THANK YOU PARTICIPANTS!!

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

ARTIFICIAL INTELLIGENCE & PERSONALIZED MEDICINE

The McGill University Research Center for Studies in Aging, with its industry and academic partners, will start multiple projects that use Artificial Intelligence (AI). During the last couple of years, AI has become an integral component in almost all technological development, ranging from language and facial recognition, financial prediction and driverless cars. The MCSA will take the initiative in designing and development of new AI based tools that can help clinicians in the accurate and efficient diagnosis of dementia several years before symptom onset. These new tools will also enable a better understanding of the neurodegenerative disease progression over time. Furthermore, MCSA will create a new AI based framework to improve the quality control of PET images, by developing tools that can perform fully automated quality control. This will allow unbiased, uniform, accurate and efficient quality control of neuroimages which will allow the researchers and clinicians fast access to the images.

Personalizing therapies for AD:
A little less than 50% of people with memory problems might develop dementia in 10 years. Using artificial intelligence, Sulantha Mathotaarachchi developed software for predicting, among people with certain memory problems, the onset of dementia in a time-frame of 24 months. These predictions are based on a brain scan presently available in Canada for research. This software will allow the enrollment of the best population for clinical trials by selecting individuals with high probability to develop dementia. Possibly in the future, when preventive therapies are available, the same software will serve to personalize therapies for patients who would benefit from preventive therapies.

Findings appear in a new study published in the journal of Neurobiology of Aging.
https://doi.org/10.1016/j.neurobiolaging.2017.06.027
Link to the software: http://predictalz.tnlmcgill.ca/PredictAlz_Amy
This research was funded by the Canadian Consortium on Neurodegeneration in Aging (CCNA) and the Canadian Institutes of Health Research.
Guylaine Gagné
I joined MCSA in January 2018, with 30 years of nursing experience of which 13 years were dedicated as a Research Nurse. It’s a pleasure to work with Dr. Rosa-Neto’s Team.

Carley Mayhew
I started in February 2018 as a Nurse and work with the Head Nurse assisting participants with biosamples and help the research team gather clinical information.

Jenna Stevenson
I am a research assistant under the supervision of Dr. Rosa-Neto. I will be completing my BA with a Major in Psychology and graduating in the spring of 2018, I have already learnt so much in my short time at the MCSA, and looking forward to what the future will hold.

Alyssa Crichton
I started volunteering at the MCSA in September 2017 and began working as a research assistant in February 2018. I graduated from McGill University in December 2017 with a Bachelor of Science in Anatomy and Cell Biology. I am working mainly on the Neuroinflammation project, however I play a role in all projects that require the collection of biosamples of research participants. I love working with such an amazing group of people, and I have really enjoyed what I have learnt thus far.

Sarah Sbeiti
I am an undergraduate student in psychology at Université de Montréal. Following my interest in neuroscience, I joined the MCSA in September 2017 where I work as a research assistant under the supervision of Dr. Pedro Rosa-Neto.

Karen Wan
I am a research assistant at the MCSA since August 2017. I coordinate with other research assistants in recruiting new participants for our study and assist participants at the Montreal Neurological Institute with their PET and MRI appointments. It is a privilege to meet research participants and to contribute to the goals of these projects.

Tasha Vinet - Cellucci
Administrator
I am the research data secretary working for MCSA since April 2017. My responsibilities include scheduling PET/MRI scans, recruitment and assisting patients with questions about our research projects. A year later, I have learnt so much and have the pleasure of working with a great team in an amazing environment. I hope I will make a difference in the fight against Alzheimer’s Disease.

NEW STUDENTS 2018

Émilie Thomas
I joined the MCSA team in January 2018 because I wanted to acquire more research skills. I am a postdoctoral researcher and also a Neuropsychologist. Since my doctoral studies, I am interested in normal and pathological memory. At MCSA, I am currently working on a research project developed by Dr. Pedro Rosa-Neto’s team on the progression of neuroinflammation and Tau aggregates in screening for preclinical Alzheimer’s Disease. I am particularly interested in measurements of cognitive functions in relation to markers of neuroinflammation and in relation to biomarkers of Alzheimer’s Disease.

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Thaís Barbosa Alberti
I received the ELAP-Scholarship - “Leaders of America Scholarship Program” and will be doing my research at MCSA from March to September 2018. I am a master student of Biotechnology and Biosciences at Universidade Federal de Santa Catarina, in Brazil. I am currently studying the effect of a nanoencapsulated cannabinoid agonist in neurodegenerative processes. I am developing nanoparticles of this agonist and I intend to test it with neuroimaging techniques and experimental models to assess if it diminishes neuroinflammation and clinical signs of the diseases, focusing particularly on Alzheimer’s Disease.

Peter Kunach
I am a Master’s student – Integrated Program in Neuroscience (IPN), first year at McGill University. I started to volunteer in the lab at MCSA in December 2017. I am presently working on characterizing Alzheimer’s Disease biomarkers in the transgenic F344-AD rat model.

Jordan Lecourtois
I am an undergraduate student at Polytechnique Montreal in Biomedical Engineering. As of March 2018, my role at the MCSA is to update and improve the P.O.N.D.E.R. project which is a free program aimed at preventing Neurodegenerative Diseases such as Dementia, Alzheimer’s and Parkinson’s. This project will be offered in French and English.

AWARDS 2018
Joseph Therriault, MSc.
Congratulations for receiving the Rémi Quirion Excellence Award which recognizes your outstanding research contribution to the Douglas Institute Research Center.

The following MCSA Research Students received Travel Awards to fund their Research Travel:
- Tharick Ali Pascoalo, MD, Neurologist, PhD Candidate (Miami, USA)
- Mira Chamoun, PhD (Chicago, USA)
- Min Su (Peter) Kang, PhD candidate (London, UK)

1ST MRtrix3 WORKSHOP
Melissa Savard, Research Associate joined the MCSA in October 2017 and will be attending the first official MRtrix3 workshop in June 2018 in Paris, France.

This hands-on workshop will cover the theory and practice of diffusion analysis that will be applied to advance the research on the role of white whiter integrity in aging and neurodegeneration.

THE 12TH HAI CONFERENCE
The Research Team of MCSA attended the Human Amyloid Imaging Conference in Miami, January 2018, (left-right) Sulantha Mathotaarachchi, Min Su (Peter) Kang, Tharick Ali Pascoalo, Andréa Lessa Benedet, Mira Chamoun and Joseph Therriault.

STAFF SPOTLIGHT
MEMORY CLINIC
Meet Tamar Tatigian, who is the medical secretary of the McGill University Research Centre for Studies in Aging. She has been working for the Centre with Dr. Serge Gauthier for over 26 years and is responsible in assisting the research team with Clinical Trial Studies and the Neurologists of the MCSA with their patient clinic.

Maria Polcaro is a member of OIIQ since 1986 and has over 30 years’ experience as a registered nurse in the Province of Quebec. Maria spent the early part of her career working as a critical care nurse at the Montreal General Hospital ICU where she treated and cared for multi-trauma patients. For the last 11 years, Maria has worked as a clinical research/nurse, study coordinator at the Royal Victoria Hospital, and the M.N.I. She joined the McGill University Research Center for Studies in Aging in September 2014 as the Research Study Coordinator, where she coordinates and carries out all aspects of phase II-IV clinical drug trials related to Alzheimer’s and Dementia.

The Memory Clinic is actively involved in cognitive research and is recognized internationally as a Clinical Trial Site. Clinical trials (Phase II-IV) that test the efficacy and safety of experimental drugs for AD and other cognitive disorders are ongoing. The MCSA is in the process of recruiting for 4 different clinical trials on Alzheimer’s Disease. Our team will answer all questions in regard to clinical trials and if you are interested in obtaining more information and/or participating in one of our clinical trials please do not hesitate to contact Tamar Tatigian at 514-761-6131 x6314 or email: info.mcsa@mcmill.ca.

Memories of Aging: 
Meet Loretta Lessa Benedet, Mira Chamoun and (Peter) Kang, Tharick Ali Pascoal, Andréa Lessa Benedet, Mira Chamoun and Joseph Therriault.

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Memories of Aging: 
Meet Loretta Lessa Benedet, Mira Chamoun and (Peter) Kang, Tharick Ali Pascoal, Andréa Lessa Benedet, Mira Chamoun and Joseph Therriault.
Russell Clough joined the McGill University Research Center for Studies in Aging in July 2017 as a Clinical Research Nurse. He is a member of the OIIQ since 2011 and was previously employed at the Douglas Mental Health University Institute where he was nurse and case manager at the Moe Levin Memory clinic for over 6 years. Russell is happy to be a part of this close-knit team and looks forward to learning more about the field of clinical research.

Laura Robb, obtained her Master’s degree in Genetic Counselling at Sarah Lawrence College in New York and has worked in various areas of the medical milieu. Her genetic work experience includes clinical and research contributions in paediatrics, infertility, prenatal, laboratory, adult onset conditions including hereditary cancer, cardiac and Alzheimer disease, as well as health care technology and service evaluation. She has applied her experience at the McGill University Hospital Centre, PROCREA clinics, the Université de Montreal Hospital Centre, VM Medical Clinic, the Montreal Heart Institute and the McGill University Research Centre for Studies in Aging. Her current interests include adult genetic services and models of genetic service delivery.

Mallery Landry is the Centre’s receptionist since August 2017. She joins our Centre with 9 years’ experience as a medical receptionist. Mallery is the key person you will meet from the moment the doors open at MCSA. She is on the frontlines of keeping patients/visitors/clients happy and ensures that things run smoothly and efficiently.

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**DONATIONS**

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 confidence in our work which contributes to the preservation of the highest levels of 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 Triantafillopoulos at 514-761-6131 X 6311 or by email: alexandra.triantafillopoulos1@mcgill.ca or silvana.aguzzi@mcgill.ca.

We invite all of our Donors to our Annual BBQ Fundraiser which will be held on Wednesday, June 20th 2018 from 4:30 -7:30 pm at our Centre. We hope that you will save this date and come and be informed on our current research projects and research successes of 2017. We would like to take this opportunity to wish each one of you and your family a warm, healthy and safe summer!!!!

**UPCOMING EVENTS**

**BRAINY BOOMER LECTURE SERIES**
[www.aging.mcgill.ca](http://www.aging.mcgill.ca)

**JUNE 20**th **2018**
**SEPTEMBER 21**th **2018**
**OCTOBER 5**th **2018**

**ANNUAL BBQ FUNDRAISER**
Wednesday, June 20th 2018
4:30 pm -7:30 pm

**RSVP BY MAY 25**th **2018**
T: 514-761-6131
Ext. 6311
Contact Ms. Triantafillopoulos

**3rd OPEN HOUSE – HEALTH DAY**
MCSA invites 50+ Seniors to come and evaluate their health and attend educational lectures

Friday, September 21**th** 2018
9:00 am to 4:00 pm
RSVP T: 514-766-2010
info.mcsa@mcgill.ca

**SYMPOSIUM: AGING IN THE 21ST CENTURY**
In honor of International Senior’s Day, MCSA, Alzheimer Society of Montreal, and Alzheimer Group Inc. invite you to attend a day of lectures and informative kiosques.
Friday, October 5**th** 2018
8:30 am to 3:00 pm
RSVP T: 514-766-2010
info.mcsa@mcgill.ca