# THE MCGILL UNIVERSITY RESEARCH CENTRE FOR STUDIES IN AGING (MCSA)





NOVEMBER 2024 - 24<sup>TH</sup> EDITION

Keeping you updated on the latest news, events, and research achievements!

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

### Quebec Conference on Alzheimer's Disease and Related Disorders (CQMA)

The Quebec Conference on Alzheimer's Disease and Related Disorders (CQMA) was held in Sherbrooke from November 6 to 8, 2024. This hybrid-format event (offered both in-person and online) featured presentations from numerous experts, including MCSA neurologist Dr. Paolo Vitali, who presented on November 8.

The CQMA primarily attracts nurses, physicians (general practitioners and specialists), and other healthcare professionals.

Its content is thoughtfully tailored to address the varied needs of this diverse audience. Some sessions are designed for frontline practitioners, while others dive into advanced topics aimed at specialists, students, and residents in training. Topics included new diagnostic methods, therapeutic innovations, and highlights from recent literature.

Over the past three years, notable advancements have emerged in Alzheimer's therapeutics, particularly with the introduction of potentially disease-modifying treatments, this being the focus of Dr. Vitali's two talks: "Traitements modificateurs de l'évolution," and "Mise à jour sur les biomarqueurs plasmatiques" highlighted recent updates on plasma biomarkers.







Eli Lilly and Company is a global healthcare leader that unites caring with discovery to make life better for people around the world. We were founded more than a century ago by Colonel Eli Lilly, who was committed to creating high quality medicines that meet people's needs, and today we remain true to that mission in all our work. Lilly employees work to discover and bring life-changing medicines to people who need them, improve the understanding and management of disease, and contribute to our communities through philanthropy and volunteerism. Eli Lilly Canada was established in 1938, the result of a research collaboration with scientists at the University of Toronto which eventually produced the world's first commercially available insulin. Our work focuses on oncology, diabetes, autoimmunity, neurodegeneration, and pain. To learn more about Lilly Canada, please visit us at www.lilly.ca. For our perspective on issues in healthcare and innovation, follow us on twitter @LillyPadCA.



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# XIV International Symposium on Functional NeuroReceptor Mapping of the Living Brain (NRM2024)

The XIV Neuro Receptor Mapping (NRM) Conference took place at the Centre Monty-Royal in Montreal from May 18-21, 2024. First established by Prof. Dr. Albert Gjedde in 1997, this biennial event focuses on the in-vivo quantification of brain function using Positron Emission Tomography (PET). Known for its innovative approach and significant impact, the conference was hosted by McGill University's CaTS, the Montreal Neurological Institute, and the Douglas Mental Health University Institute. The following provides an overview of the events and key details from the 4-day conference. The NRM community is responsible for significant progress in detection of brain neurodegenerative conditions such as Alzheimer's disease.

#### **Conference Overview:**

Dates: May 18–21, 2024

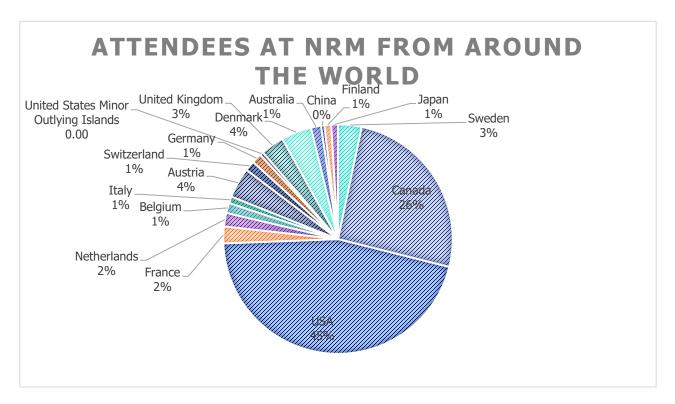
Venue: Centre Mont-Royal, Montréal, Québec (H3A 3R8)

Attendees: 227

o Academics: 109

Students (Undergraduates/PhD/MSc/Postdocs): 88

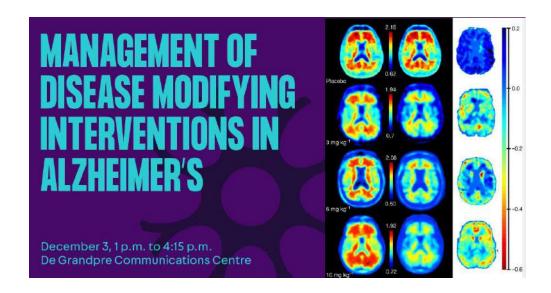
Industry: 22Others: 8





#### Workshops:

- 1. Nonlinear Parameter Pub Crawl
  - A hands-on workshop exploring nonlinear parameterization techniques for neuroimaging.
- 2. Standardization Framework for PET Metabolic Connectivity Analysis



This is a iniciative taken in collaboration with the Montreal Neurological Institute. This workshop will provide valuable insights into the latest treatment strategies and guidelines, aiming to equip healthcare researchers and professionals with the necessary tools to manage and prescribe anti-amyloid therapies effectively. Additionally, it will help enhance the knowledge and skills required to handle adverse effects associated with these treatments.



Dr. Suzanne Schindler, MD, PhD - Department of Neurology, Washington University School of Medicine will talk about Diagnosis and Treatment of Early Symptomatic Alzheimer's Disease. The early and accurate diag nosis of Alzheimer's disease in patients with cognitive impairment is more important than ever now that disease-modifying treatments are becoming available. This lecture will describe how to diagnose early symptomatic Alzheimer's disease by integrating clinical information with biomarker tests.



Dr. Alireza Atri, MD, PhD (Department of Neurology, Harvard Medical School) will discuss about Amyloid-related imaging abnormalities (ARIA) are imaging changes associated with beta-amyloid plaque-lowering monoclonal antibodies for treatment of early clinical stage Alzheimer's disease (AD) that can be observed on magnetic resonance imaging (MRI). ARIA-E refers to vasogenic edema in the brain parenchyma and/or leptomeningeal/subpial sulcal effusion; ARIA-H refers to hemosiderin deposits including cerebral microhemorrhage and localized superficial siderosis. ARIA can result in symptomatic adverse events and poor outcomes if not detected, monitored and managed through timely, coordinated and appropriate practices.





Dr. Gauthier will discuss Canada's preparedness for the use of biomarkers and disease-modifying drugs. He was a clinical investigator and staff neurologist at the Montreal Neurological Hospital and Institute (The Neuro) from 1976-1986. He was the Director of the McGill University Research Centre for Studies in Aging (MCSA) from 1986 to 1997, and Director of the Alzheimer Disease and Related Disorders Research Unit of the MCSA until 2021. He was also a Senior Scientist of the Canadian Institutes of Health Research and Development (CIHR-RxD) from 1997 to 2007.

#### **MCSA Education Committee Members**



### Celebrating the MCSA Education Committee: Empowering Excellence in Education

The MCSA Education Committee is a cornerstone of our community, driving the mission of education, growth, and empowerment at the Centre. We want to take a moment to honor and celebrate the invaluable contributions of this remarkable group of individuals.

The members of the MCSA Education Committee are dedicated professionals who not only bring their expertise but also their passion for making a positive impact on our educational landscape. Through their tireless efforts, they have played a pivotal role in fostering an inclusive learning environment and supporting the academic and personal growth of all learners. From organizing impactful programs to providing critical feedback and resources, the MCSA Education Committee continually strives to ensure that our educational offerings are of the highest quality. What makes the MCSA Education Committee so powerful is their collaborative spirit and shared vision. Together, they are working to create an environment where everyone can thrive, whether through innovative teaching methods, mentorship opportunities, or fostering a culture of lifelong learning.



We are incredibly grateful for their ongoing commitment, and we recognize the tremendous impact they have on our Centre. Their leadership and dedication inspire us all to aim higher, push boundaries, and embrace the transformative power of education. Thank you to every member of the MCSA Education Committee. Your work is truly making a difference, and we are proud to have you as part of our community.

### **Personal Reflections**

Dr. Dolly Dastoor, PhD, Chair, MCSA Education Committee

The MCSA started operations in 1985 with a mandate to promote research, education and teaching in the field of aging and aging research with a multidisciplinary approach.

Following the decision of the Advisory Committee to add an educational component to the Centre, the Education Task Force of the MCSA was established in January of 1996 and subsequently in 2001; the name was changed to Education Committee. Its main objective being to actively engage in knowledge transfer and public education, designed to sensitize both scientists and the lay public at large to health and social issues related to aging. Since 2008, a special emphasis has been put on the research area of prevention of age associated cognitive decline.

In the late 1990s and early 2000s teaching and training programs were developed as there were none available in the community. A gerontology certificate program was developed in collaboration with the school of social work. We completed an intergenerational project; we completed a needs assessment survey for the community. From 2010 we started holding symposiums on varied subjects like healthy aging, Gender brain health, Aging in the 21st century, we held Open House, with lectures and free medical examination of BP, Dental Health, Cognitive Assessments. We also started going into the community like Centre D'accueils, libraries, etc. to give presentations on different aspects of aging. With the advent of Covid in 2020, lectures were given by Zoom.

My work with the Education Committee of the McGill Research Centre has been one of the most fulfilling experiences for me. I started at the Education Committee as a Committee Member and was later elected to be the chair. As more professionals joined our committee, we saw our programs grow and our services expand in the Community. There was great co-operation and camaraderie in the committee with cross fertilization of ideas which made our work very enjoyable and gratifying that we were fulfilling the mandate of the education committee in spreading knowledge on different aspects of aging and dispelling the myth of aging.

Congratulations on being part of such a vital project for the last 40 years—and on celebrating the MCSA's 40-year milestone!



### A Personal Reflection on the MCSA Education Committee's Journey Dr. Loraine Mazzella, MD

The MCSA has been a pillar of strength and growth since the 1980s, and it's truly been a privilege to be part of this inspiring community. I was introduced to the Centre in 1985 while practicing Geriatrics at the Montreal General Hospital, and later, while working in Long-Term Care, I was invited to join the Education Committee as a medical advisor and member. This opportunity has been a deeply fulfilling part of my career.

Together, we began by addressing memory-related issues—discussing its causes, symptoms, and effective strategies for care. But over the years, our focus expanded to touch on a wide range of topics that affect people of all ages, including healthy living, managing depression, promoting heart health, understanding arthritis and osteoporosis, and supporting caregiver coping strategies. Each lecture and discussion became an opportunity to empower the public with practical knowledge they could apply to their lives.

One of the most rewarding aspects of being on the Education Committee has been the chance to educate the community through multilingual conferences. I've seen firsthand how this approach helps bridge gaps and ensure that people from all backgrounds have access to important health information. The enthusiasm and engagement from the public during Q&A sessions have been especially fulfilling—these discussions are often enlightening and make the topics we address feel even more relevant to everyone involved.

I am particularly proud of our Brainy Boomer Lecture Series and Symposia, which we organized at the Douglas Hospital. Now, in an even more accessible online format, our series continue to bring together experts, scholars, and the general public, fostering an informed and empowered community.

None of this would be possible without the commitment and dedication of my fellow members of the Education Committee. Together, we have created a lasting impact, and it has been an honor to contribute to such a meaningful cause.

Congratulations to the entire team at MCSA and my fellow committee members—BRAVO! Let's continue to make a difference, one lecture at a time.



# Empowering Seniors: A Clear and Passionate Vision for Preventative Health and Cognitive Preservation

Maria Maiolo, RN



#### Positive Experience with the Education Committee

Serving on the Education Committee has been a highly positive experience, offering an opportunity to collaborate with experts from various fields to bring accurate, relevant information on healthy aging. This enables seniors and those supporting them to make informed health decisions. The diverse expertise of the committee members complements each other, enhancing the value of the work produced.

Impact of the Committee's Work

The most rewarding aspect of being on the committee is witnessing the appreciation and impact of the information shared. Seeing how the audience uses this knowledge to make informed decisions about their health and enjoy a healthier, more fulfilling retirement is deeply motivating.

#### Background and Expertise

With over 40 years of experience in nursing, both in direct care (Centre de Jour and CHSLD) and as an executive director for the Italian Canadian Community Services of Quebec, you have been deeply involved in educating and advocating for the health and well-being of seniors. Your work includes adapting health and social services to the specific needs of the Italian community, particularly around culture, language, and healthy lifestyle.

#### Partnership with McGill University

A valued partnership with McGill's Nursing and Nutrition and Dietetics faculties allows students to complete community stages with your organization. Their projects and presentations are an excellent addition to the Brainy Boomers Lectures, enriching the learning experience for seniors and others in the community.

A great suggestion to bring back the annual Health Day, which was a popular and appreciated event pre-Covid. It had a positive impact on attendees and could continue to serve as an important community health resource. Relevance of Committee's Efforts

The Education Committee's work is seen as highly relevant and beneficial to seniors. Topics covered by the committee are crucial for maintaining health, mobility, mental well-being, and a positive outlook as people age.

#### The Potential for Leadership in Senior Education

The MCSA Education Committee became a leader in disseminating health information to seniors and their families. Furthermore, it could encourage middle-aged individuals to adopt healthier habits early on, helping them to prevent future health problems.



# My Collaboration with the MCSA Education Committee Dr. Paolo Vitali, MD, PhD, FRCPC, Neurologist - Neuropsychologist

Working alongside the MCSA Education Committee has been an incredibly stimulating and fulfilling experience. Alzheimer's disease has a profound impact not only on individuals but also on their families, and I believe that prevention and education are critical components in addressing this issue. The committee's efforts to promote healthy aging and cognitive preservation are not only important but essential in today's world.

Our shared mission of fostering awareness and encouraging early intervention is making a tangible difference. Through our initiatives, we aim to help both younger and older generations stay healthy, independent, and autonomous for as long as possible. But our work goes beyond just providing knowledge—we strive to empower individuals to take proactive steps in managing their cognitive health.

The MCSA Education Committee has the potential to create lasting change by shifting societal attitudes toward aging and increasing awareness of preventive measures. By working to change how we think about cognitive health, we are helping to lay the foundation for healthier, longer lives. This is something all of us involved should be incredibly proud of.

# The Education Committee plays a unique role within McGill for diffusing advances in dementia prevention Dr. Pedro Rosa-Neto, MD PhD, Neurologist



The Education Committee has inspired much of the research conducted at the MCSA, particularly the students conducting research in early diagnosis using PET imaging, cerebrospinal fluid and plasma tests.

Education Committee has provided the blue-prints of novel knowledge translation initiatives and has continued opened the collaborative avenues with the Montreal Neurological Institute, The pharmacology department, the brain imaging Centre, the Douglas Hospital Research Centre - Centre intégré universitaire de santé et services sociaux de l'Ouest-de-l'Île-de-Montréal, the McGill University Dementia Education Program (DEP), and the division of geriatric medicine and others.

Finally, in times of significant conceptual and therapeutic advances in Alzheimer's disease, the Education Committee has succeeded to relay to our members clinical population via this new letter the progress in this field.





## A Personal Reflection on the MRCSA Education Committee's Journey Dr. Michael Wiseman, DDS

My first contact with the McGill Research Centre for Studies in Aging (MRCSA) could be simply states as an amazing experience. I have always been interested in geriatrics and the education committee has given me the opportunity to educate the community on how diseases affecting the mouth (oral cavity) can influence other areas of the body. Periodontal disease has been linked as a potential inflammatory contributor to conditions such as Alzheimer's and other dementias.

The Centre's Education Committee has truly been an important contributor to demystify dementia and forging discussions on how to help our patients. The Education Committee has been strongly motivated to not only to discuss living with dementia, but to also discuss strategies to prevent dementia. The MRCSA Education Committee has in the past involved itself with health day, symposiums, and the Brainy Boomer Lecture Series.

I look forward to working with my MRCSA Education members to continue its great work for many years to come. My fellow members should be congratulated on their excellent work, but our community should also be congratulated on being so very receptive to welcoming us into their lives.

Congratulations to the MRCSA on 40 years!!

My first experience with the McGill University Research Centre for Studies in Aging, (MCSA) has been nothing short of amazing. I have always had a strong interest in geriatrics, and through the education committee, I've had the opportunity to raise awareness in the community about the critical link between oral health and systemic health. Specifically, I've been able to educate others on how conditions affecting the oral cavity, like periodontal disease, can have a profound impact on other areas of the body. For example, research has suggested that periodontal disease may play a role as an inflammatory contributor to conditions such as Alzheimer's disease and other forms of dementia."

The Centre's Education Committee has played a pivotal role in demystifying dementia and fostering important conversations on how we can better support our patients. The Committee has been deeply motivated to not only address the challenges of living with dementia but also to explore strategies for its prevention. In the past, the MCSA Education Committee has actively participated in health days,

symposiums, and the Brainy Boomer Lecture Series, providing valuable insights and creating opportunities for education and discussion on this critical topic."

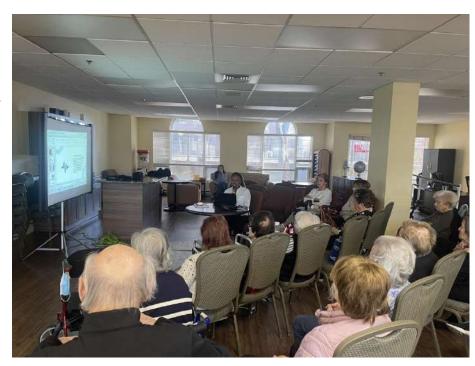
I look forward to working with my MRCSA Education members to continue its great work for many years to come. My fellow members should be congratulated on their excellent work, but our community should also be congratulated on being so very receptive to welcoming us into their lives.

Congratulations to the MCSA on celebrating 40 incredible years of dedication and service!! I look forward to seeing the continued success and growth in the years to come!

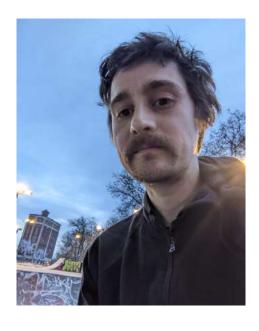


#### How to Maintain Good Cardiovascular Health Conference by Nurse Gwyneth Mutah

On November 19, 2024, our Research Nurse, Gwyneth Mutah, was invited by REISA to deliver an in-person lecture at a senior residence. The presentation, titled "How to Maintain Good Cardiovascular Health," focused on recognizing and reporting symptoms as well as adopting lifestyle changes to promote heart health. The interactive session engaged approximately 20 attendees, predominantly women, who were encouraged to ask questions and participate actively throughout the discussion.



#### **WELCOME NEW STAFF**



#### **Stuart Mitchell – Research Assistant**

Beginning in June 2024, I started working at the Translational Neuroimaging Laboratory as an intern through Dawson College's neuroscience club summer program. Following the internship, Dr. Rosa-Neto hired me as a research assistant. Currently, I am working on data organization and entry for the ongoing RINOS (Research, Imaging, and Neuroscience Observational System) project. This platform is designed for researchers, neuroscientists, and medical professionals to analyze and visualize brain imaging data with ease. In addition, I am assisting PhD student Arthur Casa-Macedo on a project assessing the spatial extent of Tau-PET and Amyloid-PET metrics (SEOT, SEOA) and their role in identifying early signs of Alzheimer's disease pathology.





#### Rayan Rahmouni- Research Assistant

I am a cegep student in the Technique of Nuclear Medicine and I joined Dr. Rosa-Neto's team in October of 2024 as a Research Assistant within the TRIAD Cohort. My current responsibilities include accompanying research participants to their imaging visits, inputting data and maintaining and updating the online database. I am very eager to learn more about PET-imaging as this aligns perfectly with my current studies.



#### Marina Pereira Gonçalves- Lab Technician

I'm Marina Pereira Gonçalves, a scientist at heart with a passion for exploring the complexity of biological processes! I have a background in Biotechnology and a Master's in Molecular Biology. I joined Dr. Rosa-Neto's team in September 2024 as a Laboratory Technician. In my role, I process collected biofluids, manage our biobank, and lead wet lab experiments. We will leverage our invaluable cohort and biobank resources to expand our research and explore the signatures and impact of the immune system in the development and progression of Alzheimer's disease. I'm excited to be part of this amazing team and contribute to such impactful work!



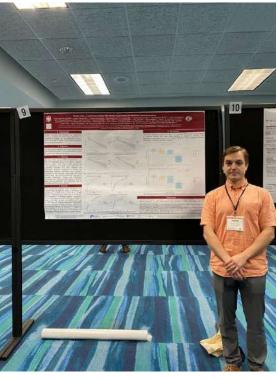
### **Navigating Dementia: A Showcase of Student Research**

#### **DR. PEDRO ROSA NETO STUDENTS**



#### Kely Quispialaya, PhD student

Kely Quispialaya joined MCSA in January 2020 as a PhD student in Experimental Medicine. She is a certified physician and surgeon from Universidad Peruana Los Andes in Peru. She is interested in the impact of [18F]FDG)-Positron Emission Topography (PET) imaging in assessing atypical clinical manifestations of Alzheimer's disease as well as its relationships with other core AD biomarkers.

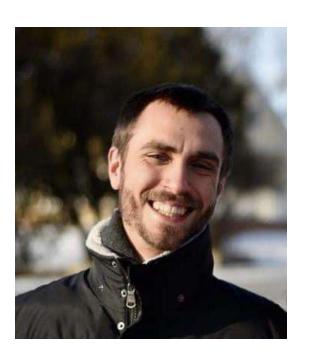


#### Jaime Arias, PhD Student

Originally from Spain, Jaime has a background in Psychology (BSc, University of Oviedo). He completed graduate studies in Neuroscience in The Netherlands (MSc in Cognitive Neuropsychology, VU Amsterdam) and in the US (MSc in Applied Cognition and Neuroscience, UT Dallas), and joined Dr. Rosa-Neto's laboratory as a PhD student in September 2019.

Jaime's project aimed to shed light on the relationship between memory performance and tau pathology in Alzheimer's disease. His publications are or will be focused on the difference between recognition and delayed recall, the relationship between plasma p-tau biomarkers and memory, and the lateralization of the relationship between tau pathology and visual and verbal memory.





#### Étienne Aumont, PhD student

Alzheimer's is a disease that is defined by the damage it does to the brain, rather than by its symptoms. It is suspected that the brain starts breaking down many years before a person with Alzheimer's begins to lose their cognitive functions. This means that cognitive decline could be predicted by detecting Alzheimer's and measuring the progression of the neurodegenerative disease associated with it.

Since 2020, Vanier Scholar Étienne Aumont, PhD student in psychology at Université du Québec à Montréal, is working to confirm this hypothesis by using neuroimaging to measure different regions of the hippocampus. Étienne is using monitoring data collected the TRIAD cohort to understand whether markers of Alzheimer's can predict neurodegenerative disease, and if the disease can lead to memory loss.

In addition to Étienne's research work, he also founded Sciences 101, an organization that encourages students to acquire science communication skills in 2019. Through this organization, he also founded the science outreach magazine la *FIBRE*, organized a science outreach competition, and developed a great number of training workshops for the student community.



#### Brandon Hall, PhD student

After working in mental healthcare, I sought to understand the physical processes that give rise to our minds. Since joining Dr. Rosa Neto's lab in May of 2024, I have been fortunate to pursue this research alongside a phenomenal team, and honored to work with Dr. Rosa-Neto's patients. My project is entitled "Exploring inflammation by imaging water in the brain". Research Description:

In the 1st century AD, the poet Lucretius wrote "On the Nature of Things", in which he described the forces that cause dust to dance wildly in shafts of light. The same principles that Lucretius described, the random motion of free particles, forms the basis of a modern neuro-imaging technique called Diffusion Weighted Imaging. My research uses this tool to study how water moves in the brain, and how changes in brain structure can be measured by tracking water.





#### Yansheng Zheng, Master's student

Following the completion of my undergraduate studies at Dalhousie University, I commenced my affiliation with the Mcgill University Research Centre for Studies in Ageing (MCSA). In September 2023, I started my studies as a newly enrolled master's student under the supervision of Dr. Rosa-Neto and Dr. Multhaup. The primary focus of my project is the Quantification of Cerebrospinal Fluid and Plasma Amyloid- $\beta$  38, 37, and 34: Correlation with Positron Emission Tomography Imaging and Alzheimer's Disease Progression. My project includes developing novel assays for protective A $\beta$  biomarkers and investigate the disease mechanism with PET imaging data. I aim to make a valuable contribution to the field by exploring the potential of using these biomarkers for the development of diagnostic method for Alzheimer's disease.



#### Seyyed Ali Hosseini, PhD student

I am a third-year PhD candidate in Neuroscience at McGill University, under the supervision of Dr. Pedro Rosa-Neto since September 2022. My research project is titled "Clearance Alteration in Alzheimer's Disease: The Role of Ventricular and Choroid Plexus Dynamics."

Brief Description: My research focuses on understanding the mechanisms of clearance alteration in Alzheimer's disease, emphasizing the additive effects of ventricular remodeling and astrocyte activation. The study integrates advanced imaging techniques, including PET and MRI, to investigate the relationship between choroid plexus function, ventricular volumes, and their association with amyloid and tau aggregation. This work aims to elucidate pathways that could contribute to the early pathophysiology of Alzheimer's and guide potential therapeutic approaches.





#### Wan Lu Jia, MSc. MD researcher

Dr. Jia is a new member of the MSCA. She is a family physician geriatrician trained at McGill University and the Université de Sherbrooke. She was previously a Masters in Family Medicine student and a Enhanced Skills fellow in the Clinician Scholars Research Profile program at McGill University, starting in July 2022 with Dr. Pedro Rosa-Neto as supervisor. Her particular interests include dementia care and care of elderly patients, application of Alzheimer's disease in primary care, and public health. She is currently working on a Narrative Review focused on the clinical utility of Alzheimer's Disease biomarkers in family medicine and primary care.

#### **Brief description:**

Alzheimer's disease is the most common form of dementia and poses a significant public health challenge in both high and low-income countries. By 2030, it is estimated that nearly 1 million Canadians will be living with dementia, and by 2050, this number is expected to rise to 1.7 million. With the recent development of blood-based biomarkers for diagnosing and monitoring Alzheimer's disease, primary care providers will play an increasingly vital role in the early detection, referral, and ongoing management of patients with the condition. However, there is a notable lack of scientific knowledge focused on the validation of Alzheimer's disease biomarkers within primary care settings. This narrative review aims to summarize existing research on the role of these biomarkers in primary care and highlight the importance of integrating them into clinical practice.





Vasvi Dhir– Master's Student I started working with Dr. Maiya Geddes as a visiting undergraduate student since January 2022. Her work inspired me to further my research, and I am currently completing a master's degree in the Integrated Program in Neuroscience under her supervision at McGill University. The title of my thesis project is The neurobehavioral mechanisms underlying Grit in older adults at-risk for Alzheimer's disease. Another project I am working on at the Geddes Lab is Gender-Related Facilitators and Barriers to Participation in Observational Neurocognitive Aging Research in Older Adults. My thesis focusses on identifying the component cognitive processes underlying late life goal- directed perseverance in the face of challenges in cognitively unimpaired older adults at-risk for Alzheimer's disease, employing resting-state functional neuroimaging and structural equation modelling. The other project I pursue with equal zeal studies facilitators and barriers that older men and women perceive considering participation in observational neurocognitive aging research, using a participatory research methodology called "Fuzzy Cognitive Mapping". This project addresses selections biases rooted in gender in brain health research.





Stéfanie Tremblay, Ph.D.I am a postdoctoral researcher in Dr. Maiya Geddes' lab for Motivational Neuromedicine at McGill University since October 2024. My project, 'A life course approach to the integration of social and structural determinants of health in research on aging and Alzheimer's disease,' aims to bring diversity and equity at the forefront of dementia research in Canada. Through my postdoctoral work and future career, I am committed to advancing policies that promote brain health for all Canadians by generating critical evidence to inform policy changes and actively engaging in knowledge mobilization. Dementia currently affects over 750,000 Canadians, impacting not only individuals but also caregivers, the healthcare system, and the economy. With an aging population, this number is expected to rise in the coming decades. While recent disease-modifying therapies for Alzheimer's disease—the most common form of dementia—offer hope, their high cost, limited accessibility, and safety concerns restrict their widespread use. As such, addressing modifiable risk factors remains critical to managing the growing public health challenge of dementia. To do so effectively, we must recognize that Canada's aging population is highly diverse, with certain communities experiencing disproportionately higher rates of dementia. Without targeted efforts, these disparities are likely to worsen. The proposed project aims to develop guidance for integrating social and structural determinants of health (SSDH) into aging and dementia research in Canada and promote the implementation of a SSDH battery in two large Canadian longitudinal aging cohorts. I will then investigate the impact of early life factors, lifetime stressors, and socioeconomic factors on cognitive trajectories and brain structure in these cohorts. By understanding how social and structural determinants of health, across the lifespan, affect brain health and cognition, this research has the potential to inform equitable health policies, reduce disparities, and alleviate the overall burden of dementia in Canada.

#### **UPCOMING BRAINY BOOMER EVENTS**

To register for these events, please visit our Eventbrite: CMEV.eventbrite.com

#### **GENTLE FLOW YOGA WITH TANAZ**

New schedule coming in January 2025



# EXERCISE FOR SENIORS WITH GIULIANA

New schedule coming in January 2025





# DEMENTIA EDUCATION PROGRAM PRESENTS NEW COMMUNITY OUTREACH ACTIVITY: YOUNG CAREGIVER COMMUNITY



A supportive space for informal caregivers who are

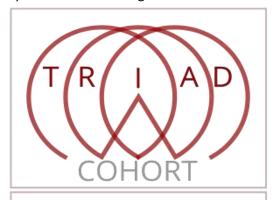


The McGill University Research Centre for Studies in Aging and the Dementia Education Program have joined forces to offer free, monthly virtual support groups for young caregivers who are looking after a parent, a spouse or a sibling with young-onset dementia, a diverse condition that affects people under the age of 65. This community outreach initiative offers a safe, non-judgmental online space for caregivers to share their stories, voice concerns and discuss the joys and challenges of this role with their peers. Info and registration: https://mcgill.ca/x/UfF



#### WANT TO GET INVOLVED IN RESEARCH? JOIN THE TRIAD COHORT

The Translational Biomarkers in Aging and Dementia (TRIAD) cohort is a longitudinal observational cohort specifically designed to study mechanisms driving dementia. The cohort studies dementia markers and their progression from pre-symptomatic stages to



Translational Biomarkers of Aging and Dementia

the onset of Alzheimer's disease or other types of dementia. TRIAD participants are followed in a longitudinal manner with clinical and neuropsychological assessments, fluid and imaging biomarkers every 24 months. Results generated from the TRIAD cohort help advance scientific knowledge and develop better targeted clinical trials to cure Alzheimer's Disease and dementia. The TRIAD cohort is actively recruiting participants, for more information about the participation criteria and the different measures please refer to <a href="https://triad.tnl-mcgill.com">https://triad.tnl-mcgill.com</a>, to get additional information or to participate call our research Centre 514-761-6131 ext: 6321. For research participants and sponsors that are interested in donating to the TRIAD Cohort Research Study, please contact Jenna Stevenson by email jenna.stevenson2@affiliate.mcgill.ca.



# WHY YOUR DONATIONS MATTER: FUELING INNOVATION & CHANGE

Your donations are the lifeblood of our mission, propelling us toward groundbreaking advancements in research and community outreach. Every dollar you contribute ignites hope, fuels discovery, and drives the transformative work we do every day.

With your support, we're not just making progress – we're changing lives. Your generosity enables us to:

- Expand our research infrastructure, pushing the boundaries of science
- Launch vital outreach programs, touching more lives in our community
- Pioneer initiatives in prevention and aging research, fostering a healthier future for all.

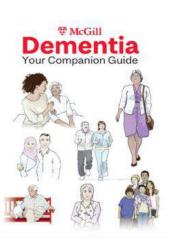


Together, we can make a lasting impact! Thank you for being an integral part of our mission.



If your company, association, club, or residence would like to hold a fundraiser for our cause, which is committed to investigating causes and possible treatment of dementias, especially Alzheimer's Diseases for the McGill University Research Centre for Studies in Aging, (MCSA) please contact Alexandra Triantafillopoulos T: 514 766 2010 or email alexandra.triantafillopoulos1@mcgill.ca. Your support can make a significant difference in advancing research and improving the lives of older adults. Thank you!

### **DEMENTIA, YOUR COMPANION GUIDE**



A free new educational resource, *Dementia, Your Companion Guide*, was designed to help provide answers. With engaging illustrations and a friendly writing style, this approachable guide covers a wide array of topics to assist both the person living with dementia (PLWD) and their care partners. It includes information on the science and progression of dementia as well as practical advice on safety and self-care. The Book is available in English, French, Spanish, Chinese and Greek.

The guide was created by a multidisciplinary team at the McGill University **Dementia Education Program** (DEP) in the Faculty of Medicine and Health Sciences (FMHS). The content was provided by the Program's founder and former care partner **Ms. Claire Webster**, geriatrician **Dr. José A. Morais** and neurologist **Dr. Serge Gauthier**, along with partners from the McGill University Research Centre for Studies in Aging, the Division of Geriatric Medicine, the School



of Physical and Occupational Therapy, and the School of Social Work. Ask for a copy of the book at your next appointment at MCSA or Crossroads! Or Visit: https://www.mcgill.ca/medsimcentre/community-outreach/dementia

#### STAY UP TO DATE WITH MCSA

Good day, We hope that you are all enjoying the good weather! We are presently updating our files and would appreciate knowing if there are any changes in your address, telephone number or email address. If yes, please contact us at T:514-766-2010 ext 6308. You have received this month's Newsletter of November 2024. We are interested in having your feedback. Call us at the above number or send us an email with your comments to silvana.aguzzi@mcgill.ca or brainy.boomer-mcsa@mcgill.ca In case you haven't joined us for our Brainy Boomer Lectures (BB), please send us your email address and we will add you to our BB lectures email list. In case you are interested and would like to check out our recorded BB YouTube lectures please check out the following link: <a href="https://www.youtube.com/c/MCSA2021">https://www.youtube.com/c/MCSA2021</a>.

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Lilly