

OSSD 2023:
PWHR & SWHR Pre-Conference Symposium
From Cells to Society: Research and Advocacy to Advance Mature Women's Health
Sunday, May 7, 2023 | 12:00 – 3:00pm MST

DESCRIPTION:

Research has documented sex differences across a myriad of biological processes and diseases, however, the full impact of sex, gender, and hormones in areas such as cognition, heart disease, and mental health, is still not well understood. The COVID-19 pandemic highlighted the urgency of applying a sex and gender-based life stages framework to promoting health for all individuals. This symposium will offer a cell to society perspective on sex and gender differences in aging that influence heart, brain, and mental health among older women. Panelists will present basic and translational research approaches, public health initiatives, and policy interventions that have been utilized to advance these key issues in mature women's health. Attendees (whether they are researchers, trainees, health care providers, patient advocates, or policy stakeholders) will have the opportunity to engage in Q&A with the panel and roundtable conversations to discuss how they can contribute their expertise to address persistent gaps and barriers to advancing the health of women.

PRESENTATIONS:

Understanding the need for women's health research

Liisa Galea, PhD, President, Organization for the Study of Sex Differences; Inaugural *womenmind* Treliving Family Chair in Women's Mental Health, Senior Scientist at CAMH

Sponsored by the Partnership for Women's Health Research Canada (PWHR) and the Society for Women's Health Research (SWHR), USA, this pre-conference symposium is designed to bring attention to the ongoing need for investment in women's health research, with a special focus on mature women's health. As our societies continue to age and women's life spans extend, there comes an increased burden of morbidity and the need to better understand sex and gender influences on health and disease. Advancing the health of women, and thus the health of society, requires interdisciplinary partnership-building and advocacy throughout the research and health care ecosystem.

Sex differences in the cognitive-enhancing ability of exercise training for older adults: Possible role of hormones and genotype

Cindy Barha, PhD, Assistant Professor, Kinesiology, University of Calgary

Individual-level interventions, such as aerobic training, promote cognitive function in older adults at risk for dementia. However, there are sex differences and variability in the degree of benefit. Females show greater enhancements to executive functions from aerobic training than males. Biological sex further interacts with the brain derived neurotrophic factor (BDNF) Val66Met polymorphism to moderate the cognitive-enhancing effects of aerobic training. The hypothalamic-pituitary-adrenal axis may play an important role in mediating the effect of aerobic training on executive functions.

Sex- and gender-related differences in cardiac treatment, outcomes, and health-related quality of life among mature women

Colleen Norris, PhD, MScN, BScN, RN, FAHA, FCAHS, Cavarzan Chair in Mature Women's Health Research, Associate Dean, Research; Professor, Nursing, University of Alberta

Estrogen impacts vascular responses in women, and there is growing evidence that physiologic and pathophysiologic cardiovascular responses are uniquely affected across the spectrum of a woman's life. Following heart attack, women experience report poorer health-related quality of life, in part related to gender differences in depressive symptoms. Application of sex and gender influences to clinical care of women has been slow or absent. The pandemic exacerbated health disparities and made visible how biological sex and gender (socio-cultural factors) and related inequities shape the health of women and men. Existing health services are ill-equipped to diagnose, treat and support women.

Gender and loneliness in older adults: unique and shared risk factors and measuring impact on health system use

Rachel Savage, PhD, Scientist, Women's College Research Institute

Social relationships are profoundly important to health and well-being but maintaining these relationships can be challenging when faced with major life transitions that can accompany older age. Loneliness and social isolation put older adults at risk of experiencing cardiovascular disease, dementia and depression. Older women report higher rates of loneliness, which may be due to unique life experiences like prolonged widowhood and a higher likelihood of living alone, caregiving responsibilities, and lower incomes. Older women and men who are lonely have unique healthcare trajectories, providing an opportunity to tailor interventions to meet these needs.

A call to action: Addressing sex and gender disparities in Alzheimer's Disease

Irene O. Aninye, PhD, Chief Science Officer, Society for Women's Health Research

Platforms that provide easy access to centralized and trusted data can be powerful tools to educate the public on key health topics. SWHR hosts a women's health dashboard that presents data of disease burden, research investment, knowledge and health care gaps, and policy implications for diseases that differently and disproportionately affect women. Alzheimer's disease, a featured condition on the dashboard, will be presented as a model to walk through progress made toward answering important SABV research questions concerning the impact of Alzheimer's disease on women and women's health. Leveraging the data analyses associated with this initiative, the presentation will also discuss calls to action to address key gaps and unmet needs in Alzheimer's disease research, education, and policy.

Responding with advocacy and policies to advance research and education

Lindsey Horan, MA, Chief Advocacy Officer, Society for Women's Health Research

Women's health research and care cannot advance without engaging health care advocacy and policy stakeholders. A complementary approach to address Alzheimer's disparities in women's health involves the development of policy agendas and solutions that can be actioned at the federal and state levels. This presentation will discuss the importance of the researcher and clinician participation in

advocacy efforts, providing examples of how their involvement has promoted legislative change in the Alzheimer's disease space. Attendees will also learn how to engage in simple and practical advocacy efforts to enhance their bench and bedside work.

Roundtable Discussions and Report Outs

Attendees will have the opportunity to idea storm how they can contribute to their roles and expertise to the interdisciplinary needs of the women's health ecosystem, as well as the challenges and successes they have experienced in their efforts to move research and policy into practice. Highlights from the small group discussions will be shared with the room.

SPEAKER BIOS:

Irene O. Aninye, PhD

Chief Science Officer, Society for Women's Health Research

Dr. Irene Aninye is the Chief Science Officer at the Society for Women's Health Research, a national nonprofit dedicated to improving women's health through science, policy, and education. She steers SWHR's science programs to increase investment in research on biological sex differences and awareness of health conditions and diseases that differently, disproportionately, or exclusively affect women. Prior to SWHR, Aninye led strategy teams for the American Association for the Advancement of Science (AAAS) to develop and evaluate STEM research and training programs for universities. Dr. Aninye's research background in endocrinology and metabolism investigated sex steroid hormone-receptor action in development, reproduction, and disease. She also brings expertise in facilitating scientific and leadership development training for researchers and professionals across all career stages, and serving on advisory boards for organizations such as the National Institutes of Health, Endocrine Society, Johns Hopkins University, and University of Maryland Baltimore County. A Washington, DC, native, Irene earned her BS in Biochemistry as a Meyerhoff Scholar at UMBC and a PhD in Molecular and Integrative Physiology from the University of Illinois at Urbana-Champaign.

Cindy Barha, PhD

Assistant Professor, Kinesiology, University of Calgary

Dr. Cindy Barha is an Assistant Professor in Neuroscience in the Faculty of Kinesiology at the University of Calgary. Cindy's primary research interests focus on the interactions between the stress and reproductive axes in determining developmental trajectories across the lifespan, with a concentration on how these interactions influence normal age-associated cognitive decline as well as risk for neurodegenerative diseases, such as Alzheimer's disease. Currently, she is interested in understanding how sex differences in the cognitive-enhancing ability of exercise training are related to hormones and genotype. Cindy received a PhD in Behavioural Neuroscience from the University of British Columbia. She completed a CIHR-funded postdoctoral fellowship in the Faculty of Health Sciences at Simon Fraser University and a joint fellowship from Michael Smith Foundation for Health Research and the Pacific Alzheimer Research Foundation at the University of British Columbia. She has also been funded by a joint fellowship from the Alzheimer's Association (USA) and Brain Canada.

Liisa Galea, PhD

Treliving Family Chair in Women's Mental Health, Senior Scientist, CAMH

Liisa Galea is the inaugural *womenmind* Treliving Family Chair in Women's Mental Health, Senior Scientist at CAMH, and leads the Women's Health Research Cluster. She comes to CAMH after being a Professor at University of British Columbia. Her PhD in Neuroscience (Western University) was followed by postdoctoral training at the Rockefeller University. Dr. Galea was a Distinguished University Scholar, NSERC Discovery Accelerator Award holder (2x), a Fellow at International Behavioral Neuroscience Society, Mortyn Jones Prize, and the Vancouver YWCA Women of Distinction award winner. She is the Principal Editor of *Frontiers in Neuroendocrinology*, the President of Organization for the Study of Sex Differences and co-Vice-President of Canadian Organisation for Sex and Gender Research. She serves on advisory boards, editorial boards, and peer review panels internationally and nationally. Dr. Galea is a tireless advocate for women's health research and for sex and gender-based analyses to improve mental health for all.

Lindsey Horan, MA

Chief Advocacy Officer, Society for Women's Health Research

Lindsey Horan is the Chief Advocacy Officer for the Society for Women's Health Research, providing oversight of SWHR's government relations, communications, and advocacy functions. She is responsible for helping to drive SWHR's policy agenda, build relationships with key stakeholders and policymakers, and guide activities to improve women's health through science, policy, and education. With a background spanning federal budget and appropriations issues, international scientific collaboration, scientific workforce matters, and tobacco policy, Horan supports efforts to raise the visibility and promote the value of health services and systems research.

Colleen Norris, PhD, MScN, BScN, RN, FAHA, FCAHS

Cavarzan Chair in Mature Women's Health Research, Associate Dean, Research; Professor, Nursing, University of Alberta

Dr. Colleen Norris is a Professor and Associate Dean of Research Faculties of Nursing at the University of Alberta. She is the Cavarzan Chair in Mature Women's Health Research, Women and Children's Health Research Institute. Her PhD is in clinical epidemiology. Dr. Norris has over 400 publications in the areas of sex and gender differences in cardiovascular treatment and outcomes, and women's heart health. She co-leads the Women's Heart Health Atlas, is a committee member on the Women's Heart and Brain Health Network Research Steering Committee, and is actively involved in advancing sex and gender-based analysis & reporting in Heart & Stroke funded research. In 2018, Dr. Norris was designated as the sex and gender champion on the CCS clinical guidelines committee where she established and published (JAHA-2019) a methodology that will be used going forward to incorporate sex and gender specific information into CCS Clinical practice guidelines. Dr. Norris is the CO-PI in a CIHR/GENDER-NET Plus research project- GOING-FWD, an international collaborative of researchers from 5 countries, evaluating the impact of sex and gender factors on outcomes.

Rachel Savage, PhD

Scientist, Women's College Research Institute

Dr. Rachel Savage, PhD is a Scientist with the Women's Age Lab and Women's College Research Institute at Women's College Hospital, an Assistant Professor at the Institute of Health Policy, Management and Evaluation at the University of Toronto, and an Adjunct Scientist at ICES. Dr.

Savage's program of research focuses on studying sex and gender differences in loneliness in older adults at the population level. She uses a variety of approaches, including surveys, focus groups and administrative data to understand the experience of loneliness in women and to determine whether older women and men have shared, or unique, risk factors, to better address the needs of all older adults. Dr. Savage's research uses national health survey data linked with health administrative data from our universal healthcare system to understand whether and how loneliness impacts how older adults use healthcare services and the role sex and gender play in this relationship.

CO-CHAIR BIOS

Sandra Davidge, PhD

Dr. Sandy Davidge is the Executive Director of the Women and Children's Health Research Institute located in Edmonton, Alberta, a Fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences, a former two-term Tier 1 Canada Research Chair in Maternal and Perinatal Cardiovascular Health and Distinguished University Professor at the University of Alberta. As an internationally renowned research leader in women's health, Dr. Davidge has published over 280 scientific articles on her pioneering studies that are focused on understanding the causes of pregnancy complications, such as preeclampsia and intrauterine growth restriction, and the long-term impact on cardiovascular health for the mother and her child.

Annette Elliott Rose, PhD

Dr. Annette Elliott Rose is the Vice President, Clinical Care & Chief Nurse Executive at IWK Health, which offers primary, secondary and tertiary services for children, youth and women. She leads an interprofessional team of health care providers and health leaders to support evidence-informed health system decision making, discovery, health professional education and clinical service delivery for women, children and youth in the Maritimes. Annette holds a Master of Nursing and PhD in Nursing from Dalhousie University and is an adjunct faculty member in the Dalhousie University School of Nursing. She is also a Research Associate with the World Health Organization Collaborating Centre on Health Workforce Planning and Research, Dalhousie University. Annette is committed to designing and supporting systems of health and social care that are focused on individual, family and community needs with a broad understanding of health that is grounded in health equity and social justice.