



**University  
of Victoria**  
Retirees  
Association

# AGING WELL: THE BRAIN – BODY CONNECTION

## AN ELDER ACADEMY AND INSTITUTE ON AGING AND LIFELONG HEALTH (IALH) EVENT

Several factors influence our ability to age well. Some of these, such as genetics, are not under our control. Others, such as exercising regularly and taking care of our mental health, are modifiable. This series will examine the impact of physical activity on brain health as well as the impact technology can play in understanding and modifying behaviours. The presenters are all affiliated with the Institute on Aging and Lifelong Health at the University of Victoria, a research centre committed to promoting and conducting basic and applied research to improve the health and quality of life of individuals across the life course.

### WHEN, WHERE, HOW MUCH?

**DATES:** Saturdays, May 7, 14, 21, June 4, 2022

**TIME:** 10:00am to Noon

**WHERE:** This will be a hybrid presentation using face-to-face and zoom. The in-person presentation will be at Cordova Bay Community Place, 5238 Cordova Bay Rd, Victoria, BC V8Y 2L2 (attached to Cordova Bay Elementary School). People attending in person will need to show proof of vaccination and personal identification.

**COST:** \$20.00 for the four sessions

#### May 7: “Exercise is Cerebrovascular Medicine for All Ages”

**Presenter:** Dr. Kurt Smith, Associate Professor, School of Exercise Science, Physical and Health Education, University of Victoria

#### May 14: “Digitize Your Exercise: How Digital Technologies Are Shaping How We Monitor, Prescribe and Augment Our Physical Activities”

**Presenter:** Dr. Yoah Sui, Post-Doctoral Fellow, School of Exercise Science, Physical and Health Education, University of Victoria

#### May 21: “Building Brain Resiliency and Healthy Aging: Positive Effects of Physical Activity and Concussions in the Aging Brain”

**Presenters:** Dr. Mauricio Garcia-Barrera, Associate Professor, Department of Psychology, University of Victoria and Ms. Stacey Horton, Actor, Dancer and Choreographer

#### June 4: “Interactions Between Physical Activity and Mental and Cognitive Health: What Do We Know and What Next?”

**Presenter:** Dr. Theone Paterson, Assistant Professor, Department of Psychology, University of Victoria

### REGISTRATION AND PAYMENT

Registration & payment done through EventBrite.

**Face-to-face:** <https://www.eventbrite.ca/e/aging-well-tickets-312540696637>

**Zoom:** <https://www.eventbrite.ca/e/aging-well-tickets-312538831057>

Students attend free but need to register by emailing

[UVRAElderAcademyevents@uvic.ca](mailto:UVRAElderAcademyevents@uvic.ca)

Need to know more? Email [UVRAElderAcademyevents@uvic.ca](mailto:UVRAElderAcademyevents@uvic.ca)

# AGING WELL: THE BRAIN – BODY CONNECTION

Saturday, May 7<sup>th</sup>, 10am – noon

## **“Exercise is Cerebrovascular Medicine for All Ages”**

**Presenter:** Dr. Kurt Smith, Associate Professor, School of Exercise Science, Physical and Health Education, University of Victoria



Kurt Smith is an Associate Professor and the principal investigator of the Cerebrovascular Health, Exercise, and Environmental Research Sciences (CHEERS) Laboratory at the University of Victoria. His research specifically focuses on developing and refining exercise and environmental interventions to enhance cerebrovascular health. The CHEERS laboratory aims to quantify the mechanisms that regulate cerebrovascular health, specifically using age and sex paradigms to elucidate the mechanisms involved in mitigating recalcitrant cerebrovascular aging.

*“How does exercise influence cerebrovascular health throughout the lifespan? What roles do sex hormones, exercise intensities and pathologies play in determining the cerebrovascular responses to exercise? These questions, as well as the evidence for and against exercise effectiveness at enhancing brain blood flow throughout the lifespan, will be explored during this presentation.”*

# AGING WELL: THE BRAIN – BODY CONNECTION

Saturday, May 14<sup>th</sup>, 10am – noon

## “Digitize Your Exercise: How Digital Technologies Are Shaping How We Monitor, Prescribe and Augment Our Physical Activities”

**Presenter:** Dr. Yoah Sui, Post-Doctoral Fellow, School of Exercise Science, Physical and Health Education, University of Victoria



Dr. Sui is a post-doctoral fellow in the Behavioural Medicine Lab at the University of Victoria. He completed his Masters and PhD degrees at Western University in Ontario where his research focused on health behaviour change, specifically sedentary behaviour among university students and how excessive sitting relates to mental health and well-being. Currently, his research involves the design and implementation of physical activity and sedentary behaviour interventions, but with a focus on digital health. In between sitting on his butt and writing, he enjoys rock climbing, mountain biking, and getting into arguments with his two dogs, Dudley and Benji.

*“For hundreds of years, how our physical bodies move and respond to movement has remained relatively similar: moving = good. Unfortunately, as societal and occupational demands shift away from more physical tasks, our opportunities to be active are changing too – but not for the better. Much of this change in activity can be attributed to an increased reliance on digital technologies like phones and computers. However, these technologies can be and are being used to promote physical activity, through improved monitoring, behavioural nudging, and increasing accessibility to exercise.”*

# AGING WELL: THE BRAIN – BODY CONNECTION

Saturday, May 21<sup>st</sup>, 10am – noon

## “Building Brain Resiliency and Healthy Aging: Positive Effects of Physical Activity and Concussions in the Aging Brain”

**Presenters:** Dr. Mauricio Garcia-Barrera, Associate Professor, Department of Psychology, University of Victoria and Ms. Stacey Horton, Actor, Dancer and Choreographer



Dr. Mauricio Garcia-Barrera is a native of Medellin Colombia. After completing his Bachelor's degree in Psychology at the University of Antioquia, he relocated to Georgia USA where he obtained his Master's and PhD at the University of Georgia. He is now an Associate Professor in the Department of Psychology at the University of Victoria. He has created the Cortex Lab, a research lab specializing in the study of the neural and behavioural foundations of executive functioning. His current research focuses on the study of both clinical events and environmental variables that modify executive function (that is, our ability to problem solve, make decisions and self-regulate) across the lifespan, including physical activity and participation in sports as well as sports-related concussions. Dr. Garcia-Barrera is a member of the Sports Neuropsychology Society, and has a research study investigating the effects of physical activity on cognitive performance and mood of older adults.



Stacey Horton has been creating original works for over 25 years. A graduate of Dance and Theatre from Simon Fraser University, Stacey uses a multi-disciplinary approach to making and performing new pieces. Her work has been presented in Western Canada and Seattle by Dancing on the Edge, Gambling Soles Productions, Calgary's Dance Explosions, Seattle's Under Construction Series, and in Victoria by Bounce, Suddenly Dance Theatre and Dance Victoria. Stacey is the winner of Dance Victoria's 2018 Chrystal Dance Prize for Independent Artists. Her most recent work, *Concussion*, was workshoped and presented in Berlin in August 2018 at ada Studios. In 2019, she premiered *Concussion* in Victoria in four sold-out performances and then

re-mounted it at the University of Victoria for the 2019 Brain Injury Awareness Week. *Concussion* was produced in partnership with the Cridge Centre for the Family through a CRD Equity Grant.

*“Using an interactive approach where science meets art, this presentation incorporates story telling and film to narrate the experiences of Stacey Horton, a local dancer who has recently developed a performance piece dedicated to the exploration of her dealing with a series of concussions during her childhood and dance career. She will share details of the events, the lingering long-lasting effects and fears, as well as the systems that facilitated coping and resiliency. Interwoven with her narrative, sports neuropsychologist Dr. Garcia-Barrera will share his recent studies on the benefits of physical activity to older adults' cognition and mental health, the current definitions of concussion, its diagnosis and treatment, as well as the literature exploring the trajectory of recovery from concussions and the controversial topic of chronic traumatic encephalopathy.”*

# AGING WELL: THE BRAIN – BODY CONNECTION

Saturday, June 4<sup>th</sup>, 10am – noon

## “Interactions Between Physical Activity and Mental and Cognitive Health: What Do We Know and What Next?”

**Presenter:** Dr. Theone Paterson, Assistant Professor, Department of Psychology, University of Victoria



Theone Paterson is an Assistant Professor in the Department of Psychology at the University of Victoria, a Visiting Researcher at Baycrest Health Sciences Centre and the Rotman Research Institute in Toronto, and a registered psychologist in the Province of BC with declared competence in clinical neuropsychology across the lifespan. Her focus is on improving our understanding of the interplay between neurocognition and psychosocial functioning, and predicting real-world health outcomes in aging and chronic illness groups. Aims of this work are to translate basic research to clinical settings through design and implementation of screening measures with utility in diverse groups, and to develop psychological and cognitive programs aimed at

improving real-world outcomes. She is the chair-elect of the Neuropsychology Executive of the Canadian Psychological Association and currently the Locally Responsible Investigator for the UVic site of the Canadian Longitudinal Study on Aging.

*“This presentation will provide an overview of current relevant research looking at the impacts of physical activity and related health behaviours on aspects of mental health and cognitive health over the adult age-span, discuss some recent findings of relevance in the pandemic context, and review some of Dr. Paterson’s ongoing studies in these areas.”*