Thank you Participants!!

The scientific achievements from last year were made possible thanks to the active participation of our patients, their relatives, and friends. Together, we advanced clinical science towards new therapies for Alzheimer’s Disease.

Annual BBQ Fundraiser
Wednesday, June 20, 2018
4:30-7:30 PM

MCSA held its Annual BBQ Fundraiser on Wednesday, June 20, 2018 to thank all of the Donors for their generosity and support throughout the past year. Dr. Rosa-Neto and Dr. Gauthier welcomed all guests and began the evening with a brief summary of this year’s accomplishments.

AWARDS 2018

This year’s event was distinctive because the Centre presented the first ever “MCSA Achievement Award,” to four recipients. The first award was presented to Dr. Howard Chertkow, MD, FRCPC, FCAHS in recognition of his leadership of the Canadian Consortium of Neurodegeneration in Aging (CCNA) and his contributions to the field of cognitive decline with aging as a whole.

Dr. Pedro Rosa-Neto, MD, PhD, Dr. Howard Chertkow, MD, FRCPC, FCAHS, Dr. Serge Gauthier, C.M., C.Q., MD, FRCPC.

The recipients of the second and third award were Rick Hiatt, President and CEO of Cerveau Technologies, Inc. and CEO of Enigma Biomedical Group, Inc. and Lee Gibbs, President of Enigma Biomedical Group, Inc. for the establishment of the Dr. Serge Gauthier Fellowship Award and for their generous contributions to MCSA’s research infrastructure on aging.

Dr. Pedro Rosa-Neto, MD, PhD, Silvana Aguzzi, Administrative Assistant, Dr. Serge Gauthier, C.M., C.Q., MD, FRCPC.
CONFERENCE & COURSES 2018

Dr. Tharick Ali Pascoal, Sulantha Mathotaarachchi, Min-Su (Peter) Kang, and Joseph Therriault attended the “PET PHARMACOKINETICS MODELING” course prior to the NeuroReceptor Mapping Conference, (NRM 2018) July 7th - 9th, 2018. They learnt about new techniques to see proteins in the brain. The outcome of this course gave them the tools required to measure the proteins that become abnormal in the brains of people with Alzheimer’s, as well as other forms of dementia.

The amyloid plaques and neurofibrillary tangles are abnormal aggregates of misfolded proteins in the brain, which are the two major hallmarks of Alzheimer’s Disease. Studies have shown that these abnormally aggregated proteins have unique spreading patterns across the different brain regions as the individuals start to show Alzheimer’s Disease symptoms. In particular, amyloid plaque spreading was defined as Thal Stages and neurofibrillary tangles spreading was defined as Braak Stages; these stages were named from the researchers Dr. Thal and Dr. Braak, respectively, who studied the brain tissues right after the time of the death of Alzheimer’s Disease patients. Using positron emission tomography (PET) imaging of the brain, we can now visualize and measure the amyloid plaques and neurofibrillary tangles in the brain of living individuals. Here, we have conducted PET scans in our participants at McGill University Research Centre for Studies in Aging (MCSA) cohort who has been actively and generously involved in our research studies. Our study hoped to show the patterns of amyloid plaques and neurofibrillary tangles in the brain, as well as how the two hallmarks are associated to each other, in cognitively healthy subjects and patients with mild cognitive impairment and Alzheimer’s Disease. Our results show that amyloid plaques mainly build up from a particular brain network called the ‘default mode network’ (corresponding to the active brain regions during rest) and spread to the rest of the brain. This follows like Thal Stages.

However, neurofibrillary tangles mainly build from a particular brain region called the medial temporal lobe. This follows Braak Stages. Importantly, we showed that the association of the two hallmarks spread following Braak Stages (corresponding to neurofibrillary tangles) rather than Thal Stages (corresponding to amyloid plaques) as the disease progresses to Alzheimer’s Disease. Based on these results, although amyloid plaques are crucial to initiate Alzheimer’s Disease, perhaps, neurofibrillary tangles may be more closely related to the disease severity than amyloid plaques.

“SEE YOU IN MONTREAL”

Election of 2020 NeuroReceptor Mapping Conference (NRM 2020) – An announcement was made at the closing of the 2018 meeting that Montreal would host the next NRM meeting in 2020.

Alzheimer’s Association International Conference (AAIC 2018) July 22-26, 2018
Chicago, USA

Dr. Tharick Ali Pascoal, MD

The McGill University Research Centre for Studies in Aging (MCSA) graduate students presented at the AAIC 2018. Andrea Benedet, Sulantha Mathotaarachchi, Min-Su (Peter) Kang, Joseph Therriault, Melissa Savard, Dr. Tharick Ali Pascoal, and Émilie Thomas had...
The National TV of Japan NHK (Nippon Hōsō Kyōkai), official English name: Japan Broadcasting Corporation made a documentary about artificial intelligence (AI) at our Centre (www.nhk.or.jp). The motivation of the Japanese Broadcasting Corporation was from our recent scientific paper authored by Sulantha Mathotaarachchi entitled “Identifying incipient dementia individuals using machine learning and amyloid imaging”. Our publication showed that AI technique developed in the MCSA is capable to indicate individuals on the verge to develop dementia based on a brain scan. This research provides crucial information for the development of clinical trials and, in the future, to select individuals for preventive therapies. The Japanese TV program described the advances of AI in Agriculture, Finances and Human health.

The TV program visited the McGill University Research Centre for Studies in Aging (MCSA) from May 28 to May 30, 2018.

Dr. Hua Zhang, MD, PhD, a visiting scholar who arrived in August 2017 from the Department of Neurology, the First Affiliated Hospital of Chongqing Medical University, China will be at MCSA until August 2018. His research interests focuses on pathogenesis & treatment of Alzheimer’s Disease. Dr. Zhang will be completing his research as a visiting scholar at the MCSA with important publications on biomarker changes associated with brain aging. He is the latest of a very successful group of researchers from China (Drs. Wu, Ba, Li) and Singapore (Dr. Ng), who continue to interact with the McGill University Research Centre for Studies in Aging.

Dr. Muhammad Naveed Iqbal Qureshi, PhD, recently joined the MCSA as a postdoctoral research fellow as of June 20, 2018.

Dr. Qureshi has won the prestigious “Dr. Serge Gauthier Fellowship Award” and “Quebec Government FRQS Fellowship Award” and working as a postdoctoral research fellow with Dr. Pedro Rosa-Neto. He will be developing the methods to integrate the cutting-edge artificial intelligence and machine learning (including deep learning) with the clinical neurological data. The goal of his research is to develop an automated early prediction system of the Mild Cognitive Impairment and of the onset of Alzheimer’s Disease and Dementia.

Paul Bakhchine, 22 years old, is a medical student from Université de Reims Champagne-Ardenne, France. Paul was invited and chose to come to the McGill University for a non-credit observational studentship under the supervision of Dr. Serge Gauthier, at the McGill University Research Centre for Studies in Aging, Faculty of Medicine. His non-credit studentship began on July 9 and will end August 5, 2018. Paul is grateful for this opportunity with MCSA, Dr. Serge Gauthier and MCSA team.

Marlee is originally from Nova Scotia, and has recently completed her medical degree at McGill University. She has joined the research lab of the McGill University Research Centre for Studies in Aging to complete a Master’s of Science in Microbiology and Immunology and is presently working with biosamples in the Neuroinflammation project and helps with data entry and other administrative tasks. She enjoys working with the CrossRoads amazing team and looks forward to a knowledgeable learning experience.

Ellie Joung joined MCSA in June 2018 as a Research Assistant under the supervision of Dr. Pedro Rosa-Neto. Ellie graduated from McGill University with a Bachelor of Science in Microbiology and Immunology and is presently working with biosamples in the Neuroinflammation project and helps with data entry and other administrative tasks. She enjoys working with the CrossRoads amazing team and looks forward to a knowledgeable learning experience.

MEMORY CLINIC: ALZHEIMER’S DISEASE RESEARCH UNIT

Alzheimer’s Disease Research Unit Director Dr. Serge Gauthier and Dr. Pedro Rosa-Neto, Director of the McGill University Research Centre for Studies in Aging, utilize the best clinical practices and cutting-edge technologies for diagnosis of medical conditions associated with memory problems. The Memory Clinic is actively involved in cognitive research and is recognized
We appreciate your continued support to our Centre! To achieve all of our objectives and to continue to play an important role in aging research in Quebec and Canada, we always need your help. In order to advance in our mission and mandate towards prevention, our major focus of aging research, and our commitment in investigating causes and new treatments of the dementias, we count on your continued support. We thank all of our Donors for their encouragement and mandate towards prevention, research, education, and teaching in the field of aging. We are happy to accept donations that will support our research efforts. We will issue a receipt for tax purposes for all donations above $15.00. In addition, every donor whose gifts exceed $500 will be honored by receiving a permanent inscription on our Donor Wall. If you would like to make a donation by mail, phone or email please contact Alexandra Triantafilopoulos at 514-761-6313 x6311 or By Email: alexandra.triantafilopoulos1@mcgill.ca or silvana.aguzzi@mcgill.ca.

**DONATIONS**

On Wednesday, June 20, 2018, MCSA held its Annual BBQ Fundraiser. The Centre would like to acknowledge and thank all of the Donors, Family members, Volunteers, Students, Staff and Sponsors that contributed to this year’s event. We would like to express our deepest gratitude to all of our Donors and are grateful for your continued association with the McGill University Research Centre for Studies in Aging. Thanks to Donors like you, we can continue our mission in investigating causes and treatments of the dementias, especially Alzheimer Disease. Your support is extremely important to us and we encourage you to spread the word on social media to other people in your lives to care about us and to help us out with our cause. We would like to take this opportunity to wish you and your family a warm, healthy and enjoyable summer!!!!

[www.mcsa.ca](http://www.mcsa.ca)  
[www.aging.mcgill.ca](http://www.aging.mcgill.ca)  
[tnl.research.mcgill.ca](http://tnl.research.mcgill.ca)  

**UPCOMING EVENTS**

**SAVE THE DATE**

**BRAINY BOOMER LECTURE SERIES**

**“Healthy Eyes”**  
**Wednesday, October 3, 2018**  
**Time: 2:00 PM**  
**Speaker: Dr. Dolly Dastoor, PhD**  
**Ville Kirkland Library – Bibliothèque Kirkland**  
**Registration: T: 514-694-4100 x 3204**  
**Adult Activities Coordinator**

**“Healthy Aging”**  
**Wednesday, October 31, 2018**  
**Time: 12:00 pm**  
**Speaker: Dr. Christopher Serhan, Optometrist**  
**Bibliothèque du Vieux Saint Laurent**  
**Registration: T: 514-855-6130 x 4742**  
**Activity Coordinator**

**“Strategies for Healthy Aging: An Active Brain”**  
**Wednesday, October 24, 2018**  
**Time: 1:00 PM**  
**Speaker: Dr. Dolly Dastoor, PhD**  
**D.D.O. Seniors Club**  
**Registration: T: 514-684-1012 x 209**  
**Activity Coordinator**

**“Coping Strategies for Caregivers and Family Members of Dementia Patients”**  
**Wednesday, October 31, 2018**  
**Time: 1:30 pm**  
**Speaker: Dr. Loraine Mazzella-Maiolo, MD, FCCP(C)**  
**Centre de Soutien – Entre’ Aidants**  
**Registration: T: 450-465-2520 x 204**  
**Activity Coordinator**

**SYMPOSIUM:**

**AGING IN THE 21ST CENTURY**

In honor of International Senior’s Day, MCSA along with Alzheimer Society of Montreal, and Alzheimer Groupe Inc. invites you to attend a day of lectures and informative kiosques. **Registration: $25.00 per person Includes: Refreshments, Lunch, Educational Lectures, Kiosques.**

**3rd OPEN HOUSE – HEALTH DAY**

**THE MCGILL UNIVERSITY RESEARCH CENTRE FOR STUDIES IN AGING (MCSA) Invites all seniors 50+ to come and evaluate their health and attend educational lectures.**

**Friday, September 21th 2018**  
**9:00 am to 4:00 pm by appointment only**  
**RSVP Call - T: 514-766-2010**  
**Limited Places Available**  
**Info.mcsa@mcgill.ca**