

Story angles for Rotman Research Institute Conference

Healthy Brains, March 21-22, 2016

Understanding the brain through large-scale and longitudinal studies

Scientists working on large-scale studies follow thousands of participants over the course of years or even decades to increase our understanding of how genes and environment interact to affect brain health throughout life. The emerging field of population neuroscience may lead to personalized preventive medicine to empower individuals to keep their brains healthy as they age.

Three presenters and one conference co-chair are working in this exciting field:

Increasing healthy life expectancy: Is starting early in life the key?

Dr. Zdenka Pausova's work focuses on a two-generation study of 2,000 Canadian adolescents and their parents. In studying this cohort, Dr. Pausova is aiming to shed new light on how genes and modifiable risk factors such as obesity, hypertension, diabetes, smoking, or cognitive and physical inactivity, affect brain health during adolescence and contribute to risk of developing brain diseases later in life. Ultimately Dr. Pausova hopes to identify effective means for increasing healthy life expectancy.

Dr. Zdenka Pausova (Senior Scientist at the Hospital for Sick Children and Professor, University of Toronto) presents on Monday, March 21, 9:15 to 10:15 a.m.

Is the rate of dementia declining?

A recent study by Dr. Sudha Seshadri of Boston University Medical Centre suggests the prevalence of dementia may be on the decline. Dr. Seshadri and her colleagues used data from a study of the cardiovascular health of adults in the small town of Framingham, Massachusetts. The team found that from 1977 to 2008 the prevalence of dementia progressively declined by about 20 per cent per decade, parallel to a decrease in cardiovascular disease. Through studying this cohort Dr. Seshadri is aiming to increase our understanding of factors that affect our risk of developing dementia. Her work has implications for health policy and primary care practice.

Dr. Sudha Seshadri (Professor of Neurology, Boston University) presents on Monday, March 21 from 10:30 to 11:30 a.m.

Our aging brains

Brain changes are an inevitable part of getting older. Dr. M. Arfan Ikram's work on the Rotterdam Study in the Netherlands is using neuroimaging and medical data from approximately 15,000 participants to learn more about the biological processes that happen in the brain in aging and in degenerative diseases, the difference between these processes and factors that may protect the brain or increase the risk of developing disease.

Dr. M. Arfan Ikram (Associate Professor of Neuroepidemiology, Departments of Epidemiology, Radiology, Neurology at the Erasmus University Medical Center, the Netherlands) presenting on Monday, March 21, 11:30 to 12:30 a.m.

How can technology support better health and healthcare for seniors?

Communication Platforms for Social Connectedness and Memory Care

Dr. Ronald M. Baecker is aiming to tackle the problems of social isolation, loneliness and cognitive decline among older adults using the power of new technology. Dr. Baecker is part of a team that's working on an application that will help seniors connect with their families; use photos and video from social media to stimulate memories; and provide helpful reminders to support seniors in living healthy, independent lives.

Ronald M. Baecker (Emeritus Professor of Computer Science; Co-director of the Technologies for Aging Gracefully Lab; Emeritus Bell Chair in Human-Computer Interaction, University of Toronto) presenting on Tuesday, March 22 from 9 to 10 a.m.

Can new technology prevent falls?

By the 2030s, 3.3 million older adults are expected to fall at least once per year, with an impact on the direct costs of health care estimated at \$4.4 billion. Dr. Frank Knoefel is working on a technology solution to help reduce the risk of falls and enable seniors to live more independently. Using new sensor technology, Dr. Knoefel is developing a mobility monitoring system. By monitoring movement and analyzing patterns the system will be able to pick up on health changes that could increase the risk of a fall, allowing for early interventions and personalized falls prevention.

Frank Knoefel, (Physician, Bruyère Memory Program, Bruyère Continuing Care; Clinical Scientist, Bruyère Research Institute, Assistant Professor, Family Medicine, University of Ottawa) presents on Tuesday, March 22, 10 to 11 a.m.

Technology Innovation in Senior's Care: What works?

From smart-home technology to personal wearables, from big-data analytics to self-driven brain games, the tech sector is crowded with offerings for older adults. But of all these solutions, which of them have real and lasting positive impact on the health and wellness of older adults? Dr. Ron Riesenbach is the Vice President of Innovation and Chief Technology Officer at Baycrest Health Sciences and the executive lead on the development of the new Centre for Aging and Brain Health Innovation (CC-ABHI) at Baycrest. His presentation will provide an overview of technology for older adults as well as an overview of CC-ABHI program, which represents the largest investment in brain health innovation in the seniors sector to date.

Ron Riesenbach (Vice President, Innovation and Chief Technology Officer Baycrest Health Sciences) presents on Tuesday, March 22 at 11:15 to 12:15

Designing communities for better brain health

How can cities contribute to residents' health and wellbeing?

How can we create vibrant and healthy cities for everyone, regardless of age or social status? How can parks and open spaces improve the quality of life that attracts and retains people to their communities? How can we support meaningful engagement and create communities that promote health and well-being across generations? Gil Penalosa answers these questions in a dynamic presentation about creating more liveable cities that put people at their center. Drawing on his experience in working with over 200 cities across six continents Gil provides examples of cities at the forefront of innovation in public space reclamation that demonstrate the many benefits parks and public spaces have on both mental and physical health, social inclusivity, and city vitality.

The full conference program is available at <http://www.research.baycrest.org/conference.php>
Media planning to attend the conference at the Metro Toronto Convention Centre are asked to sign in at the on-site registration desk. To arrange interviews with any of the conference speakers, contact: Steph Parrott, Communications Specialist, Rotman Research Institute at Baycrest Health Sciences, sparrott@baycrest.org, cell: 416-785-2500 ext 5724.