MEET THE CCNA SEX AND GENDER CHAMPIONS

Women, Sex, Gender and Dementia Cross-Cutting Program Lead

Gillian Einstein, PhD
Gillian Einstein is a faculty member in the Department of Psychology at the University of Toronto, Program Lead of the Women, Sex, Gender, & Dementia Program—Canadian Consortium on Neurodegeneration and Aging (CCNA), Adjunct Scientist at Women's College Research Institute, and a member of both the Institute for Life Course & Aging and the Centre for Sexual Diversity Studies at the University of Toronto. Dr. Einstein is the Wilfred and Joyce Posluns Chair of Women's Brain Health and Aging and Guest Professor of Neuroscience and Gender Medicine at Linköping University in Linköping, Sweden and she also founded the Canadian Organization for Gender and Sex Research (COGS). Through her research, Dr. Einstein aims to contribute to a more complete understanding of how sex and gender shape brain and behaviour, with a focus on brain health and successful aging.

Lab page

Champion for Team 1

Ziv Gan-Or, MD, PhD
Dr. Ziv Gan-Or utilizes advanced genotyping and next-generation sequencing technologies to further study the genetic background of Parkinson's Disease. He is also interested the genetics of a specific prodromal condition – REM sleep behavior disorder. Individuals who suffer from REM sleep behavior disorder will most likely develop a neurodegenerative disease: either Parkinson's Disease, dementia with Lewy bodies or multiple system atrophy. By identifying the genetic background of REM sleep behavior disorder and its progression to one of these neurodegenerative disorders, Dr. Gan-Or aims to identify novel pathways and mechanisms that may help developing treatment. His research also focuses on other neurological disorders, such as hereditary spastic paraplegia and restless legs syndrome.

Lab website

Champion for Team 2

Margaret Fahnestock, PhD

Dr. Fahnestock began her research program in neurotrophin molecular biology during her first appointment, at SRI International (formerly Stanford Research Institute), in 1984. Following a sabbatical in the Department of Neurology at the University of California at San Francisco, Dr. Fahnestock moved to the Department of Biomedical Sciences at McMaster University in September, 1991. She joined McMaster's Department of Psychiatry and Behavioural Neurosciences in 1998 and was promoted to Full Professor in 2003. She has published more than 100 peer-reviewed journal articles and book chapters and has been continuously funded during the past 30 years by CIHR, NIH and private foundations.

Lab website

Champion for Team 3
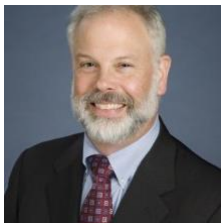
Neil Cashman, MD

Dr. Cashman is a Clinician-Scientist Professor of Medicine (Neurology). He is also Founder and Chief Scientific Officer of ProMIS Neurosciences, which translates his lab's therapeutics and diagnostics in protein misfolding diseases. Dr. Cashman's research focus is elucidating the structure and pathogenicity of proteins which misfold in neurodegeneration, starting with the prion protein. He has developed novel strategies for immunotherapeutic intervention in these diseases, which are specifically directed at peptide motifs exposed by protein misfolding, but inaccessible in native structures. Dr. Neil Cashman is a neurologist-neuroscientist working in neurodegeneration and neuroimmunology. His areas of specialty are motor neuron diseases, particularly amyotrophic lateral sclerosis (ALS), and amyloid encephalopathies, including prion illnesses and Alzheimer's disease.

Clinic webpage

Champion for Team 4
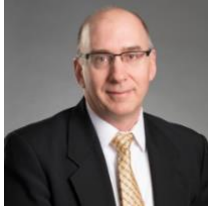
Robert Bartha, PhD

Dr. Bartha's research is focused on the development of high-field magnetic resonance imaging (MRI) and spectroscopy techniques for early diagnosis of disease and monitoring of treatment response. We use primarily 3.0 Tesla and 7.0 Tesla human MRI scanners as well as a 9.4 Tesla small bore MRI scanner all at Robarts Research Institute. The group develops new methods for imaging structural and metabolic tissue changes, but also applies these new methods to the study of disease such as Alzheimer disease, stroke, and cancer. A major goal is to validate new imaging biomarkers of disease progression and build novel MRI tracers that highlight pathological aspects of a disease process. These studies involve a highly integrated team with expertise in physics, chemistry, cell biology, and medicine. Physiological and metabolic biomarkers of disease progression may have greater sensitivity to tissue damage than the imaging of structural changes.

Lab website

Champion for Team 5

Alexandra Fiocco, PhD

Dr. Fiocco's approach to research is multidisciplinary, incorporating different branches of learning, including psychology, neuroscience, and epidemiology. She obtained a MSc in Psychology with a specialization in Neuroscience from Carleton University in 2002, followed by a PhD in Neuroscience from McGill University in 2008. Following her doctoral training, she pursued postdoctoral training at the University of California San Francisco in clinical and epidemiological research and completed a second postdoctoral fellowship at Baycrest in Toronto. Dr. Fiocco's research interests center around cognitive function, brain health, and emotional wellbeing in late life. Her work examines the biological, psychological, and social factors that determine cognitive function and wellbeing in later adulthood. Dr. Fiocco also examines preventive measures that facilitate healthy aging.

Lab website

Champion for Team 6

Nadia Gosselin, PhD

Nadia Gosselin is a neuropsychologist, Associate Professor of Psychology and Director of the PhD program in Neuropsychology at University of Montreal. She is also a researcher at the Hôpital du Sacré-Coeur de Montréal, a tertiary trauma center. Since 2011, she leads a research program on sleep and brain health. She is particularly interested by the role of sleep on brain recovery after a TBI and she studies the acute and chronic stage of recovery. She is the leader of the Canadian Sleep and Circadian Network's Aging axis.

Lab website

Champion for Team 7

Steffany Ann Bennett, PhD

Dr. Steffany Bennett is a lipid biochemist and systems neurobiologist working to block the pathological changes in brain lipid metabolism that precipitate pediatric and geriatric neurodegenerative disease. Her team is pioneering the emerging field of neurolipidomics. Her applied research focuses on developing methodologies in super-resolution imaging (stimulated emission depletion STED), liquid chromatography electrospray ionization mass spectrometry (LC-ESI-MS), and bioinformatics to study membrane metabolism. Her basic and translational research programs focuses on (a) identifying circulating phospholipids and glycolipids at the molecular level that predict neurodegenerative disease conversion, (b) mechanistically determining how changes in these structural and second messenger lipids signal neurodegeneration, and (c) establishing whether these changes can be targeted therapeutically using both pharma and natural health products to resist neurodegenerative disease.

Lab website

Champions for Team 8
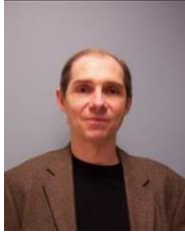
Richard Camicioli, MD

Dr. Richard Camicioli trained in engineering (BSc) and medicinal chemistry (MSc) prior to obtaining his MD,CM from McGill University in 1987 and completing a neurologic residency at the same institution in 1991. He obtained fellowship training in geriatric neurology at Oregon Health and Sciences University, joining the faculty in 1994. He came to the University of Alberta as associate professor in 2000 and became full professor in 2008. His research interests include cognitive dysfunction in Parkinson's disease and motor dysfunction, especially gait disorders in aging and dementia. He applies epidemiological, genetic and imaging research methods to better understand clinical phenotypes and clinical outcomes.

Webpage

Janis Miyasaki, MD

Dr. Miyasaki is a graduate of the University of Toronto completing medical school, residency and a movement disorders fellowship. In 2014, she joined the University of Alberta Faculty of Medicine and Dentistry as Professor of Neurology and Medicine. Since 2015, she became the Director of the Movement Disorders Program comprising 10 physicians and a dedicated interdisciplinary team.

Dr. Miyasaki founded the first dedicated Palliative Care Program for Parkinson's Disease and Related Disorders at the University of Toronto in 2007. Author of many publications on this topic, she is viewed as the founder of palliative care for Parkinson's disease. In 2015, Dr. Miyasaki established the Complex Neurologic Symptoms Clinic at the Kaye Edmonton Clinic, University of Alberta for all neurologic patients with palliative care needs.

Program webpage

Champions for Team 9

Peggy McFall, PhD

Dr. G. Peggy McFall is a Research Associate in the Department of Psychology (Science) and the Assistant Director of the NIH-funded Victoria Longitudinal Study at the University of Alberta. She received her PhD in Cognitive Aging in 2014 from the University of Alberta. Her main research area is in discovery and quantitative modeling of biomarkers in brain/cognitive aging and dementia. Her research seeks to distinguish specific modifiable risk factors associated with different neurocognitive phenotypes and the specific populations (e.g., sex, genotype) that might benefit from intervention protocols. She is also interested in sex and gender differences as they relate to risk and protection factors, omics technologies, and conversion to (or differentiation among) other neurodegenerative diseases. Her expertise includes management of large-scale data sets and analyses of longitudinal data using structural equation modeling, data-driven, and machine learning technologies.

University page

Jacqui Pettersen, MD

Dr. Pettersen completed her BSc Honours degree in Biopsychology and MSc degree in Neuropsychology at the University of Victoria, and subsequently, she received her MD from the University of Toronto, followed by a Neurology residency with FRCPC designation at the University of Calgary. She then completed a 2-year CIHR and AHFMR-supported clinical research fellowship in Cognitive/Behavioural Neurology, with a secondary interest in Stroke. In 2009, Dr. Pettersen became a Tenure-Track Faculty member with the Northern Medical Program and the Division of Neurology, Department of Medicine, UBC and Affiliate Professor, UNBC and was granted tenure and promotion to Associate Professor in 2017. Her time is divided between clinical research, teaching and mentoring, providing input into local and provincial stroke strategy development, and providing clinical care through her role as a Cognitive/Behavioural Neurologist, primarily in the multidisciplinary Memory Clinic at the University Hospital of Northern BC.

Webpage

Champion for Team 10

Louis Bhérer, PhD

Dr. Bherer research program is to better understand how cognitive vitality could be improved and maintained in late adulthood. To this aim, his empirical work is concerned with changes in cognitive functioning that occur in normal aging, specifically those that affect attention and executive functions and with identifying the determinant factors of cognitive vitality in late adulthood (e.g., lifestyle, educational background, physical condition). A major line of research investigates the effects of cognitive training interventions on dual-task performance in older adults (NSERC and PAFARC-UQAM). Another important research project assesses the impact of physical fitness condition on cognitive vitality in late adulthood (FRSQ).

Webpage

Champion for Team 11

Krista Lanctôt, PhD

Neuropsychiatric symptoms associated with illness include mood changes, apathy, aggression and cognitive changes. These are common sequelae of many central nervous system disorders such as dementia, traumatic brain injury, cerebrovascular disease and stroke. Dr. Lanctôt's goal is to optimize treatment of these neuropsychiatric symptoms. Her research addresses this goal by determining the underlying neurobiology of neuropsychiatric symptoms, examining predictors of treatment response, using novel pharmacological agents and carefully considering adverse drug events. Dr. Lanctôt's early focus was on the neurobiology of behavioural disorders associated with dementia. The goal of this research was to determine if behavioural subtypes can be linked to underlying neurochemical or neuropathologic dysfunction.

Webpage

Champions for Team 12

Teresa Liu-Ambrose, PhD

Dr. Teresa Liu-Ambrose, PhD, PT, is a Professor in the Department of Physical Therapy, and Canada Research Chair in Physical Activity, Mobility, and Cognitive Health. She is the Research Director of the Vancouver General Hospital Falls Prevention Clinic and Director of the Aging, Mobility, an Cognitive Neuroscience Laboratory. Dr. Liu-Ambrose has a leadership role in two major Canadian Institutes of Health Research initiatives in aging – the Canadian Longitudinal Study of Aging (CLSA) and the Canadian Consortium on Neurodegeneration in Aging (CCNA). Dr. Liu-Ambrose is known internationally for her work in randomized controlled trials of exercise with cognitive and mobility outcomes in older adults. Her research findings have been implemented in health authorities, translated into a provincial-wide program, and influenced international practice guidelines to promote healthy aging.

Lab website

Cindy Barha, PhD

Cindy Barha 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.

Post doc website

Champion for Team 13

Simon Ducharme, MD

Dr. Simon Ducharme is a neuropsychiatrist at the Montreal Neurological Institute and as a C-L psychiatrist at the MUHC. His clinical interests are frontotemporal dementia and the neuropsychiatric aspects of epilepsy. His research uses advanced structural brain-imaging techniques to study the longitudinal changes in brain development from childhood to old age, and how it impacts behaviour across health and psychopathology. His current projects aim to develop novel neuroimaging diagnostic and prognostic biomarkers for frontotemporal dementia. He is the Montreal site PI of the Genetic Frontotemporal Dementia Initiative study and an FTD team co-leader of the Canadian Consortium on Neurodegeneration in Aging.

Lab website

Champion for Team 14

Melissa Andrew, MD

Dr. Melissa K. Andrew is Associate Professor of Medicine at Dalhousie University and a consultant in Geriatric Medicine at the QEII Health Sciences Centre in Halifax. She is Principal Investigator of a team studying frailty and multi-morbidity in relation to dementia as part of the Canadian Consortium on Neurodegeneration in Aging. She is co-Principal Investigator of the Public Health Agency of Canada/CIHR Serious Outcomes Surveillance (SOS) Network, where she studies how frailty impacts vaccine effectiveness, burden of disease and clinical outcomes of infectious diseases in older adults. She is also engaged in other research collaborations, including studies of models of care for older adults living with frailty in Long Term Care in relation to resident Quality of Life and quality of primary care.

Webpage

Champions for Team 15

Debra Morgan, PhD

Dr. Morgan is a Professor and Chair, Rural Health Delivery, at the Canadian Centre for Health and Safety in Agriculture. After obtaining her Registered Nursing diploma in 1974 she worked in various clinical areas before completing her BSN (1986), MN (1989), and PhD (Nursing, 1996) at the University of Saskatchewan. In 1999 Dr. Morgan joined the faculty of the CCHSA (then the Centre for Agricultural Medicine), where she held a CIHR New Investigator Award from 1999 to 2004. She held a CIHR-SHRF Applied Chair in Health Services & Policy Research, awarded 2009 to 2015.

Research webpage

Melanie Bayly, PhD
Bio to come

Lab website

Rachel Herron, PhD

Dr. Rachel Herron is a health geographer and a Canada Research Chair in Rural and Remote Mental Health. The overarching goal of Rachel's research is to work with rural communities, students, researchers and policy makers to create more supportive environments for people with dementia, and other mental health conditions. She is currently working on a project to examine the potential of the National Ballet School of Canada's Sharing Dance Program to improve the social inclusion of people with dementia and their carers. She is also working on several projects examining the complex demands of caring for people with dementia who exhibit reactive behaviours (e.g., hitting, spitting, kicking and screaming) across a range of care settings. Her broader research interests include rural mental health and aging, care and caregiving, the ethics of doing research with vulnerable populations, and gender and women's health. Her research contributes to the fields of rural health and social care, social gerontology, gender and women's studies, and the geographies of voluntarism.

University webpage

Champion for Team 16

Stephanie Yamin, PhD
Bio to come

University webpage

Champion for Team 17

Kathy Pichora-Fuller, PhD
Kathy Pichora-Fuller is a Professor Emerita of Psychology at UTM. She is also an Adjunct Scientist at the Toronto Rehabilitation Institute, and at the Rotman Research Institute at Baycrest, and a Guest Professor in the Linneaus Centre for Hearing and Deafness Research at Linköping University in Sweden. She was President of the Canadian Association of Speech Language Pathologists and Audiologists, served on the executive boards of the Canadian Acoustical Association, International Collegium of Rehabilitative Audiology, Canadian Academy of Audiology and she was the Canadian representative to the International Society of Audiology. She is presently on the editorial boards of two international journals, *Ear and Hearing* and the *International Journal of Audiology*.

Lab website

Champion for Team 18

Karen Pitawanakwat, RN

Karen Pitawanakwat is an Anishinaabe Kwe from the Wikwemikong Unceded Indian Reserve, Ontario, Canada. Karen has over 25 years' experience nursing in local First Nations on Manitoulin Island, focusing on care for the elderly. She acts as the community researcher for the Canadian Consortium on Neurodegeneration in Aging (CCNA) Team 18 Ontario Indigenous dementia projects. Karen has been involved in community-based research projects concerning diabetes, dementia and cancer since 2006. Her work as a community researcher with First Nations on Manitoulin Island with the Perceptions of Alzheimer's Disease and Related Dementias in Diverse Aboriginal Communities in Ontario study (2009-2013) and now the CCNA Team Indigenous dementia study in Ontario (2014-2019), aims to address quality of life for Indigenous people living with dementia and their caregivers.

Health Centre webpage

Champion for Team 19

Susan Bronskill, PhD

Susan Bronskill is a Senior Scientist and Scientific Lead, Life Stage Program at ICES, Canada's largest health services and policy research institute. In her research, Dr. Bronskill makes use of population-based administrative databases to study transitions between health care sectors and her research focusses on improving quality of care, medication use, health services utilization and health care outcomes for older adults — particularly persons with Alzheimer's and related dementias, women, residents of nursing homes and those who are frail.

Research program webpage

Champion for Training and Capacity Building Cross-Cutting Program

Colleen Maxwell, PhD

Dr. Colleen Maxwell is a Professor and University Research Chair with the Schools of Pharmacy and Public Health & Health Systems, University of Waterloo, an Adjunct Scientist with ICES, and an Adjunct Professor with Community Health Sciences, University of Calgary. She is a senior health services researcher with expertise in aging, frailty, continuing care and pharmacoepidemiology. Her research interests include the quality of care and pharmacotherapy of older vulnerable populations across the care continuum – particularly those with dementia, depression and related disorders. A key focus is the investigation of different approaches to screen for (and grade) levels of frailty among older adults with the goal of using this information to optimize geriatric pharmacotherapy and outcomes. She is involved in national and international collaborative research on the health, medication and quality of care needs of older residents within assisted living and long term care settings.

University webpage

Champion for Ethical, Legal and Social Implications Cross-Cutting Program

Liisa Galea, PhD

Dr. Liisa Galea is a Professor in the Department of Psychology and a member of the Centre for Brain Health at the University of British Columbia (UBC). She is also Director of the Graduate Program in Neuroscience and a Scientific Advisor at Women's Health Research Institute at UBC. Her research investigates how sex hormones influence brain health and disease in both females and males. The main goal of her research is to improve brain health for women and men by examining the influence of sex and sex hormones on normal and diseased brain states such as depression and Alzheimer's disease. Research interests include sex and sex hormone influence on brain health (cognitive and emotional); Estrogens impact on neuroplasticity and resilience to stress; neuropsychiatric and neurodegenerative disorders; postpartum depression, short and long-term impact of reproductive experience (motherhood) on the brain; impact of sex hormones across the lifespan.

Lab website

Champion for the Neuroimaging Platform

M. Natasha Rajah, PhD

Dr. M. Natasha Rajah is Sex and Gender Science Chair of the CIHR' Institute of Neuroscience, Mental Health and Addiction. She joined the Douglas Institute in 2005 as Assistant Professor at the Department of Psychiatry. Dr. Rajah's research is focused on the cognitive neuroscience of memory and aging. In 2011 she was promoted to Director of the Douglas Brain Imaging Centre.

Lab page