



Annual Reporting of Research Units

All provisional and established McGill Centres, Research groups and Networks affiliated with the Faculty of Medicine and Health Sciences (FMHS) are required to provide an annual report to the Dean via the Committee for Oversight of Research Units ([CORU](#)).

The reporting period is May 1, 2023 – April 30, 2024.

The deadline to submit your report to the Faculty's Research Office (riac.med@mcgill.ca) is

June 3, 2024

For units that receive financial support from the Faculty, continued support is contingent upon:

1. the receipt of the reporting documents on time,
2. the alignment of the Unit's structure and workings with [McGill Procedures for Research Units](#), and [Policies on Research Entities](#),
3. the quality of reported activities, and
4. the availability of Faculty funds.

Your collaboration on this exercise, and your continued engagement in the Faculty's mission for research excellence, are truly appreciated.

Annual Report of Activities and Outcomes

Name of the Unit:

The McGill University Research Centre for Studies in Aging (MCSA)

Le Centre de recherche et d'études sur le vieillissement de l'Université McGill (CMEV)

Date of creation: MCSA is recognized as an official Senate approved McGill Research Centre since October 1, 1984.

Name of Unit Director: Dr. Pedro Rosa-Neto, MD, PhD, Professor of Neurology & Neurosurgery, Psychiatry and Pharmacology & Therapeutics at McGill University, affiliated to the Douglas Hospital Research Centre.

Tel: 514-766-2010 pedro.rosa@mcgill.ca

Date of nomination in the role: April 1, 2017

As per [McGill Procedures for Research Units](#) Section 10.4, Research Units are led by a Director, who is appointed by, reports to, and is accountable to the Dean of FMHS, for a fixed term of 4 years, renewable.

Mission statement of the Unit (~2 sentences):

Refer to the following link that captures the same information as presented in our website ([Mission Statement](#)). The Centre leads the way to cure, treat and prevent dementias by promoting research, education, and teaching in the field of aging and aging research.

Membership

Ensure the full list of nominative members is featured on the Unit's website. Please refer to [McGill Procedures for Research Units](#) Section 7.

Number of

Regular Members: 61

Associate Members: 0

Affiliate Members: 7

Trainee Members: 22

Website:

Research Units must have a website with information about their mission statement, research objectives, [membership](#) and research activities.

Please note the website is also required to feature:

- all sources of funding support ([including the FMHS logo](#)),
- the list of Members and their institutional affiliation with appropriate links,

- the activities supported by the Unit,
- all previous Annual Reports.

Website address (URL): <http://mcsa.ca/>

Please note the page limits, where indicated.

(minimum font size of 11 pts, use lay language)

1. **Explain the significance of the Unit’s mission at McGill and beyond (1/2 page max.)** ([Mission Statement](#))

The MCSA’s mission holds significant importance within McGill University, particularly within the overarching theme of research excellence in neurosciences, focusing on neurodegenerative disorders. Our dedication to the University entails promoting and advancing research, education, training, and teaching primarily centered on aging, age-related diseases, prevention, and early detection of age-associated cognitive decline. Situated as a pivotal component of the University, the MCSA serves as a hub for the aging and dementia community. Our Memory Clinic conducts comprehensive cognitive assessments, specialized neurological examinations, innovative diagnostic procedures (including blood tests and lumbar punctures), and state-of-the-art brain imaging for diagnostics. The Centre has achieved sustainable growth in its activities by fostering groundbreaking research and implementing strategies and interventions aimed at preventing dementia. Here are several key points to consider regarding its significance:

- **Advancing Knowledge and Innovation**: The unit's commitment to research ensures that new knowledge is generated, leading to innovations in the prevention, treatment, and management of age-related conditions.
- **Adaptability and Evolution**: The unit remains responsive to evolving societal needs and scientific advancements.
- **Interdisciplinary Collaboration**: The unit fosters collaboration among researchers with diverse expertise, medicine, psychology, psychiatry, neurology etc., leading to comprehensive and holistic understandings of aging-related issues.
- **Educational Excellence**: Through its focus on education and teaching, the unit is preparing the next generation of scholars, healthcare professionals, policymakers, and educators to address the challenges and opportunities associated with aging.
- **Community Engagement and Impact**: The MCSA’s activities include outreach programs such as: Brainy Boomers Public Lecture Series, Exercise for Seniors, International Dementia Conferences, Ensemble, Nous Prenons Soins -Webinars, Support Groups for Young Caregivers, newsletters and various partnerships with community organizations.

2. **Alignment with the [Faculty’s Strategic Research Plan](#) (1/2 page max.)**([5 year SRP](#))

The accomplishments from 2023 that are in line with the Faculty’s Strategic Research Plan, particularly in Brain Research and Research in Dementia, are detailed below:

1. **Excellence in Early Dementia Biomarker Research**:
The MCSA’s transformative research endeavors in developing cost-effective biomarkers such as BIOPAD (BIOMARKER DISCOVERY PLATFORM FOR AGING AND DEMENTIA), utilizing plasma samples and tests tailored for non-Alzheimer’s Dementia.
2. **Expansion of Collaboration Networks and Open Science Initiatives**:
Strengthening international academic and industry collaborations, augmenting medical and research training capacity through new partnerships, and implementing a roadmap to promote open science.

Notably, the establishment of a data exchange program among Dementia scientists is ongoing since 2022, in collaboration with the Brightfocus Foundation.

3. **Advancements in Telemedicine for Dementia Care and Cognition:** Progress in online cognitive assessments through the SNAP (Screening of Neurobehavioral Abnormalities in the Ageing Population) platform, facilitating novel tests and multilingual capabilities. Additionally, validation of online dementia screening through the Cognitive Test for Dementia (CoDe) online application within the TRIAD cohort.
4. **Societal Contribution through Education and Knowledge Transfer Programs:** The MCSA's provision of an innovative learning environment for students and professionals, along with support for initiatives fostering personal and community improvement. This includes various free community knowledge transfer programs such as the Brainy Boomer Public Lecture Series (BB), Groupe de Soutiens/Webinair, Support Groups for Young Caregivers and International Dementia Conference Series (IDCS),
5. **Innovative Online Outreach Initiatives:** The establishment of multiple online social media platforms including the MCSA YouTube Channel, Facebook Page, Twitter, LinkedIn page, and Zoom platform, as well as the introduction of interactive physical exercise programs, aimed at combating social isolation.
6. **Network Learning/exchange knowledge & current trends & share best practices: Events: PK 2024-Pharmacokinetic Course May 16 -18, 2024 & NRM 2024 -Neuroreceptors Mapping Conference May 18- 21, 2024 –** The announcement was made at the closing of the 2018 meeting that Montreal would host the next PK and NRM meeting due to Covid this was postponed and will be now live in Montreal from May 16 to 21, 2024.

3. **Highlight the top-5 accomplishments of the Unit over the past 12 months (1 page max.).**

- **Excellence in Scientific Publications:** The MCSA members have published 597 papers on aging and dementia (see below).
- **Young Caregiver support group:** Virtual support groups demonstrate a proactive approach towards addressing the diverse needs of caregivers, underscoring the commitment of both organizations towards supporting the community. By sharing their educational resources and strengthening their collaboration, the DEP and MCSA aim to enhance support for patients and caregivers affected by neurocognitive disorders, reflecting a commendable commitment to advancing dementia care and research.
- **High Profile International collaborations:**
Memory Clinic in Brazil: The McGill University Research Centre for Studies in Aging (MCSA) and McGill University Dementia Education Program (DEP) are working together to establish a Memory Clinic in Brazil. This collaboration with the Moinhos de Vento Hospital (HMV) in Porto Alegre, Brazil and Federal University of Rio Grande do Sul (FURGS), Brazil. This collaboration includes student exchanges, technology transfer, and extensive data collection. A new sister cohort will be created "TRANSLATIONAL BIOMARKER FOR AGING AND DEMENTIA COHORT" (TRIAD) will be established to gather data on amyloid, tau PET, CSF, and fluid biomarkers. Moinhos de Vento Hospital (HMV'S), advanced facilities will ensure data collection meets Montreal's standards. Clinical and biomarker data will be overseen by the Zimmer lab. The outcomes of this collaboration will allow MCSA's technologies to be implemented on a large scale in low- and mid-income countries. The collaboration is spearheaded by Prof. Sheila Martins (HMV), Prof. Eduardo Zimmer (FURGS, McGill), Dr. Wyllians Vendramini Borelli (HMV), and Dr. Pedro Rosa-Neto (McGill). Similar collaborations are planned with Malta and Japan.

Collaboration with Dr. Kaj Blennow and Dr. Henrik Zetterberg in Sweden have brought countless advances in blood biomarkers for Alzheimer's Disease, through collaborations with groups in Sweden,

the Netherlands, Germany, Singapore, Japan and the United States, outstanding scientific breakthroughs have been possible through open science.

- **MCSA Students attended the following four conferences for period May 2023 to April 2024:** Alzheimer's Association International Conference (AAIC 2023) July 2023 in Amsterdam; World Federation of Neurology's XXVI World Congress of Neurology (WFN 2023) October 2023 in Montreal; Human Amyloid Imaging Conference (HAI 2024) January 2024 in Miami, USA; Alzheimer's Disease and Parkinson's Disease (AD/PD 2024) March 2024 in Lisbon, Portugal.
- **Outreach Projects: BB Lectures/Dieticians/Nurses, Exercise for Seniors, IDCS, Support Groups, MCSA Newsletters 2023-2024:**
BB Lectures Year 2023-2024 – 10 lectures; 26 Exercise for Seniors; Total Participants 750
Ensemble Nous Prenons Soins : 10 Webinars; Total Participants 506
Young Caregiver Groups/Groupes des jeunes proches aidants : 9 Groups
IDCS Conferences: 16 lectures – Participants 1710
MCSA Newsletters: 3 (April/August/November 2023): Donor/Patient Mailout & Email
[Newsletters – McGill University Research Centre for Studies in Aging \(mcsa.ca\)](https://mcsa.ca)

4. **Major joint publications over the past 12 months.** Please only feature peer-reviewed publications co-authored by at least two Regular/Associate/Affiliate Members of the Unit:

1. Bellaver B, Povala G, Ferreira PCL, Ferrari-Souza JP, Leffa DT, Lussier FZ, Benedet AL, Ashton NJ, Triana-Baltzer G, Kolb HC, Tissot C, Therriault J, Servaes S, Stevenson J, Rahmouni N, Lopez OL, Tudorascu DL, Villemagne VL, Ikonovic MD, Gauthier S, Zimmer ER, Zetterberg H, Blennow K, Aizenstein HJ, Klunk WE, Snitz BE, Maki P, Thurston RC, Cohen AD, Ganguli M, Karikari TK, Rosa-Neto P, Pascoal TA. Astrocyte reactivity influences amyloid- β effects on tau pathology in preclinical Alzheimer's disease. *Nat Med.* 2023 Jul;29(7):1775-1781. doi: 10.1038/s41591-023-02380-x. Epub 2023 May 29. PMID: 37248300; PMCID: PMC10353939. IF 82.9
2. Ferrari-Souza JP, Bellaver B, Ferreira PCL, Benedet AL, Povala G, Lussier FZ, Leffa DT, Therriault J, Tissot C, Soares C, Wang YT, Chamoun M, Servaes S, Macedo AC, Vermeiren M, Bezgin G, Kang MS, Stevenson J, Rahmouni N, Pallen V, Poltronetti NM, Cohen A, Lopez OL, Klunk WE, Soucy JP, Gauthier S, Souza DO, Triana-Baltzer G, Saad ZS, Kolb HC, Karikari TK, Villemagne VL, Tudorascu DL, Ashton NJ, Zetterberg H, Blennow K, Zimmer ER, Rosa-Neto P, Pascoal TA. APOE ϵ 4 potentiates amyloid β effects on longitudinal tau pathology. *Nat Aging.* 2023 Oct;3(10):1210-1218. doi: 10.1038/s43587-023-00490-2. Epub 2023 Sep 25. PMID: 37749258; PMCID: PMC10592050. IF 5.0
3. Jiang D, Liu L, Kong Y, Chen Z, Rosa-Neto P, Chen K, Ren L, Chu M, Wu L; Frontotemporal Lobar Degeneration Neuroimaging Initiative. Regional Glymphatic Abnormality in Behavioral Variant Frontotemporal Dementia. *Ann Neurol.* 2023 Sep;94(3):442-456. doi: .1002/ana.26710. Epub 2023 Jun 14. Erratum in: *Ann Neurol.* 2023 Oct 20;: PMID: 37243334; PMCID: PMC10657235. IF 11.2
4. Pascoal T, Bellaver B, Povala G, Ferreira P, Ferrari-Souza JP, Leffa D, Lussier F, Benedet A, Ashton N, Triana-Baltzer G, Kolb H, Tissot C, Therriault J, Servaes S, Stevenson J, Rahmouni N, Lopez O, Tudorascu D, Villemagne V, Ikonovic M, Gauthier S, Zimmer E, Zetterberg H, Blennow K, Aizenstein H, Klunk W, Snitz B, Maki P, Thurston R, Cohen A, Ganguli M, Karikari T, Rosa-Neto P. Astrocyte reactivity influences the association of amyloid- β and au biomarkers in preclinical Alzheimer's disease. *Res Sq [Preprint].* 2023 Feb 1:rs.3.rs-2507179. doi: 10.21203/rs.3.rs-2507179/v1. Update in: *Nat Med.* 2023 May 29;: PMID: 36778243; PMCID: PMC9915798. IF 87.2
5. Ferreira PCL, Therriault J, Tissot C, Ferrari-Souza JP, Benedet AL, Povala G, Bellaver B, Leffa DT, Brum WS, Lussier FZ, Bezgin G, Servaes S, Vermeiren M, Macedo AC, Cabrera A, Stevenson J, Triana-Baltzer G, Kolb H, Rahmouni N, Klunk WE, Lopez OL, Villemagne VL, Cohen A, Tudorascu DL, Zimmer ER, Karikari TK, Ashton NJ, Zetterberg H, Blennow K, Gauthier S, Rosa-Neto P, Pascoal TA. Plasmapp-tau231 and p-tau217 inform on tau tangles aggregation in cognitively impaired individuals. *Alzheimers*

Dement. 2023 Oct;19(10):4463-4474. doi:10.1002/alz.13393. Epub 2023 Aug 3. PMID: 37534889; PMCID: PMC10592380. IF 14.0

6. cerebrospinal fluid in the diagnosis of Alzheimer's disease. *Alzheimers Dement.* 2023 Nov;19(11):4967-4977. doi: 10.1002/alz.13026. Epub 2023 Apr 20. PMID: 37078495; PMCID: PMC10587362. IF 14.0
7. Ferreira PCL, Ferrari-Souza JP, Tissot C, Bellaver B, Leffa DT, Lussier F, Povala G, Therriault J, Benedet AL, Ashton NJ, Cohen AD, Lopez OL, Tudorascu DL, Klunk WE, Soucy JP, Gauthier S, Villemagne V, Zetterberg H, Blennow K, Rosa-Neto P, Zimmer ER, Karikari TK, Pascoal TA; Alzheimer's Disease Neuroimaging Initiative. Potential Utility of Plasma P-Tau and Neurofilament Light Chain as Surrogate Biomarkers for Preventive Clinical Trials. *Neurology.* 2023 Jul 4;101(1):38-45. doi: 10.1212/WNL.0000000000207115. Epub 2023 Mar 6. PMID: 36878697; PMCID: PMC10351303. IF 8.8
8. Macedo AC, Tissot C, Therriault J, Servaes S, Wang YT, Fernandez-Arias J, Rahmouni N, Lussier FZ, Vermeiren M, Bezgin G, Vitali P, Ng KP, Zimmer ER, Guiot MC, Pascoal TA, Gauthier S, Rosa-Neto P. The Use of Tau PET to Stage Alzheimer Disease According to the Braak Staging Framework. *J Nucl Med.* 2023 Aug;64(8):1171-1178. doi: 10.2967/jnumed.122.265200. Epub 2023 Jun 15. PMID: 37321820; PMCID: PMC10394315. IF 11.8
9. Schaffer Aguzzoli C, Ferreira PCL, Povala G, Ferrari-Souza JP, Bellaver B, Soares Katz C, Zalzale H, Lussier FZ, Rohden F, Abbas S, Leffa DT, Scop Medeiros M, Therriault J, Benedet AL, Tissot C, Servaes S, Rahmouni N, Cassa Macedo A, Bezgin G, Kang MS, Stevenson J, Pallen V, Cohen A, Lopez OL, Tudorascu DL, Klunk WE, Villemagne VL, Soucy JP, Zimmer ER, Schilling LP, Karikari TK, Ashton NJ, Zetterberg H, Blennow K, Gauthier S, Valcour V, Miller BL, Rosa-Neto P, Pascoal TA. Neuropsychiatric Symptoms and Microglial Activation in Patients with Alzheimer Disease. *JAMA Netw Open.* 2023 Nov 1;6(11):e2345175. doi: 10.1001/jamanetworkopen.2023.45175. PMID: 38010651; PMCID: PMC10682836. IF 120.7
10. Yakoub Y, Ashton NJ, Strikwerda-Brown C, Montoliu-Gaya L, Karikari TK, Kac PR, Gonzalez-Ortiz F, Gallego-Rudolf J, Meyer PF, St-Onge F, Schöll M, Soucy JP, Breitner JCS, Zetterberg H, Blennow K, Poirier J, Villeneuve S; PREVENT-AD Research Group. Longitudinal blood biomarker trajectories in preclinical Alzheimer's disease. *Alzheimers Dement.* 2023 Dec;19(12):5620-5631. doi: 10.1002/alz.13318. Epub 2023 Jun 9. PMID: 37294682. IF 14.0

5. **Major joint research projects funded over the past 12 months** (including shared software, data repositories; with links, when relevant) involving at least two PI members of the Unit:

- 2024-2028 Sex differences in brain tau aggregates. Major Goals: Investigate the role of menopause as a risk factor for developing aggregation of tau aggregates. Name of PD/PI: Rosa-Neto, Pedro. Source of Support: CIHR. Primary Place of Performance: Montreal Neurological Institute. Project/Proposal Start and End Date: 2024-2028. Total Award Amount: \$1 143 675 (CAD)
- 2024-2026 Tracking the progression of neuroinflammation and tau aggregates in preclinical Alzheimer's Disease – The follow-up. Major Goals: To better characterize the natural history of neuroinflammation biomarkers in Alzheimer's Disease. Name of PD/PI: Rosa-Neto, Pedro. Source of Support: Weston Family Foundation. Primary Place of Performance: Montreal Neurological Institute. Project/Proposal Start and End Date: 2024-2026. Total Award Amount: \$1 495 000(CAD)
- 2021-2026 Longitudinal multicenter head-to-head harmonization of tau PET tracers". NIH 1R01AG073267-01, GRANT13216360 Pascoal, Tharick (PI), Baker, Suzanne (PD/PI); Bateman, Randall; Blennow, Kaj; Cohen, Ann; Foroud, Tatiana; Gauthier, Serge; Gordon, Brian; Graff-Radford, Jonathan; Jagust, William; Janabi, Mustafa; Klunk, William; Koeppe, Robert ; La Joie, Renaud; Lopez, Oscar; Lopresti, Brian; Lowe, Val; Masdeu, Joseph ; Min, Paul; Oh, Hwanee; Pascual, Belen; Petersen, Ronald; Rabinovici, Gil; Raji, Cyrus; Rosa-Neto, Pedro (Co-I); Toga, Arthur; Tudorascu, Dana; Villemagne, Victor; Zetterberg, Henrik; (Pending IRG)
- 2024 Quantifying in-vivo cerebrospinal fluid motion in relation to neuroinflammation and cortical amyloid-beta burden in Alzheimer's disease. Major Goals: Investigate CSF motion in relation to neuroinflammation and amyloid-beta in Alzheimer's Disease. Name of PD/PI: Rosa-Neto, Pedro.

- Source of Support: McConnell Brain Imaging Centre. Primary Place of Performance: Montreal Neurological Institute. Project/Proposal Start and End Date: 2024. Award Amount: \$25 000 (CAD)
- 2024 Data driven harmonization of microglia imaging. Major Goals: To improve the utility of TSPO PET imaging in Alzheimer's disease and primary proteinopathies. Name of PD/PI: Rosa-Neto, Pedro. Source of Support: The University of Cambridge/Montreal Neurological Institute-Hospital Neuroscience Research Collaboration. Primary Place of Performance: Montreal Neurological Institute. Project/Proposal Start and End Date: 2024. Total Award Amount: \$24 933.51 (CAD)
- 2020-2025 Integrating Multi-Omics, Multi-Modal Neuroimaging and Artificial Intelligence for Biologically-defined Staging and Stratification in the Alzheimer's Disease spectrum. CIHR- Project Grant 2020 (CAN\$745,876) Dr. Yasser Iturria Medina (PI) S. Ducharme, S. Duchesne, S. Gauthier, C. Kleinman, K. O'Donnell, Rosa-Neto, Pedro (Co-Applicant)
- 2020-2025 Investigating the impact of loneliness on brain aging and pre-symptomatic Alzheimer's disease progression. NIH National Institute of Aging (US\$2,046,995) Danilo Bzdok (PI) Robert Nathan Spreng (CO-PI) Rosa-Neto, Pedro
- 2020-2023 The McConnell Brain Imaging Center: A world-renowned multidisciplinary platform dedicated to brain research using multimodal neuroimaging and neuroinformatics. Brain Canada Foundation. (\$4,797,000) Julien Doyon (PI) Rosa-Neto, Pedro
- 2019-2024 Untangling tau contribution to cognitive impairments in Huntington's disease CIHR-Project Grant 2019 (\$1,044,225). Cicchetti, Francesca (PI); Rosa-Neto, Pedro (Co-applicant); Planel, Emmanuel
- 2019-2023 Biomarqueurs de vieillissement et de démence: BioVie. FRQS (CAN \$ 1,442,842). Rosa-Neto, Pedro (PI); Gauthier, Serge; Soucy, Jean-Paul; Tsuneyuki, Ozaki

6. Major outreach activities (e.g., seminar series, general public events):

McGill Dementia Education Program (DEP): The integration of McGill Dementia Education Program (DEP) into the MCSA facilities aligns well with the MCSA's vision of advancing dementia prevention and therapies through patient care, research, and knowledge dissemination. Dr. Pedro Rosa-Neto's collaboration with the DEP team on the World Alzheimer Report underscores the synergy between the two entities.

Celebrating World Alzheimer's Day – September 14, 2023



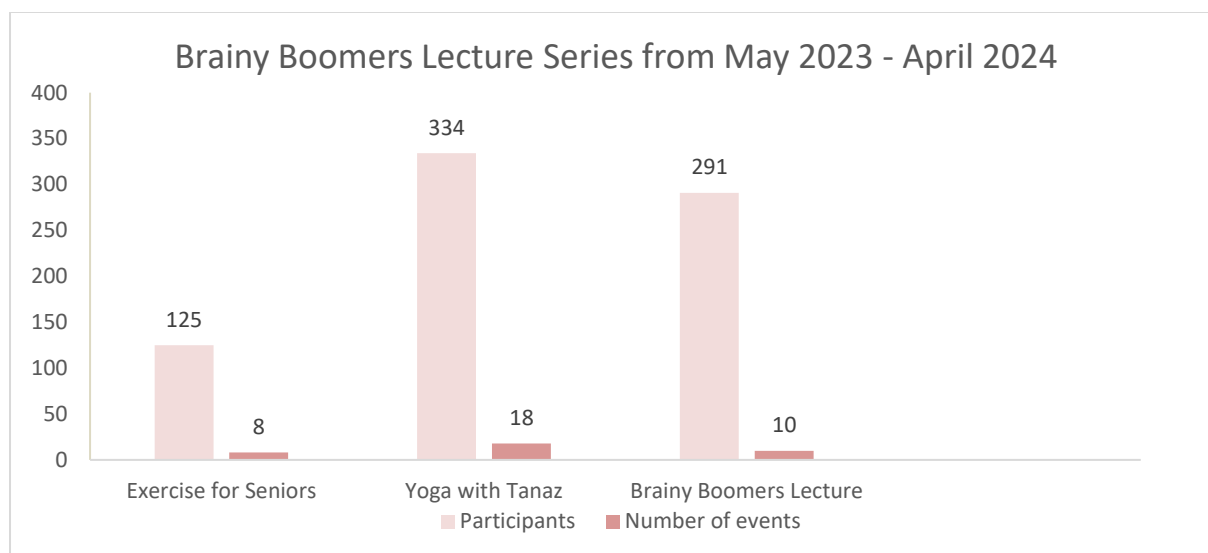
The Centre celebrated and recognized Alzheimer day, a week in advance on September 14, 2023, and provided all an opportunity to attend various events. The MCSA held a virtual symposium with special invitees: Mme Paola Barbarino, the CEO of Alzheimer Disease International, Dr Serge Gauthier, C.M., C.Q., MD, FRCPC, Professor Emeritus in the Departments of Neurology & Neurosurgery and Psychiatry, McGill University and Ms. Nicole Poirier, Director, and Founder of Carpe Diem – Alzheimer's Resource Centre, Trois-Rivières. The Global Action Plan was developed by WHO (World Health Organization) to tackle the challenge that dementia poses to health-care systems, communities, and families worldwide. It was published by WHO 6 years ago in 2017 to be achieved in 2025,

2 years from now, but progress has been woefully off track for several years by national governments and very disappointing. *From Plan to Impact VI*, a report from Alzheimer's Disease International (ADI)—released to coincide with the Seventy-Sixth World Health Assembly (May 21–30, 2023), highlights the dire situation. ADI are calling on WHO to prolong the deadline by 4 years, to 2029. National governments must use this change to accelerate the work that still needs to be done on reaching the Global Action Plan targets. Because of the exponential rise in dementia cases worldwide, prioritization of dementia in public health is crucial. Around 57 million individuals were living with dementia in 2019, and is predicted to rise to 153 million cases by 2050.

[World-Alzheimer-Report-2023.pdf \(mcsa.ca\)](https://www.mcsa.ca/World-Alzheimer-Report-2023.pdf)

Brainy Boomer Lecture Series (BB)/Les Boomers Brillants: The Education Committee of the McGill University Research Centre for Studies in Aging (MCSA) was established in 1996. In 2007 the Education Committee established the “Brainy Boomer Lecture Series” to support its objectives, raise awareness and

educate the community at large. Our public lecture series are presented by academic professionals and medical specialists. The goal of the series is to suggest and initiate practical steps to improve brain health, to prevent other age-related disorders, as well as to promote healthy lifestyle choices amongst the most populous generation in history. In 2023 (May 2023– April 2024), the virtual Brainy Boomers series, consisted of **36 events with a total of 750 participants**, covering various topics related to healthy aging, including post-COVID-19 prevention, dementia prevention, nutrition, safety, benefits of retirement living, yoga, exercise for seniors with presentation and Q&A sessions. Our participants are typically older adults (55 and over), consisting of caregivers, patients, and donors. **Total Number of Events= 36 Participants = 750**
[BB-LECTURES-EXERCISES-FOR-SENIORS-2023-2024.pdf \(mcsa.ca\)](#)



Young Caregiver Support Groups/Groupes des jeunes proches aidants:

The McGill University Research Centre for Studies in Aging, (MCSA) announced in September 2022 the first initiative of its kind in Quebec, which consisted of three support groups which were created by Dr. Dolly Dastoor and Mallery Landry. The three-support groups are for Teenagers, Young adults, and Spouse/Partner groups. This support group was created for the children of patients with major neurocognitive disorders before the age of 65, such as early-onset Alzheimer's Disease.

At the end of 2023 the MCSA and Dementia Education Program joined forces to continue to offer free, monthly virtual support groups for young caregivers who are looking after a person with young-onset dementia, a diverse condition that affects people under the age of 65. Animated by Mallery Landry, 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. Our goal is to give a voice to caregivers who face the unique reality of having a parent, a spouse, or a sibling with young-onset major neurocognitive disorders. We have been offering six different ongoing monthly support communities for the following groups since September 2023. **Total Number of Webinars: 10 -Participants: 506 Total Number of Support groups: 9** [Young-Caregiver-Support-Groups-and-Webinars-2023-2024.pdf \(mcsa.ca\)](#)

The International Dementia Conference Series (IDCS) has rapidly evolved into a mentorship program focused on nurturing the next generation of dementia scientists. Our core values are excellence, diversity, and innovation. The program is an ever-evolving project where everyone, from undergraduate to Emeritus, is invited to participate and contribute. Experienced investigators are invited to elaborate on the most pressing problems in neurodegeneration and devise solutions thereby encouraging collaboration among student groups. The generosity of the scientists in our community enables one-on-one mentorship and nurtures the next generation of dementia scientists. Some of the most pressing problems in neurodegeneration include understanding the underlying mechanisms of various diseases such as Alzheimer's and Parkinson's, developing effective treatments to slow or stop disease progression. This platform facilitates the interactions between

trainees and high caliber scientists in the form of a lecture series. Increasing collaboration among research groups to share resources, data and expertise can provide valuable guidance and support to students and young researchers in this field. By fostering collaboration among student groups and providing mentorship from experienced investigators, we can work toward finding effective solutions to the challenges of neurodegeneration and ultimately improve the lives of those affected by these devastating diseases. This series aims to embody the translational nature of research by bringing together in-vitro studies specialists focused on understanding individual biological constituents of disease, in vivo studies whereby these individual constituents are studied in the context of model organisms of disease, and in clinical studies where we find emergence of these constituents in humans affected by disease. This level of communication across the hierarchy of research environments will be a crucial component towards finding lasting solutions. The sustainability of this project comes from the synergy between: Inspiration from the late career and enthusiasm from early career scientists.

16 lectures 1710 participants. [IDCS-International-Dementia-Conference-Series-2023-2024.pdf \(mcsa.ca\)](https://www.mcsa.ca/IDCS-International-Dementia-Conference-Series-2023-2024.pdf)

SNAP

The SNAP (Screening of Neurobehavioral Abnormalities in the aging Population) project, formerly known as PONDER, is dedicated to screening for neurobehavioral abnormalities in the aging population. By utilizing cognitive performance assessments, SNAP aims to detect dementia at early stages. The project includes a user-friendly website offering free online cognitive assessments and employs a holistic approach to studying variables linked to neurodegeneration in older individuals. The validation of SNAP within the TRIAD cohort would allow for the implementation of SNAP in a clinical setting and provide patients and clinicians with an easy and remote access to cognitive and neuropsychological assessments therefore alleviating the burden and stress associated with in person testing. In 2023, SNAP has shifted its focus to detection of dementia-related early memory impairment in the elderly. We have started the validation phase, which consists of testing SNAP in a batch of participants from the TRIAD cohort. Thus far, we have tested 16 participants, and the results are encouraging: SNAP's verbal and visual memory tests correlate with performance in well-established pen-and-paper tests. In 2024 preliminary results were what we required in order to move on to the next stage of the validation, which consists of administering SNAP to more participants of the TRIAD cohort.

BUSINESS DEVELOPMENT OUTREACH 2023-2024

7. Governance body

please refer to [McGill Procedures for Research Units](#), Section 5

Colin Adair Family Foundation-Fellowship 2022-2026 (\$100,000 /per year)	\$500,000.00
Brightfocus Foundation Donation (IDC conferences)	\$26,986. 49
Travel Award/Scholarships/Fellowships/Salary Award (Students)	\$395,923.52
McGill 24 Campaign	Donations Received \$1,935.00
Counterback Studio Fundraiser	Gym fund raiser November 2023 \$1,300.00
Total Donations (May 2023 to March 2024)	2023-2024 = \$58,367.00 (172445) + \$18,620.00 (226232) Total \$76,987.00
Triannual Mailout Communication (Donors and Patients)	1500 mailout letters (2023)
Triannual MCSA Newsletters 2023	April/August/November 2023 Keeping our participants, patients, donors up to date with the Centre's Clinical, Research and Outreach activities
Social Network Platforms	Zoom, Teams, YouTube , Twitter , LinkedIn , Facebook

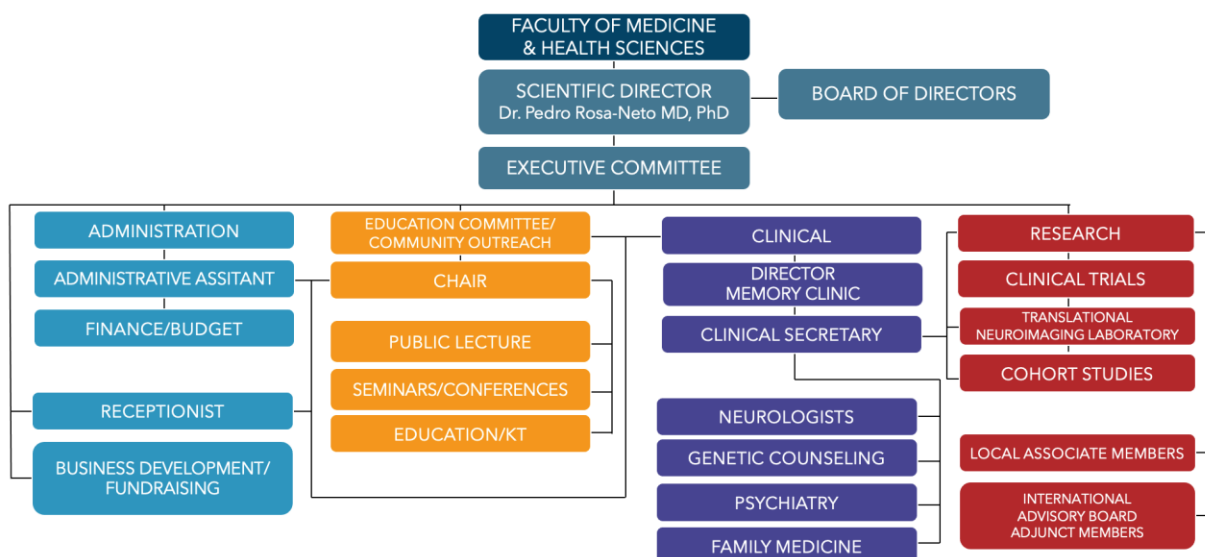
Each Research Unit must have a governance body, named and adapted to its size and scope, that provides strategic direction, management guidance, and ensures accountability of the activities of the Research Unit.

The Dean of FMHS is responsible for forming, chairing and appointing members to the governance body, which shall be composed at a minimum of: the Lead Faculty Dean or delegate as Chair, Deans or delegates from each of the Faculties involved, the Director, two Regular Members of the Research Unit, and at least one member from every other membership category.

The Vice-President (Research and Innovation) or delegate will serve as a member of a Research Unit’s governance body.

The governance body must meet annually at the invitation of the Lead Faculty Dean to review activities and membership, assess progress and performance, approve the annual report, the annual budget for operations, and provide guidance for any issues that may arise.

Governance Structure of The McGill University Research Centre for Studies in Aging



Date of the Unit’s last Board Meeting: April 13, 2023

8. **Major training activities** (e.g., summer schools, co-supervision of trainees, practical workshops, 1 page max):

	Post Doctoral	PhD	MSc	Medical Student	Undergraduate Student	Graduate Research Trainee	Visiting Scholar
Dr. Pedro Rosa-Neto	1	11	3	1	3	0	3
Dr. Paolo Vitali		0		2			
Dr. Maiya Geddes	2	6	3	11	26	0	1

9. If applicable, **list new members** who joined the Unit in the past 12 months (indicate: Name, title, Regular/Associate/Affiliate Members, affiliation):

Dr. Wan Lu Jia, MD, Member
 Dr. Qi Guo, PhD, Member
 Dr. Maxime Montembault, PhD, Member

10. If applicable, **list members who have left the Unit** in the past 12 months
 (indicate: Name, title, Regular/Associate/Affiliate Members, affiliation):

Dr. Nair Vasavan, MBBS; FRCPC ; FRCP (U.K.) ; FRCPsych ; DPM ; FAPA, Associate Member (retired)

Financial report & forecast

Please ensure your 2024/25 forecasted budget is balanced or explain any possible contingencies below.

Expenses	2022/23 report	2023/24 budget
Total salaries	\$220,000.00	\$220,000.00
Travel Conferences Students	\$49,692.44	\$40,000.00
Stipends	\$17,134.19	\$45,000.00
Outreach	\$10,922.63	\$15,000.00
Publications	\$17,332.43	\$25,000.00
Other (Detail in #10 below)	\$66,849.63	\$28,000.00
Total expenses	\$381,931.32	\$373,000.00

Revenues	2022/23 report	2023/24 budget
Carryover	-	-
FMHS	\$13,500.00	\$50,000.00 (forecasted 2023- 2024)
User fees	-	-
Other sources (Detail in #10 below)	\$384,688.70	\$378,404.34
Total revenues	\$398,188.70	\$428,404.34

11. Budget justification (e.g., itemize if multiple salaries, detail other sources of funding):

Expenses: Other Sources Details #10	2022/23 report	2023/2024 budget
Other Sources Details: Specialized equipment purchases, upgrades, repairs; -81 freezers (2); Computer equipment; Materials & supplies; Brokerage; Contract Services (Insurances); Citizen & Imm. Eapps Fees International Visitors, Network Con. Internal Purchases	\$66,849.63	\$28,000.00

Revenues: Other Sources Details #10	2022-2023 report	2023-2024 budget
R. Wiselburg Fund; Jennie Rae-Feldman Bequest; W.& C. Bentham Medical Research Fund; Derek Davis Comined Annuity Fund; Chalk Rowles Laura Lectureship; MCSA Donations; MCSA Alzheimer Disease Unit; Colin Adair Family Foundation; Gloria Gari Support Travel Fund; Brightfocus Foundaton Donation;	\$384,688.70	\$378,404.34

The Centre is in the process of establishing a new clinical trial infusion unit. This unit will serve as vital resource for conducting cutting-edge research and providing advanced care to our patients participating in clinical trials. With our dedicated team of experts, we are confident that this initiative will contribute significantly to the advancement of medical science and patient care. We are requesting financial support in the amount of \$50,000.00 from the FMHS. These funds will be used to purchase equipment for the new clinical trial infusion unit (refer to table #1) and the difference will be used to hire a part-time nurse (3 days per week). This incentive is crucial for the aging centre in providing specialized care to the elderly and will increase enhanced patient care; interdisciplinary collaborations; educational opportunities; research potential; community impact and advancement in healthcare research and innovation. Your expertise and support are invaluable to us as we work toward this important milestone.

Table#1 Clinical Trial Research Infusion Unit:

12. Explain why continued support from the FMHS is crucial to Unit (½ page max):

Quantity	Equipment to purchase	Minimum Price	Maximum Price
	Painting of the Office	DRC	DRC
	Furniture	\$1,000.00	\$3000.00
1	Patient Monitor + EKG	\$875.00	\$1000.00
2	Infusion Chair	\$1,438.00 (\$719.X2)	\$2514.00 (\$1257 X 2)
2	IV Stand	\$485.10 (\$242.55 X2)	\$539.00 (\$269.50 X2)
1	Medical Crash Card Emergency	\$1985.00	\$2500.00
3	Blackout Curtains	\$258.00 (\$86.00 X3)	\$300.00 (3 X \$100.00)
2	Infusion Pump	\$1980.00 (\$990.00 X 2)	\$3000.00 (2 X \$1500.00)
Total		\$8,021.11	\$12,853.00

Continued support for our Centre remains essential for launching new projects and enhancing existing programs dedicated to the health and wellbeing of older adults. Financial support from the FMHS, would foster innovation and revamp our current initiatives, insuring the sustainability of vital centre activities such as research outreach programs and patient care. This support enables the unit to stay at the forefront of scientific discovery facilitating the pursuit of new avenues of research exploring emerging fields and address pressing health challenges facing society. We extend our heartfelt gratitude to the FMHS for their ongoing support and now we seek additional funding to bolster not only our research and clinical activities but also our outreach programs and social media presence.

Investment in our outreach programs and social media presence will enable us to continually and disseminate information and knowledge to a grown and vulnerable aging population. Your support would enable our Centre to disseminate research finding and knowledge to the broader community through these outreach programs, educational initiatives, and public engagement activities. This would help translate research discoveries into real world applications, benefitting society. The funds from FMHS would help enhance the marketability of the Centre’s outreach activities and also lend creditability to our Centre and its programs, facilitating the attraction of new donors, supporters, sponsors, thus amplifying our impact in the community.

Furthermore, your support can facilitate collaboration between our Centre and other Departments, Research Centres, and external partners. These collaborations will enable the Centre to leverage expertise and resources from these diverse sources, leading to disciplinary research efforts and the greater scientific breakthroughs. Doing so would enhance the Centre's reputation and credibility within the academic and scientific community attracting talented research, fostering collaborations, and increasing the Centre's visibility. This can ultimately lead to greater recognition and impact in the field.

In summary, by providing consistent support overtime, the FMHS helps ensure the long-term sustainability of the Centre's efforts for both research and knowledge transfer activities. Without adequate funding and support the Centre may struggle to fulfill its mission effectively.

13. Provide suggestions about how the Faculty could do better to support the Unit (**no page limit but please be specific and unleash your creativity!**)

To better support the aging centre and its focus on discovering preventative treatments for Alzheimer's Disease and other age-related ailments, the faculty could consider the following suggestions:

Increased Resources/Support: The current focus of MCSA is to discover effective preventative treatments for Alzheimer's Disease and other age-related ailments, translating these breakthroughs into benefits for Canadians. To advance aging research, the FMHS could initiate funding programs expanding MCSA's research scope and could foster partnerships with industry stakeholders to create new technologies for diagnosing, monitoring, and improving health in the elderly population. Because of the exponential rise in dementia cases worldwide, prioritization of dementia in public health is crucial. (WHO is predicting that there will be 153 million cases of individuals living with dementia by 2050.) Additional funding will be required to support the growing demands for additional services for the elderly, support for the expansion of programs, hiring of qualified personnel, and procurement of necessary equipment and supplies. These advancements have the potential to significantly enhance the quality of life for patients and their caregivers.

Interdisciplinary Collaboration: Facilitate collaborations between the Unit and other departments or research Centers within the Faculty. Encouraging interdisciplinary research collaborations can foster innovation and advance scientific discoveries. By encouraging and referring new collaborations to our Centre will not only prompt new research projects and endeavors but would simultaneously enhance the visibility of our centre through networking and connections.

Infrastructure and Equipment: Allocate resources for the expansion and upgrade of infrastructure, including laboratory facilities, imaging equipment, and data analysis tools, to support cutting-edge research in aging and neurodegenerative diseases.

Research & Innovation: Support research initiatives focused on advancing the understanding of dementia and developing innovative approaches to diagnosis, treatment, and caregiving. Encourage faculty members to engage in research projects that explore novel interventions, therapeutic strategies, and technologies aimed at improving the quality of life for patients with dementia.

Specialized Training & Education: Offer more training programs and educational resources to medical students, healthcare professionals focusing on dementia care, including diagnosis, management and communication techniques tailored to the needs of elderly patients. This could include workshops, seminars, and continuing education courses.

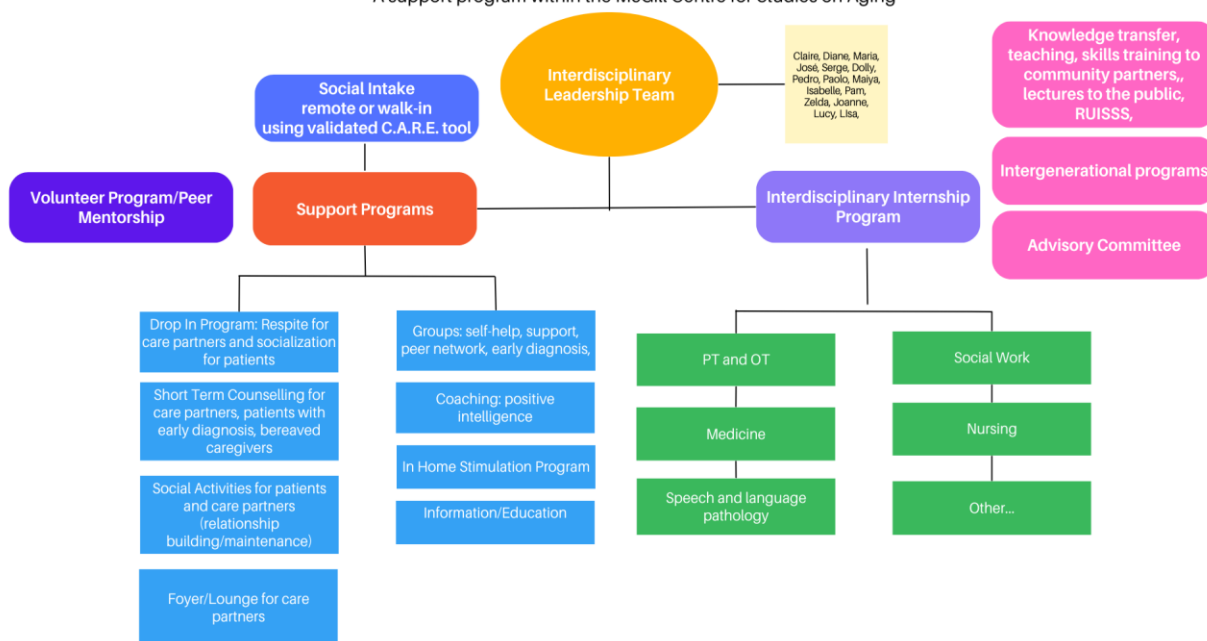
ADDENDUM 1

Partnership between the McGill University Research Center for Studies in Aging (MCSA), the McGill Dementia Education Program (DEP), the McGill School of PT and OT and the McGill School of Social Work

A new partnership between the McGill University Research Center for Studies in Aging (MCSA), the McGill Dementia Education Program (DEP), the McGill School of PT and OT and the McGill School of Social Work has been initiated in order to develop a new **Care Partner and Patient Support Program** with in-person activities to support and educate people living with dementia and their care partners, including short-term counselling for care partners, educational events, peer support groups, information sessions and leisure and recreational activities. This new program will provide essential training to future healthcare and social work professionals in the realities of people living with dementia and their care partners. This program will be housed at the MCSA.

Care Partner and Patient Support Program

A support program within the McGill Centre for Studies on Aging



Executive Summary of Care Partner and Patient Support Program (by Dr. Isabelle Gélinas)

Under the umbrella of the McGill University Dementia Education Program and working in collaboration and housed within the McGill University Research Centre for Studies in Aging (MCSA), the bilingual **Care Partner and Patient Support Program** will be a multi-faceted service offering for care partners and patients. This will include an inter-disciplinary leadership team (MD, Rehab, RN, SW), an advisory committee, a student internship program, social intake/triage for care partners and patients, as well as a complement of support services for care partners and patients.

This summer, preparatory work will be carried out to develop an environmental scan of support offerings in Montreal, a literature review of current best practices in care partner support, outreach to key stakeholders in care partners and patient support.

In the fall of 2024, two social work students will take part in an internship experience to develop a pilot project for short term counselling for caregivers/care partners, in person and on the telephone. The students will complete 350 hours per academic year, (7 hours per day on Tuesdays and Thursdays) for the Fall 2024 and Winter 2025 semesters, and complete assessment tools, ongoing progress notes/reports for each caregiver. The internship will be hybrid – both online and in person.

Students will receive 2 hours per week of weekly supervision. The students will have a contact support person onsite at the MCSA for technical and resource support, on Tuesdays and Thursdays. There will be a clinical supervisor back up, when needed.

As part of the interdisciplinary team involved in the McGill University Dementia Education Program, the School of Physical and Occupational Therapy (SPOT) will collaborate in the development and implementation of this new bilingual **Care Partner and Patient Support Program**. SPOT will contribute to the program at different levels. This will include participating in the leadership team and the educational activities offered to care for partners and patients. In addition, we plan to involve our students from the professional programs in volunteering and fieldwork activities in the program as well as our research-based graduate students in research projects to support the implementation of the program and evaluate its impact.

Other DEP activities in 2024-2025 which will include:

- Production of 10 to 12 additional monthly episodes of the *McGill Cares* webcasts with leading experts.
- Translate ***Dementia, Your Companion Guide*** into 3 to 5 additional languages; Polish, Cantonese, and Farsi are currently in progress.
- Continue to offer virtual support platforms, including:
 - 8 new episodes of ***Caring Conversations***.
 - 3 new seasons of ***The Sharing Room***, consisting of 2 English and 2 French support groups offered in partnership with the Alzheimer Society of Montreal; 2 new seasons of ***Young Caregiver Community***, consisting of 2 English and 3 French support groups offered to caregivers of people with young onset dementia; this is being offered in partnership with the MCSA whom it was initiated by in September 2022, created by Dr. Dolly Dastoor and Mallery Landry.
- Expand upon **outreach initiatives**, including attending conferences and offering lectures and workshops for community organizations and healthcare professionals.
- Create a **corporate video** in English and French to raise awareness of the program.
- Develop a series of short **video capsules** in English and French on activities of daily living and challenging behaviours.
- Launch a new **Dementia Education for Care Partners** online education program, consisting of 10 modules that care partners of a person living with dementia can go through at their own pace. To be launched in spring 2024, the content will be available in both English and French. It will include expert advice, shared experiences from participants, and solutions to the challenges of being a care partner in the context of dementia.
- Develop an **e-book** on dementia **specifically for healthcare professionals**.

ADDENDUM 2

Partnership between the McGill University Research Center for Studies in Aging (MCSA), the McGill Dementia Education Program (DEP)

In 2023, the MCSA provided office space and activity rooms to the DEP members to better integrate members and accelerate joint projects. This joint project aims at a new Patient and Care Partner Support Program with in-person activities to support and educate people living with dementia and their care partners, including

short-term counselling for care partners, educational events, peer support groups, information sessions and leisure and recreational activities. This new program will provide essential training to future healthcare and social work professionals in the realities of people living with dementia and their care partners.

The McGill DEP offers innovative programs and free, accessible multilingual resources to support people living with dementia and their care partners. It was founded in 2017 by former caregiver Claire Webster and falls under the academic leadership of Drs. Jose Morais and Serge Gauthier, who work in close collaboration with Dr. Pedro Rosa- Neto. During the upcoming 2024-25 academic year, the DEP will continue to expand the available resources and build new ones, as outlined below.

ADDENDUM 3

Integration of MCSA clinical activities with the Douglas Hospital Research Centre (DRC) - Centre intégré universitaire de santé et services sociaux de l'Ouest-de-l'Île-de-Montréal

Prof. Gustavo Tureki has appointed Dr. Paolo Vitali as the Director of the Clinical Trial Unit at the DRC (CRIC). In this new position, Dr. Vitali will integrate clinical trials administration at the Douglas and ensure compliance of all clinical activities. As part of his mandate, Dr. Vitali will align neurological care to the services offered to the CIUSSS l'Ouest-de-l'Île-de-Montréal. He will also implement an infusion unit.

Infusion Unit

Under the leadership of Dr. Vitali, the MCSA and DRC will create a facility for IV drug infusion for patients and research participants in clinical trials. This space will be arranged on the main floor of the MCSA location and will be fully equipped with standard of care instruments and monitoring tools to administer IV medication in a safety and comfortable manner. Drug administration will be provided by a registered nurse and supervised by an attending neurologist. Drug preparation will be outsourced to a specialized pharmacy nearby the MCSA. This exciting development of an infusion unit at the MCSA will increase the number and quality of services offered by the MCSA to our attending clinical and research population. The MCSA will be therefore well prepared to offer in situ the most advanced therapeutic management when the new disease-modifying drugs against AD will be available in Canada in the next future. At the same time, this new infusion unit will give the MCSA the possibility to be selected for and enrolled into the most advanced and complex clinical trials offered today by the industry and academic centers, in order to keep our leading role in treating AD and other age-related neurodegenerative diseases, such as Parkinson.

ADDENDUM 4

The role of MCSA is to promote education, research and health care to seniors. As outlined above, the MCSA's integration with the DEP and the McGill School of PT and OT was made possible by providing human resources and physical space to accommodate innovative programs on caregiving. For one whole year, the MCSA was a secretariat support to the NRM2024 meeting leveraging on its previous experience with NRM2020. Specifically, regarding the core PI, the centre offers clinical and research secretarial support, including assistance to the Behavioral Neurology Fellowship. Apart from clinical and secretary support, Dr. Vitali and Dr. Guedes also use participants of observational studies (i.e. TRIAD, Stop AD) for their own studies.

ADDENDUM 5

We meet with the MCSA web designer to better feature the MCSA on the TRIAD website, and the International Dementia conference series. During the NRM2024, the MCSA received a great ovation, and Silvana Aguzzi, and Alexandra Triantafillopoulos were acknowledged for their work. The list of publications was updated to satisfy the request from CORU.