RESEARCH AT THE SCHOOL OF NURSING

University of Minnesota
School of Nursing
Driven to Discover℠
EXPLORE, ENGAGE, EXCEL
AT THE SCHOOL OF Nursing

The mission of the School of Nursing is to generate knowledge and prepare nurse leaders who create, lead and participate in holistic efforts to improve the health of all people within the context of their environments.

The School of Nursing envisions a world where nurses lead collaborative efforts to attain optimal health for all people.

The school has two locations: one in the heart of the Twin Cities-Minneapolis/St. Paul and the second in Rochester, Minnesota.

THE UNIVERSITY OF Minnesota

Founded in 1851, the University of Minnesota is ranked 30th in the world by the Academic Ranking of World Universities and has the fourth largest main campus student body in the U.S. With University of Minnesota campuses in the Twin Cities, Duluth, Morris, Crookston and Rochester, our mission is three-fold:

Research and discovery
Teaching and learning
Outreach and public service
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A rich array of interprofessional research opportunities are available to faculty and students at the School of Nursing. Robust scholarly inquiry is central to the School of Nursing’s mission and is enhanced by close collaboration with schools and colleges within the University and its Academic Health Center comprised of: pharmacy, medicine, public health, dentistry, veterinary medicine and nursing.

Faculty lead innovative research and evidence-based practice projects with students, interdisciplinary colleagues, community partners and clinical affiliates.

School of Nursing Research Focal Areas

School of Nursing research addresses health issues across the life span in local, state, national and global contexts. Areas include:

- Health promotion among vulnerable populations
- Prevention and management of chronic health conditions
- Symptom management
- Health/nursing informatics and systems innovation
Research Support
The mission of the Office of Nursing Research and Scholarship is to support the School of Nursing’s goal to become a top-echelon, research-intensive school by:

- Providing a collaborative approach to delivering reliable, thorough and comprehensive grant assistance to faculty and students
- Serving as the School of Nursing hub for faculty and student research and scholarship activities
- Gathering and reporting research and information to link faculty and students to relevant resources

Funding
Funding is available on a competitive basis for pilot studies to launch faculty toward external funding success. Examples include:

- Academic Health Center funding
  Faculty development and seed grants
- Clinical and Translational Science Institute
  Career development and translational research grants
- The Office of the Vice President for Research
  Grant-in-Aid and transdisciplinary grants
Research and Scholarship Examples

Health Promotion among Vulnerable Populations
• Healthy family meals to prevent childhood obesity
• Community-based interventions to promote mental health among immigrants and refugees
• Healthy youth development interventions to reduce risky behaviors
• School nurse directed obesity prevention program

Prevention and Management of Chronic Health Conditions
• Comprehensive support for Alzheimer’s caregivers
• Exercise interventions to improve functioning in patients with Alzheimer’s disease, cancer, kidney disease, osteoarthritis or peripheral artery disease
• Preventing disabilities in frail elders
• Promoting healthy transitions into adulthood for youth with chronic illness
• Telehealth APRN care coordination intervention for children with complex chronic conditions

Symptom Management
• Development of mobile health strategies to monitor symptoms and improve health outcomes
• Management of urinary and fecal incontinence
• Reducing poststroke depressive symptoms
• Reducing fatigue and symptom distress in children undergoing cancer treatment

Health/Nursing Informatics and Systems Innovation
• Big Data research for transforming health care
• Developing analytic and predictive models to improve patient outcomes
• Improving quality and patient safety in multiple settings (e.g., acute care, home health, long-term care)
• Developing and testing natural data and informatics standards
Centers in the School of Nursing

Center for Adolescent Nursing
www.nursing.umn.edu/CAN

Center for Children with Special Health Care Needs
www.nursing.umn.edu/CCSHCN

Center for Child and Family Health Promotion Research
www.nursing.umn.edu/CCFHPR

Center for Gerontological Nursing
www.nursing.umn.edu/CGN

Center for Nursing Informatics
www.nursing.umn.edu/ICNP

Katharine J. Densford International Center for Nursing Leadership
www.nursing.umn.edu/Densford

Minnesota Hartford Center of Gerontological Nursing Excellence
www.nursing.umn.edu/Hartford
Connie White Delaney, PhD, RN, FAAN, FACMI
School of Nursing
Professor and Dean

Academic Health Center Director,
Biomedical Health Informatics (BMHI)

Associate Director, CTSI-BMI

• Knowledge representation standards/essential data
• Big data and knowledge discovery
• Interprofessional education and Triple Aim impact

Jehad Adwan, PhD, RN, MS
Clinical Assistant Professor

• Grief among pediatric nurses
• Diabetes management in children
Eunice Areba, PhD, RN, PHN
Clinical Assistant Professor

- Environmental, social and individual factors fostering healthy youth development
- Coping mechanisms in immigrant and refugee youth
- Drugs, substance use, violence and mental health in immigrant and refugee youth

Robin R. Austin, DNP, DC, MS, RN-BC
Clinical Assistant Professor

- Consumer health informatics/patient engagement
- Standardized terminologies
- Integrative health and healing

Melissa Avery, PhD, APRN, CNM, FACNM, FAAN
Professor

- Maternal confidence for physiologic birth
- Outcomes of nurse midwifery care in vaginal birth after Cesarean section
- Technology-enhanced learning
FACULTY EXPERTS

Linda Bearinger, PhD, RN, FAAN, FSAHM
Professor
• Health promotion and youth development with vulnerable adolescent populations
• Prevention of risky behavior, particularly around sexual health and violence involvement
• Health care services for adolescents and the competencies of health providers

Mary Benbenek, PhD, APRN, FNP, PNP
Clinical Associate Professor
• Immigrant health
• Adolescent health
• Bone health

Donna Bliss, PhD, RN, FAAN
Professor
• Health disparities related to incontinence, pressure ulcers and incontinence associated dermatitis
• Fecal incontinence and associated skin damage (dermatitis/pressure ulcers) epidemiology, assessment, management
• Caregiving for individuals with Alzheimer’s disease
Ulf Bronas, PhD, ATC, ATR, FSVM, FAHA
Assistant Professor
- Exercise interventions to prevent and manage chronic disease, particularly renal disease, peripheral artery disease and diabetes
- Vascular and cardiovascular pathophysiology
- Daily physical activity and exercise in older adults

Mary Chesney, PhD, APRN, CNP, FAAN
Clinical Associate Professor
- APN utilization in new models of health care delivery
- Family adjustment after international adoption
- Parent-child attachment/relationship
- Neurobiological, cognitive, social, and emotional effects of early childhood deprivation

Corjena Cheung, PhD, RN
Assistant Professor
- Yoga for older adults with osteoarthritis
- Use of mobile technology to improve exercise adherence and health
- Methods to enhance the quality of life for older adults with functional disabilities
Chih-Lin Chi, PhD, MBA
Assistant Professor

- Translational research for personalized health management
- Machine learning and knowledge discovery
- Treatment modeling and simulation

Thomas Clancy, PhD, MBA, RN, FAAN
Clinical Professor

- Computational modeling, simulation
- Social network analysis
- Agent-based modeling

Elaine Darst, PhD, APRN, CS, LCPC
Clinical Associate Professor

- Sexuality
- Cardiovascular disease, prostatectomy, disability and other illnesses affecting sexual function
Patrick Dean, EdD, RN  
*Clinical Assistant Professor*

- Cardio-vascular disease in African American faith communities
- Phenomenology of burnout among health care researchers
- Creating dementia-friendly communities

Mary Dierich, PhD, APRN, MSPH, GNP-C  
*Clinical Associate Professor*

- Safe transitions across care settings
- Effect of medication on re-admissions to hospitals
- Models of care for older adults

Laura Duckett, PhD, MPH, RN  
*Associate Professor*

- Breastfeeding of full-term and pre-term infants and maternal employment
- Maternal-infant-family health during the first year; parent-infant attachment
- Reiki touch for pre-term infants
Mary Findorff, PhD, MPH, RN
Clinical Assistant Professor
- Program evaluation
- Public health nursing education
- Violence prevention

Carol Flaten, DNP, RN, PHN
Clinical Assistant Professor
- Technology-enhanced education
- Vulnerable and underserved populations

Jayne Fulkerson, PhD
Associate Professor
- Family-based health promotion in community settings
- Child/adolescent obesity prevention through family meals at home
- Research methodology, evaluation, measurement and instrument development
Ann Garwick, PhD, RN, LMFT, LP, FAAN

Professor

- Children and youth with special health needs
- Cross-cultural health and culturally competent care
- Family health and stress caregiving, and coping

Carolyn Porta García, PhD, MPH, RN

Associate Professor

- Promoting healthy physical and emotional trajectories into adulthood
- Trans-disciplinary eco-health research to advance global health
- Use of mHealth and photovoice strategies in health promotion

Joseph Gaugler, PhD

Associate Professor

- Alzheimer’s disease and long-term care
- Longitudinal implications: care for disabled adults
- Effectiveness of services for caregiving families
Nasra H. Giama, DNP, RN, PHN
Clinical Assistant Professor
- Health disparities related to viral hepatitis and liver disease
- Adolescent health
- Refugee and immigrant health

Niloufar Niakosari Hadidi, PhD, APRN, ACNS-BC, FAHA
Associate Professor
- Problem-solving therapy to treat post-stroke depression
- Use of fMRI to determine neuron connectivity in stroke survivors following problem-solving therapy

Cynthia Gross, PhD
Professor
- Mindfulness interventions to reduce chronic insomnia and symptoms
- Quality of life in patients with chronic health conditions, and in transplant donors and recipients
- Patient-reported outcomes in clinical trials
Mary Catherine (Casey) Hooke, PhD, APRN, CNS, CPON  
Assistant Professor  
- Interventions for fatigue and related symptoms in children with cancer  
- Physical performance and exercise in children with cancer  
- Development in children with chronic illness

Merrie Kaas, PhD, APRN, PMHCNS, FGSA, FAAN  
Associate Professor  
- Nursing interventions: older adults with late-life depression  
- Advanced practice psychiatric mental health nursing  
- Caregiver training about late-stage dementia

Linda Olson Keller, DNP, RN, FAAN  
Clinical Professor  
- One Health  
- Evidence-based public health practice  
- Emotional intelligence and leadership in the workplace
FACULTY EXPERTS

Madeleine Kerr, PhD, RN
Associate Professor
- Intervention to prevent occupational hearing loss
- Latino worker health promotion
- Public health informatics

Laura Kirk, PhD, RN
Assistant Professor
- Gerontology
- Exercise
- Long-term Care

Mary Jo Kreitzer, PhD, RN, FAAN
Professor
- Mindfulness-based stress reduction to improve health outcomes
- Integrative care model to manage women with eating disorders
- Meditative movement and health outcomes of older adults
Kathleen Krichbaum, PhD, RN, FGSA, ANEF
Professor

- Complexity compression: factors influencing the nursing work environment
- Education interventions to improve nursing student learning outcomes including use of simulations
- Quality of long-term care delivered to elders

Martha Kubik, PhD, RN
Associate Professor

- Obesity prevention in children and youth
- Wellness policies and practice in the school environment
- Global health with a focus on youth
- Youth development and youth health promotion

Renee Kumpula, EdD, RN, PHN
Clinical Assistant Professor

- End-of-life nursing and spiritual care
- Learning assessment, adult learning theory and program evaluation
- Continuing professional development; online learning
Joan Liaschenko, PhD, RN, FAAN  
Professor  
- Clinical ethics, bioethics, feminist ethics and nursing ethics  
- Interdisciplinary communication and collaboration particularly in end-of-life care  
- Impact of the electronic health record on the nurse-patient relationship

Linda Lindeke, PhD, APRN, CNP, FAAN  
Associate Professor  
- High-risk infants: school-age outcomes of adverse events  
- Advanced practice nurse roles, strategies and policies  
- Care coordination; care quality metrics and outcomes

Ruth Lindquist, PhD, RN, ACNS-BC, FAHA, FAAN  
Professor  
- Enhancing quality of life for women with or at risk for cardiovascular disease  
- Adherence to health behavior change  
- Complementary and alternative therapies to reduce stress and anxiety
Wendy S. Looman, PhD, APRN, CNP  
**Associate Professor**  
• Family health care nursing  
• Quality of life among children and youth with special health care needs  
• Care coordination for children with medical complexity

Anne Chevalier McKechnie, PhD, RN, IBCLC  
**Assistant Professor**  
• Preparing process of expectant parents after fetal diagnoses  
• Adaptive work of parents caring for children born with complex health needs

Siobhan McMahon, PhD, MPH, APRN, GNP-BC  
**Assistant Professor**  
• Promoting lifestyle behaviors among older adults  
• Mobile health (mHealth) technology to enhance motivation for physical activity  
• Interventions to promote motivation for engagement in fall-reducing physical activity
FACULTY EXPERTS

Barbara McMorris, PhD
Associate Professor

- Prevention of risky health behaviors in adolescence
- Promotion of health among vulnerable populations
- Program evaluation, research methods and complex statistical modeling

Karen Monsen, PhD, RN, FAAN
Associate Professor

- Home visiting intervention effectiveness research
- Standardized terminology data research
- Data mining, data visualization, time-motion and machine learning methods

Christine Mueller, PhD, RN, FAAN
Professor

- Quality of care in nursing homes
- Long-term care nursing leadership
- Geriatric nursing education
- Nurse staffing and nursing practice models in long-term care
Susan O’Conner-Von, PhD, RN-BC, CHPPN
Associate Professor
• Pediatric pain and palliative care
• Spiritual care
• Web-based education for adolescents with cancer

Judith Pechacek, DNP, CENP, RN
Clinical Assistant Professor
• Leadership and organizational culture
• Interprofessional education and practice
• Informatics

Cynthia Peden-McAlpine, PhD, ACNS-BC
Associate Professor
• Qualitative methods
• Family/provider communication at end of life in ICUs
• Family end-of-life decision making
FACULTY EXPERTS

Daniel J. Pesut, PhD, RN, PMHCNS-BC, FAAN

Professor

• Nursing leadership
• Nursing education: creativity, innovation, teaching/learning
• Clinical reasoning

dpesut@umn.edu

Barbara Peterson, PhD, APRN, PMH-CNS

Clinical Assistant Professor

• Psychiatric and mental health problems in children/adolescents
• Interprofessional graduate education; integrative psychiatric mental health
• Trauma-related nightmares and post-traumatic stress in youth

pete1389@umn.edu

Jeanne Pfeiffer, DNP, MPH, RN, CIC

Clinical Assistant Professor

• Disaster preparedness
• Infection prevention
• Global health

pfeif052@umn.edu
Teddie Potter, PhD, RN
Clinical Associate Professor
• Partnership-based health care and interprofessional practice
• Diversity and inclusivity
• Design thinking and innovation

Lori Rhudy, PhD, APRN, ACNS, CNRN
Clinical Associate Professor
• Decision-making/clinical judgment
• Surveillance as a nursing intervention
• Neuroscience nursing

Deborah Ringdahl, DNP, APRN, CNM
Clinical Assistant Professor
• Integrative nursing practice
• Integrative health and women’s health
• Reiki practice and self care
Erica Schorr, PhD, BSBA, RN
Assistant Professor
• Cardiovascular disease and cardiac rehabilitation
• Interventions to increase physical activity, improve sleep and enhance quality of life
• Mobile health and integrative therapies for health promotion and disease prevention

Cheryl Robertson, PhD, MPH, RN, FAAN
Associate Professor
• Refugee trauma, stress and coping
• Climate variability, conflict and forced migration
• Community coping interventions

Melissa Saftner, PhD, APRN, CNM
Clinical Associate Professor
• Adolescent sexual risk behavior
• American Indian health promotion
• Confidence for physiologic birth
Kristine Talley, PhD, RN, GNP-BC  
*Assistant Professor*  
- Preventing excess disability and frailty in older adults  
- Nursing rehabilitation of older adults  
- Preventing and managing urinary incontinence in older adults

Renee Sieving, PhD, RN, FAAN, FSAHM  
*Associate Professor*  
- Promoting health and healthy development among vulnerable populations of young people  
- Preventing risky sexual behaviors, violence and school dropout among adolescents  
- Improving adolescent health services

Diane Treat-Jacobson, PhD, RN, FAAN  
*Associate Professor*  
- Outcomes of exercise training in patients with peripheral artery disease  
- Quality of life assessment and measurement  
- Early detection and management of peripheral artery disease
Eileen Weber, DNP, JD, RN, PHN  
*Clinical Assistant Professor*  
- Health care legal partnerships  
- Ethics and public policy  
- Interprofessional care coordination education

Bonnie L. Westra, PhD, RN, FAAN, FACMI  
*Associate Professor*  
- Big data analytics/data mining with electronic health record data  
- Data quality/standardization to create data warehouse for research  
- Nursing terminologies and minimum data set research

Kathryn Waud White, DNP, APRN, CRNA  
*Clinical Associate Professor*  
- Clinical doctoral education  
- Nurse anesthesia  
- Staffing models
Jean Wyman, PhD, APRN, GNP-BC, FAAN, FGSA
Professor

- Urinary incontinence
- Fall prevention in the elderly
- Exercise in older adults with chronic disease

Fang Yu, PhD, GNP, RN
Associate Professor

- Non-pharmacological interventions for improving cognition and function in older adults
- Aerobic exercise in older adults with dementia
School of Nursing Research Foci

Health Promotion Among Vulnerable Populations

Adwan, Jehad
Areba, Eunice
Austin, Robin
Avery, Melissa
Bearinger, Linda
Benbenek, Mary
Chesney, Mary
Cheung, Corjena
Dean, Patrick
Duckett, Laura
Findorff, Mary
Friedrich, Cheri
Fulkerson, Jayne
Garcia, Carolyn
Garwick, Ann
Giama, Nasra
Flaten, Carol
Hadidi, Niloufar
Hooke, Mary Catherine
Keller, Linda
Kerr, Madeleine
Krichbaum, Kathleen
Kubik, Martha
Kumpula, Renee
Lindeke, Linda
Lindquist, Ruth
McKechnie, Anne
McMorris, Barbara
Monsen, Karen
Pfeiffer, Jeanne
Peterson, Barbara
Robertson, Cheryl
Saftner, Melissa
Sieving, Renee
Talley, Kristine
Wyman, Jean
Yu, Fang

Prevention and Management of Chronic Health Conditions

Avery, Melissa
Bearinger, Linda
Bliss, Donna
Bronas, Ulf
Cheung, Corjena
Dean, Patrick
Fulkerson, Jayne
Garwick, Ann
Gaugler, Joseph
Gross, Cynthia
Hadidi, Niloufar
Hooke, Mary Catherine
Koa, Merrie
Kerr, Madeleine
Kirk, Laura
Kreitzer, Mary Jo
Kubik, Martha
Lindeke, Linda
Lindquist, Ruth
Looman, Wendy
McKechnie, Anne
McMorris, Barbara
Monsen, Karen
Peden-McAlpine, Cynthia
Robertson, Cheryl
Sieving, Renee
Talley, Kristine
Treat-Jacobson, Diane
Westra, Bonnie
Wyman, Jean
Yu, Fang

Symptom Management

Bliss, Donna
Cheung, Corjena
Dierich, Mary
Duckett, Laura
Garcia, Carolyn
Gaugler, Joseph
Gross, Cynthia
Hooke, Mary Catherine
Kaas, Merrie
Kreitzer, Mary Jo
Lindquist, Ruth
Monsen, Karen
O’Conner-Von, Susan
Peden-McAlpine, Cynthia
Robertson, Cheryl
Schorr, Erica
Talley, Kristine
Treat-Jacobson, Diane
Westra, Bonnie
White, Kathryn
Wyman, Jean
Yu, Fang
Health/Nursing Informatics and Systems Innovation

Austin, Robin
Benbenek, Mary
Chesney, Mary
Chi, Chi-H-Lin
Clancy, Thomas
Dean, Patrick
Delaney, Connie
Dierich, Mary
Duckett, Laura
Friedrich, Cheri
García, Carolyn
Garwick, Ann
Giama, Nasra
Keller, Linda
Kerr, Madeleine
Krichbaum, Kathleen
Liaschenko, Joan
Lindeke, Linda
Looman, Wendy
McMahon, Siobhan
Monsen, Karen
Mueller, Christine
Pechacek, Judith
Pesut, Daniel
Pfeiffer, Jeanne
Weber, Eileen
Westra, Bonnie
White, Kathryn
Yu, Fang
Academic Health Center Research Corridors

**Diabetes**
Avery, Melissa  
Bronas, Ulf  
Fulkerson, Jayne  
Garcia, Carolyn  
Gross, Cynthia  
Kreitzer, Mary Jo  
Kubik, Martha

**Infectious Disease**
Bearerger, Linda  
Bliss, Donna  
Duckett, Laura  
Garcia, Carolyn  
Sieving, Renee

**Neurosciences**

*Neurodevelopment and Mental Health*
Bearerger, Linda  
Chesney, Mary  
Garcia, Carolyn  
Garwick, Ann  
Gross, Cynthia  
Hadidi, Niloufar  
Kaas, Merrie  
Kreitzer, Mary Jo  
Lindeke, Linda  
Looman, Wendy  
Peterson, Barbara  
Robertson, Cheryl  
Sieving, Renee  
Yu, Fang

*Memory Research and Care*
Bliss, Donna  
Gaugler, Joseph  
Kaas, Merrie  
McMahon, Siobhan  
Yu, Fang

**Cancer**
Fulkerson, Jayne  
Gaugler, Joseph  
Hooke, Mary Catherine  
Kreitzer, Mary Jo  
Kubik, Martha  
O’Conner-Von, Susan

**Cardiovascular Disorders/Health**
Bronas, Ulf  
Fulkerson, Jayne  
Hadidi, Niloufar  
Kirk, Laura  
Kubik, Martha  
Lindquist, Ruth  
Schorr, Erica  
Treat-Jacobson, Diane
Ann Garwick, PhD, RN, LP, LMFT, FAAN
Senior Executive Associate Dean for Research
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