RESEARCH
AT THE SCHOOL
OF NURSING

University of Minnesota
School of Nursing
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.

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, 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 post-stroke 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 Aging Science and Care Innovation
Launching this year

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

Jehad Adwan, PhD, RN
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, 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
- Exercise and pregnancy
- Interprofessional education
Barbara Beacham, PhD, RN  
Assistant Professor  
- Family management  
- Children with chronic health conditions  
- Diabetes mellitus

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, CPNP  
Clinical Associate Professor  
- Immigrant health  
- Adolescent health  
- Bone health

Rozina Bhimani, PhD, DNP, APRN, FNP-BC, CNE  
Assistant Professor  
- Symptom experiences in movement disorders  
- Neurological and musculoskeletal disabilities, symptom experiences and management issues  
- Patients and clinicians communication issues, patient safety and shared decision making

Donna Bliss, PhD, RN, FAAN, FGSA  
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

Barbara Champlin, PhD, RN  
Clinical Assistant Professor  
- Alzheimer’s disease: Impact on caregivers  
- Qualitative research: Phenomenology  
- Veteran-centered care: Preparation of nursing students
Mary Chesney, PhD, APRN, CPNP, FAAN
Clinical Associate Professor
• APRN 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, FGSA
Assistant Professor
• Yoga for managing osteoarthritis in older adults
• Yoga for improving stress and motor/non-motor functions in individuals with Parkinson’s disease
• Use of mobile technology to improve yoga adherence and symptom management

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, PMHCNS-BS, LCPC
Clinical Associate Professor
• Sexuality
• Cardiovascular disease, prostatectomy, disability and other illnesses affecting sexual function

Patrick Dean, EdD, RN, OSTJ
Clinical Assistant Professor
• Caring science and technology in nursing
• Cardiovascular health in African American people
• Dementia friendly communities
Mary Dierich, PhD, APRN, GNP-C, MSPH  
*Clinical Associate Professor*  
- Safe transitions across care settings  
- Effect of medication on readmissions to hospitals  
- Models of care for older adults  

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

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  

Jayne Fulkerson, PhD  
*Professor*  
- Family-based health promotion in community settings  
- Child/adolescent obesity prevention through family meals at home  
- Research methodology, evaluation, measurement and instrument development  

Mary Findorff, PhD, MPH, RN  
*Clinical Associate Professor*  
- Program evaluation  
- Public health nursing education  
- Violence prevention  

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
Joseph Gaugler, PhD  
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

Mary Catherine (Casey) Hooke, PhD, APRN, PCNS-BC, 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

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

Melissa Horning, PhD, RN, PHN  
Assistant Professor  
• Community-engaged, health promotion research with children, youth and families  
• Social ecological influences on adolescent health behaviors and nutrition  
• Public health nursing
Merrie Kaas, PhD, APRN, PMHCNS-BC, FGSA, FAAN
Associate Professor
- Nursing interventions: older adults with late-life depression
- Advanced practice psychiatric mental health nursing
- Caregiver training about late-stage dementia

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

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

Kathleen Krichbaum, PhD, RN, ANEF, FGSA, FAAN
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

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

Penny Kessler, DNP, RN
Clinical Assistant Professor
- Integrative nursing
- Symptom management
- Reflective practice

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

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- Exercise
- Long-term care

Penny Kessler, DNP, RN
Clinical Assistant Professor
- Integrative nursing
- Symptom management
- Reflective practice
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, CPNP, 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, FAHA, FAAN
Professor
• Enhancing quality of life for people 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, CPNP
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
FACULTY EXPERTS

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

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

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

Christine Mueller, PhD, RN, FGSA, 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

Barbara McMorriss, PhD
Associate Professor
• Prevention of risky health behaviors in adolescence
• Promotion of health among vulnerable populations
• Program evaluation, research methods and complex statistical modeling

Susan O’Conner-Von, PhD, RN-BC, CHPPN
Associate Professor
• Pediatric pain and palliative care
• Spiritual care
• Web-based education for adolescents with cancer
FACULTY EXPERTS

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

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Daniel J. Pesut, PhD, RN, PMHCNS-BC, FAAN
Professor
- Nursing leadership
- Nursing education: creativity, innovation, teaching/learning
- Clinical reasoning

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

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Barbara Peterson, PhD, APRN, PMHCNS-BC
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

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

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Jeanne Pfeiffer, DNP, MPH, RN, CIC, FAAN
Clinical Associate Professor
- Disaster preparedness
- Infection prevention
- Global health

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Carolyn M. Porta, 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

Teddie Potter, PhD, RN, FAAN  
**Clinical Associate Professor**  
- Partnership-based health care, interprofessional practice and interdisciplinary studies  
- Diversity and inclusivity  
- Design thinking and innovation

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

Deborah Ringdahl, DNP, APRN, CNM  
**Clinical Associate Professor**  
- Integrative nursing practice  
- Integrative health and women’s health  
- Reiki practice and self care

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
Dereck Salisbury, PhD
Clinical Assistant Professor
- Aerobic exercise training and its effects on tissue perfusion and metabolism in patients with peripheral artery disease
- The anti-inflammatory and antioxidant effects of exercise training

Erica Schorr, PhD, 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

Renee Sieving, PhD, RN, FAAN, FSAHM
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

Kristine Talley, PhD, APRN, 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

Diane Treat-Jacobson, PhD, RN, FAAN
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, RN, GNP-BC, FGSA, FAAN
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
- Beacham, Barbara
- Bearinger, Linda
- Benbenek, Mary
- Champlin, Barbara
- Chesney, Mary
- Cheung, Corjena
- Dean, Patrick
- Duckett, Laura
- Findorff, Mary
- Flaten, Carol
- Friedrich, Cheri
- Fullerson, Jayne
- Garwick, Ann
- Giama, Nasra
- Hadidi, Niloufar
- Hooke, Mary Catherine
- Horning, Melissa
- Keller, Linda
- Kerr, Madeleine
- Krichbaum, Kathleen
- Kubik, Martha
- Kumpula, Renee
- Lindeke, Linda
- Lindquist, Ruth
- McKechnie, Anne
- McMorris, Barbara
- Monsen, Karen
- Pfeiffer, Jeanne
- Peterson, Barbara
- Porta, Carolyn
- Ringdahl, Deborah
- Robertson, Cheryl
- Saftner, Melissa
- Sieving, Renee
- Talley, Kristine
- Wyman, Jean
- Yu, Fang

**Prevention and Management of Chronic Health Conditions**
- Adwan, Jehad
- Avery, Melissa
- Beacham, Barbara
- Bearinger, Linda
- Bhimani, Rozina
- Bliss, Donna
- Cheung, Corjena
- Dierich, Mary
- Duckett, Laura
- Gaugler, Joseph
- Gross, Cynthia
- Hooke, Mary Catherine
- Kaas, Merrie
- Kessler, Penny
- Kreitzer, Mary Jo
- Lindquist, Ruth
- McMahon, Siobhan
- Monsen, Karen
- O’Conner-Von, Susan
- Peden-McAlpine, Cynthia
- Peterson, Barbara
- Porta, Carolyn
- Robertson, Cheryl
- Salisbury, Derrick
- Schorr, Erica
- Talley, Kristine
- Treat-Jacobson, Diane
- Westra, Bonnie
- White, Kathryn
- Wyman, Jean
- Yu, Fang

**Symptom Management**
- Bhimani, Rozina
- Bliss, Donna
- Cheung, Corjena
- Dierich, Mary
- Duckett, Laura
- Gaugler, Joseph
- Gross, Cynthia
- Hooke, Mary Catherine
- Kaas, Merrie
- Kessler, Penny
- Kreitzer, Mary Jo
- Lindquist, Ruth
- McMahon, Siobhan
- Monsen, Karen
- O’Conner-Von, Susan
- Peden-McAlpine, Cynthia
- Peterson, Barbara
- Porta, Carolyn
- Robertson, Cheryl
- Salisbury, Derrick
- 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, Chih-Lin
- Clancy, Thomas
- Dean, Patrick
- Delaney, Connie
- Dierich, Mary
- Duckett, Laura
- Flaten, Carol
- Friedrich, Cheri
- Garwick, Ann
- Giama, Nasra
- Keller, Linda
- Kerr, Madeleine
- Kessler, Penny
- Kirk, Laura
- Krichbaum, Kathleen
- Kumpula, Renee
- Liaschenko, Joan
- Lindeke, Linda
- Looman, Wendy
- McMahon, Siobhan
- Monsen, Karen
- Mueller, Christine
- Pechacek, Judith
- Peden-McAlpine, Cynthia
- Pesut, Daniel
- Peterson, Barbara
- Pfeiffer, Jeanne
- Porta, Carolyn
- Potter, Toddie
- Salisbury, Derrick
- Weber, Eileen
- Westra, Bonnie
- White, Kathryn
- Yu, Fang
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