhD, CRNP

Comorbid sleep disorders and their impact on health outcomes in patients with chronic medical conditions. Faith Luyster, PhD

Health policy and health services research, primary care quality and access and payment policy, workforce analysis, aAdvanced practice provider policy and training. *Grant Martsolf, PhD, MPH, RN, FAAN* 

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; bereavement following sudden, unnatural death 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, CCRC, AHN-BC, FAAN* 

Simulation instructional methodologies, translation of simulation outcomes in clinical care, epidemiology of provider injury, patient safety, clinically and educationally focused QI evaluation. *John O'Donnell, CRNA, MSN, DrPH* 

Biostatistics including longitudinal data analysis, meta-analysis and novel statistical methods in outcome research. Dianxu Ren, MD, PhD

Influence of symptoms on racial treatment disparity in cancer care. Patterns of disease, treatment and support needs of women with metastatic breast cancer. Margaret Quinn Rosenzweig, PhD, CRNP-C, AOCNP

Adherence to chronic disorder regimens; focus on adherence to physical activity regimen; MHealth and technology for outcome assessment and self-monitoring during intervention delivery in patients with chronic disorders. *Elizabeth Schlenk, PhD, RN, FAAN* 

Statistics, including modeling and assessment of longitudinal data, structural equation modeling, and meta-analysis; regimen adherence using multiple modes of measuring. Susan Sereika, PhD

Caregiver and patient outcomes in persons with neurological disorders, primarily in neuro-oncology, neurosurgery, and aneurysmal subarachnoid hemorrhage. Biobehavioral interactions in distress and long term outcomes (e.g., neuropsychological function, return to work, depressive symptoms). *Paula Sherwood, PhD, RN, CNRN* 

Symptom management and symptom science with particular focus on the genomics and epigenomics of treatment-induced symptoms experienced by women with breast cancer. Susan W. Wesmiller, PhD, RN

Molecular pathogenesis of chronic and fibrotic wounds, wound healing and its inhibition at molecular, genomic, and cellular levels. Current wound healing models: skin, eye, heart, and lung. Cecelia C. Yates, PhD