continuum
A Research Publication
Issue #2

Montana State University
College of Nursing
Excellence in Research

a range or series of things that are slightly different from each other and that exist between two different possibilities

Greetings From The Associate Dean

Excellence in Research

Dr. Sandra Benavides-Vaello
Dr. Peter Buerhaus
Dr. Yoshiko Colclough
Dr. Tracy Hellem
Dr. Wade Hill
Dr. Elizabeth Kinion
Dr. Sandra Kuntz
Dr. Laura Larsson
Dr. Susan Luparell
Dr. Dorothy “Dale” Mayer
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Dr. Christina Sieloff
Dr. Donna A. Williams
Dr. Charlene “Charlie” Winters
Greeting from the Associate Dean for Research and Graduate Education

Welcome to an overview of researchers in the College of Nursing at Montana State University. In the pages that follow I am proud to present the college's research portfolio and give you a little insight into those in our college who shoulder our portion of the Montana State University research mission.

Never has there been a greater need for careful, well-designed, and relevant research in health care than now and never has there been a greater calling for those who can solve problems through systematic inquiry. As you read, I think you will agree that the researchers in the College of Nursing are answering the call. Thanks to each of them for hearing the voices of those who need them most, dreaming big, and seeking important answers as the future unfolds.

Hard work, perseverance, intelligence, vision, energy, focus, tenacity, leadership, passion, clinical insight, inspired, and inspiring are some of the ways I like to describe those who contribute to the research mission in the College of Nursing. I think you will agree – enjoy!

Most Sincerely,
Donna A. Williams, PhD

Acknowledgements
A very special thank you to Susan Myers-Clack, Office of Research, Program Manager for creative design and overall direction of "Continuum, Issue 2"
Much of Dr. Benavides-Vaello’s research is conducted in collaboration with community health centers and religious institutions. Currently, she is engaged in a bi-national study (Peru and United States) examining the use of CAM, particularly herbal remedies, by low income Latinos for the treatment/management of chronic conditions. She has just joined a study, as a consultant, related to the use of promotores in South-Western Montana. Other research efforts include the use of nurse navigation and increased patient engagement for the management of diabetes and hypertension and related co-morbid conditions among low income Latinos.

Dr. Benavides-Vaello is bilingual (English/Spanish) and was raised in a rural community close to the Texas/Mexico border. She has a passion for working with low-income Latinos, and most of her research has included Spanish-speaking participants.


Peter Buerhaus, PhD, RN, FAAN

Profile
Dr. Buerhaus focuses on the nursing workforce and involves studies on the economics of the nursing workforce, forecasting nurse and physician supply, developing and testing measures of hospital quality of care, determining public and provider opinions on issues involving the delivery of health care, and assessing the quantity and quality of health care provided by nurse practitioners.

Doctorate: Wayne State University
Contact Dr. Buerhaus: peter.buerhaus@montana.edu

Research
Dr. Buerhaus has developed teams of interdisciplinary health services researchers in each of the areas listed in his profile. Currently he is assessing the views of nurse practitioners and primary care physicians and analyzing Medicare claims data to determine the types, quantities, costs and quality of primary care services provided to Medicare beneficiaries by nurse practitioners.

Current Funded Research
"Determining the Quality of Primary Care Provided to Medicare Beneficiaries by Nurse Practitioners" Source: American Association of Nurse Practitioners
"Determining the Impact of the Johnson & Johnson Campaign for Nursing's Future on Increasing the Number of People Becoming Registered Nurses" Source: Johnson & Johnson
"Health Worksource Studies Program" Source: Gordon & Betty Moore Foundation

Interesting Facts
Dr. Buerhaus has published roughly 110 articles, 5 of which are designated as “classics” by the Agency for Healthcare Research and Quality (AHRQ) Patient Safety Network. Several publications have ranked among the most widely accessed articles published in the health policy journal Health Affairs. And, some of the studies he has published were instrumental in the development of the Johnson & Johnson Campaign for Nursing’s Future, the development and passage of national legislation, and the adoption of quality of care measures associated with nursing by the Centers for Medicare and Medicaid Services, the Joint Commission, and other leading quality and financing organizations.

Key Research-related Publications
Dr. Colclough’s current research program is called “Comforting Toward Your Wishes.” The aims are to help rural reservation patients with chronic illnesses, especially cancer, and their families improve quality of life and make informed choices on treatments and care. Partnering with Blackfeet members, Dr. Colclough is investigating the effectiveness and sustainability of a lay health educator intervention in palliative and hospice care intended for Blackfeet patients and families. The intervention will be used to increase their knowledge of and decrease the burden of illnesses, treatments, and care.

Profile
Dr. Colclough’s research centers on generational and cultural differences in end-of-life decision making, especially minority populations, in particular Japanese Americans and American Indians. More broadly, her interests include nursing ethics, qualitative methods, the community-based participatory research approach, gerontology, mixed methods, and family caregiver topics.

Doctorate: Oregon Health & Science University
Contact Dr. Colclough: yoshikoc@montana.edu

Funded Research
“End-of-Life Decision Making and Quality Care for American Indians’ Source: Livestrong Foundation

Interesting Facts
When Dr. Colclough introduces herself either in-person or on the phone, she usually cautions the person she is speaking to about her Japanese accent. Dr. Colclough recalled making an interview appointment with a research participant and blurted out “I am Japanese.” Her participant immediately responded saying “I am American Indian.” Dr. Colclough stated that she immediately liked the way the woman thought.

Key Research-related Publications
Tracy Hellem, PhD, RN

Profile
Dr. Hellem's research interests include exploring novel treatment approaches to manage mood symptoms among individuals with substance use disorders. She specifically focuses on comorbid depression and anxiety and methamphetamine dependence, as there currently are no effective pharmacological treatments for methamphetamine dependence, and comorbid mood symptoms that confound treatment outcomes.

Doctorate: University of Utah

Contact Dr. Hellem: tracy.hellem1@montana.edu

Research
Dr. Hellem is currently conducting a study of creatine monohydrate for men and women methamphetamine users with depression and anxiety. Creatine has been shown to be an effective adjunctive treatment for adult women with major depressive disorder in a randomized controlled trial. In addition, creatine was associated with a reduction in methamphetamine use and depressive and anxiety symptoms in women methamphetamine users. Her current study is the first clinical trial of creatine for depression to include both men and women. Dr. Hellem is also working on a descriptive study of substance use characteristics of individuals living in Missoula, Montana.

Interesting Facts
Studying methamphetamine dependence is very challenging, as the participants are unreliable, complicated and unpredictable. This challenge has taught Dr. Hellem to be more compassionate and understanding of individuals who lead lives that are different from hers. She often hears people stereotype and stigmatize those who struggle with substance use disorders and/or mental illness, and Dr. Hellem said she has learned from her participants that they are simply people with a disease.

Key Research-related Publications


Wade Hill, PhD, APRN-BC

Profile
Dr. Hill is a public health clinician and researcher who investigates ecological determinants of human environmental exposures.

Doctorate: Oregon State University

Contact Dr. Hill: whill@montana.edu

Research
Dr. Hill’s research focuses on current and emerging threats to rural public health. To date, Dr. Hill has worked with populations experiencing chronic illness and a variety of environmental threats including exposures to radon, asbestos, chemicals, and threats to air and water quality. Most recently Dr. Hill has become interested in emerging public health issues especially problematic in rural environments.

Funded Research
"Environmental Risks to Rural Low Income Women of Childbearing Age" Source: National Institutes of Health

Interesting Facts
Dr. Hill’s favorite aspect of research is designing studies to answer specific questions. He describes the design process as a creative outlet and balancing time, resources, scientific rigor, and scope of methods allows him to make unique contributions. The fact that two different researchers might design a very different study to address similar questions is an appealing aspect of conducting public health research.

Key Research-related Publications


Dr. Kinion's research foci are oral health and health disparities using community-based participatory approaches in rural and American Indian communities.

Contact Information: ekinion@montana.edu

Research

Dr. Kinion would like her oral health research program to:

- Excite undergraduate and graduate students about the thrill of discovery, specifically related to oral health.
- Inform communities about the impact and health consequences of poor oral health and empower them to make positive changes through research.
- Inform health professionals about oral health through dissemination of findings via refereed presentations and publications.
- Influence changes in local and national health care policies.
- Improve the oral health status of underserved and vulnerable populations across Montana.

Profile

Dr. Kinion's research foci are oral health and health disparities using community-based participatory approaches in rural and American Indian communities.

Doctorate: University of Akron

Contact Information: ekinion@montana.edu

Key Research-related Publications


Interesting Facts

An experience in trust, love, and connection...

While visiting her partner reservation Elizabeth was told that her meeting would be delayed for several hours. Two of Elizabeth's young American Indian friends offered to take her on a buffalo hunt in a remote area of the reservation. As the three women stood quietly near the edge of a ravine, tiny dark specks appeared in the distance. Elizabeth's two friends called out to the buffalo in their native language and the dark specks grew larger. After several minutes the buffalo were only a half mile away. As the three watched they could hear the buffalo pawing the grass, chewing, and the calls of baby calves to their mothers. Elizabeth asked her friends what they had said and they replied "come closer" and "we won't hurt you." The three friends watched the buffalo for over an hour and when it was time to leave her friends again called out to the buffalo saying "thank you for coming."
Sandra Kuntz, PhD, APRN, PHCNS-BC

Profile
Dr. Kuntz is a community/public health clinical nurse specialist with a research focus in environmental health, disaster, health disparities and community-based participatory approaches in rural and Native American communities. Dr. Kuntz is a co-project director of the Robert Wood Johnson Foundation Academic Progression in Nursing, MT BSN Education Initiative.

Doctorate: Walden University
Contact Dr. Kuntz: skuntz@montana.edu

Research
The direction of Dr. Kuntz’s current program of research includes publication of completed environmental health studies; working with community partners to determine effective and culturally appropriate methylmercury risk/fish benefit messages; and developing proposals for research related to the Academic Progression in Nursing objectives.

Funded Research
"Methylmercury Risk, Awareness, and Exposure: Fort Peck Tribal Community and Academic Partnership" Source: Robert Wood Johnson Foundation, Nurse Faculty Scholars Program

Key Research-related Publications


Interesting Facts
Prior to joining the College of Nursing at MSU, Dr. Kuntz taught nursing at Salish Kootenai College. While working with the tribes on the Flathead Reservation she was introduced to the specialty area of pediatric environmental health. Her work in the community led to a commitment to participatory research approaches and a study of the benefits and hazards of fish consumption among tribal childbearing-age women.

RETURN TO TOP
Laura Larsson, PhD, MPH, RN

Profile
Dr. Larsson is interested in community-based risk communication research with vulnerable groups. Dr. Larsson utilizes techniques such as digital signage technology and motivational interviewing in novel settings to expand the reach of traditional public health communication approaches to settings where priority populations access services.

Doctorate: Oregon Health & Science University
Contact Dr. Larsson: llarsson@montana.edu

Research
Dr. Larsson is currently working with state agencies to integrate home-radon testing with tobacco cessation programming. In the fall of 2014 she and two former students presented three papers at the American Association of Radon Scientists conference in Charleston, SC. She is also working with a Montana tribal community to improve pediatric oral health outcomes using motivational interviewing, community outreach, and digital signage technology.

Funded Research
"Montana Radon Study" Source: Robert Wood Johnson Foundation, Nurse Faculty Scholars Program
National Institutes of Health Nurse Loan Repayment Program

Interesting Facts
Some people wonder what radon and oral health have in common. Both of Dr. Larsson's projects emphasize efficiency in public health spending and empowering vulnerable families through education to achieve better health. Both projects rely on stakeholders from a variety of agencies and disciplines to arrive at sensible and sustainable approaches to improving the public's health.

Key Research-related Publications
Research
Legitimate concerns exist suggesting that poorly behaving students might go on to become poorly behaving nurses, and uncivil, unprofessional behavior recently has been linked to negative patient outcomes, adding to the importance of this line of inquiry.

Dr. Luparell's long term research goals are to positively influence quality of patient care by identifying strategies for decreasing workplace incivility among nurses and other care providers. She also continues to work on improving the education experience for both students and faculty by helping faculty learn to foster more civil learning environments and better address inappropriate student behavior.

Interesting Facts
- Dr. Luparell discovered her research topic many years ago after noticing that some of her faculty colleagues were distressed and distraught following isolated, but unpleasant, interactions with students. Not only were the faculty underprepared to address the situation, it was evident that the impact of such interactions on faculty well-being was profound.
- Dr. Luparell has found that a challenge to studying this topic is that the term 'incivility' tends to conjur negative emotional responses. It is sometimes difficult to access faculty who are willing and able to discuss it fully and freely.

Key Research-related Publications


Dorothy “Dale” Mayer, PhD, RN

Profile
Dr. Mayer is a cardiac clinical nurse specialist with a strong interest in cardiovascular nursing, grief and loss, palliative care, and end of life issues. Recently, Dr. Mayer employed narrative analysis to examine family bereavement experiences after sudden cardiac death.

Doctorate: Oregon Health & Science University

Contact Dr. Mayer: dmayer@montana.edu

Research
Dr. Mayer’s program of research focuses on grief, loss, and bereavement. She combines her expertise as a cardiac nurse with her research to support individuals and families after the death of a loved one. Some of Dr. Mayer’s areas of interest are the family changes that may occur after the death of a family member, because of the life altering impact death has on survivors. Her long term research goal is to understand the bereavement experiences of individuals and families and then develop nursing interventions to support bereaved families. Dr. Mayer also is interested in the impact of critical incidents, such as the death of a patient, on health care professionals.

Current Funded Research
“The Elephant in the Room: Critical Incidents in Health Care” Source: Sigma Theta Tau, Zeta Upsilon Chapter at Large

Interesting Facts
Dr. Mayer became interested in the topic of bereavement after the sudden death of a family member. As a cardiac nurse Dr. Mayer supported families at the time of death in the hospital setting yet had limited knowledge of the experiences of family members after they left the hospital. This realization prompted her return to school to study family bereavement. Her favorite part of research is listening carefully and respectfully to individuals and families who are willing to share their experiences with her. In turn, Dr. Mayer shares her research with health care professionals and develops best practices for bereavement support.

Key Research-related Publications
Polly Petersen, PhD, RN

Profile
Dr. Petersen’s research focuses on the characteristics of advanced practice nurses that support independent practice and primary care for patients, especially patients in rural Montana.

Doctorate: New Mexico State University

Contact Dr. Petersen: polly.petersen@montana.edu

Research
The long-term goal of Dr. Petersen’s research is to provide real data to policy makers as they contemplate decisions regarding healthcare. It is important for nurses to be a part of the process.

Current Funded Research
“Understanding the Relationship of Advanced Practice Registered Nurses and Physicians in Rural Health Care Settings”
Source: Sigma Theta Tau, Zeta Upsilon Chapter at Large

Interesting Facts
Dr. Petersen enjoys gathering data and including as many people as she can in both the development of a study as well as understanding the results. She believes that everyone has a different expertise and interest and finds it invigorating to put all of those components together.

Key Research-related Publications
Dr. Running is working to provide clinically relevant evidence for the use of Integrative Therapies in the treatment of chronic disease, the mediation of cancer symptoms and the reduction of stress. The long term goal of Dr. Running’s research is to reduce stress (chronic and acute) and its effects by utilizing bio-energy interventions, particularly a National Institutes of Health approved Complementary/Integrative Nursing intervention called “Healing Touch.” A secondary goal is to educate nursing students and faculty in the provision of this nursing intervention so that students, faculty and patients alike can benefit.

Funded Research
“Use of Energy Biofield Therapy for the Treatment of Cancer and Graft Verses Host Disease” Source: National Institutes of Health

Interesting Facts
Dr. Running became interested in Healing Touch after she was invited by a group of Hospice nurses to observe patient responses who had received this nursing intervention. Dr. Running noted that hospice patients who received healing touch were less anxious, required less medication, and had better sleep. As a result of this clinical experience, Dr. Running began researching the effects of Healing Touch in murine models and community populations.

Key Research-related Publications


Jean Shreffler-Grant, PhD, RN

Profile
Dr. Shreffler-Grant’s program of research focuses on access to and quality of formal (allopathic) and informal (complementary) health care services for people living in sparsely populated rural areas. Her recent research activities concern health literacy about complementary care among rural residents.

Doctorate: University of Washington
Contact Dr. Shreffler-Grant: jeansh@montana.edu

Research
The long term goal of Dr. Shreffler-Grant’s research is to improve the health of older rural adults by assisting them to become more health literate about natural products and other complementary and alternative therapies (CAM). By improving CAM health literacy through an educational intervention, older rural adults will have the information needed to more effectively self-manage their health and make more informed health decisions.

Current Funded Research
“CAM Health Literacy and Older Rural Adults” Source: National Network of Libraries of Medicine

Funded Research
“Refining and Evaluating the MSU CAM Health Literacy Scale” Source: National Institutes of Health

Interesting Facts
After many years of living and practicing as a nurse in rural Montana, Dr. Shreffler-Grant became interested in how people living in a sparsely populated, rural area meet their health care needs. She has learned that rural people often manage their own health care needs with advice from family, friends, and neighbors unless they determine the need is urgent. Many of these people also use home remedies, over-the-counter therapies, and natural products with limited health literacy about the therapies they use. This is especially true with older rural adults with chronic health conditions.

Key Research-related Publications


Christina Sieloff, PhD, RN

Profile
Dr. Sieloff’s program of research focuses on how the empowerment, embedded naturally within groups of clinicians, can impact patient outcomes. As a theorist, Dr. Sieloff facilitates the work of nurse researchers, at any level, to further the development and testing of nursing knowledge, and its application to nursing situations.
Doctorate: Wayne State University
Contact Dr. Sieloff: csieloff@montana.edu

Research
The long term goals of Dr. Sieloff’s program of research are to:
1) explicate the contribution of nursing groups to quality patient outcomes and safety;
2) translate her research, related to nursing group empowerment, to the work environment of nursing groups through intervention research; and
3) further expand nursing knowledge related to Dr. Imogene King’s conceptual system and Dr. Sieloff’s mid-range theory of group empowerment within organizations.

Funded Research
“Revision Of An Established Instrument” Source: Sigma Theta Tau, Zeta Upsilon Chapter at Large
“Examining The Contributing Factors Of Nurses and Nursing Groups To A Nursing Group's SKAGOAO© Score (Outcome Attainment Level)” Source: Sigma Theta Tau, Zeta Upsilon Chapter at Large

Interesting Facts
- Dr. Sieloff’s instrument can be used within other cultures. The Sieloff-King Assessment of Group Empowerment within Organizations© instrument has been translated into Finnish, Hebrew, and Korean.
- Nursing group empowerment levels are not specifically related to the size of the health care organization.
- Dr. Sieloff’s instrument can be utilized with interprofessional groups. Research has been successfully conducted with these groups.
- Dr. Sieloff’s favorite part of her research is increasing nurses’ and nursing group's awareness that they are in control of their group’s level of empowerment and that her instrument can help them further improve their group’s empowerment.

Key Research-related Publications
Donna A. Williams, PhD

Profile

Dr. Williams is a cardiovascular physiologist with a specific research focus on microcirculation and control of water permeability by intact, living capillaries. Clinical significance includes hydration, exercise, edema formation, and cardiovascular health and disease.

Doctorate: Pennsylvania State University

Contact Dr. Williams: dwilliams@montana.edu

Research

The individual, living capillaries studied by Dr. Williams are one cell layer thick, comprised of 40 to 50 cells, half the diameter of a human hair, and about 1 mm long. How these delicate microvessels control water movement when challenged by the forces of blood flow remains unknown. Dr. Williams uses intravital (looking into life) microscopy to study the cellular mechanisms that underlie the “integrated dance” of the capillary wall as it controls water moving into tissue. Non-steroidal anti-inflammatory drugs (NSAIDS) are among the chemical tools that Dr. Williams uses to probe capillary function.

Funded Research

“Probing The Dynamics of Capillary Filtration With Changes In Flow-related Force” Source: American Heart Association

“Shear Stress & Cellular Control of Capillary Function” Source: National Heart, Lung, and Blood Institute, National Institutes of Health

Interesting Facts

- One of many mysteries in the field of cardiovascular physiology and microcirculation is how the forces of blood flow cause the cellular lining of the cardiovascular system to function.
- The very first, initiating step of atherosclerosis is thought to be a malfunction of how large blood vessels control movement of water.
- Living capillaries may hold the key to discovering how mechanical forces are transmitted into cellular responses, knowledge that could be translated for prevention of cardiovascular disease.

Key Research-related Publications


Charlene “Charlie” Winters, PhD, APRN-BC  

Profile  
Dr. Winters is a clinical nurse specialist with research interests in two areas: chronic illness (individual responses, adaptation, illness self-management) and rural health issues (rural nursing practice, health disparities, rural nursing theory development). She has a particular interest in asbestos-related disease and heart failure.  

Doctorate: Rush University  
Contact Dr. Winters: winters@montana.edu  

Research  
While working with individuals, community-based partners/health care providers, and other researchers, the long term goal of her program of research is to: 1) identify the biopsychosocial health status and health service needs of rural persons managing chronic health conditions and 2) design patient-centered evidence-based solutions to support chronic illness self-management.  

Funded Research  
“Exploring Research Communication and Engagement in a Rural Community: The Libby Partnership Initiative” Source: National Institutes of Health  
“Descriptive Analysis of the Health Status of A National Asbestos-Related Cohort” Source: HRSA Office of Rural Health Policy Research  

Interesting Facts  
Dr. Winters finds that people who live in rural and remote areas are exceptionally resilient, self-sufficient, and creative when tackling enormous barriers to access health care and manage health issues.  

Designing a research study that has the potential to uncover information that may make a difference in the lives of others is Dr. Winters’ favorite part of the research process.  

As a staff nurse in the ICU, Dr. Winters was fascinated by the way patients responded to their illnesses and traumatic injuries. Her interest in adaptation to illness evolved over time to focus on the illness experience of rural and remote populations.  

Key Research-related Publications  