



Hôpital général juif  
Jewish General Hospital

**ANNUAL REPORT**

**DIVISION OF GERIATRIC MEDICINE**

**JEWISH GENERAL HOSPITAL**

**January 1 – December 31, 2016**

**Ruby Friedman, M.D.**  
**Site Director**

**José A. Morais, MD, FRCPC**  
**Director**  
**McGill Division of Geriatric Medicine**

**July 2017**



HÔPITAL D'ENSEIGNEMENT  
DE L'UNIVERSITÉ MCGILL | A MCGILL UNIVERSITY  
TEACHING HOSPITAL

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**Annual Report**  
**Division of Geriatric Medicine**  
**Department of Medicine - Jewish General Hospital**  
**January 1 - December 31, 2016**

**SUMMARY**

We continue to fulfill the mandate of 1) delivering high-quality care to our elderly patients, 2) providing excellent teaching milieu to medical students and residents, 3) performing relevant clinical research on aging by our division members and 4) innovating in services to the elderly population. We are particularly proud of the achievements in reducing waiting time to access our outpatient services and the success so far of the Elderly Friendly Hospital implementation program at the JGH (*Approche adaptée pour personnes âgées, AAPA*).

The Division of Geriatric Medicine continues to respond to the increasing demands for clinical services. The Division of Geriatrics has agreed to care for 22 patients who require relocation to a LTC facility on a dedicated ward. This should improve the care required for these patients. Patients are identified on every medical/surgical unit for transfer to this ward. Access to the acute wards from the ED should be improved. The Division's areas of clinical activities include the Geriatric's Ward 6NW, the outpatient Geriatric Assessment Unit, Memory Clinic, Senior Oncology Clinic, the Geriatric Consultation Services in the Emergency Room, and in the hospital. To improve the efficiency of the Division's many activities, we have assigned a physician coordinator for each of them. Thus, for the 6NW Ward, the Medical Director will remain Dr. Ruby Friedman; for consultation services, Dr. Olivier Beauchet; for out-patient clinics, Dr. Susan Gold; for Memory Clinic, Dr. Susan Vaitekunas and Dr. Howard Chertkow (Neurology); for Geriatric Oncology Clinic, Dr. Doreen Wan-Chow-Wah & Dr. Johanne Monette. Dr Yin has assumed the responsibility of the Undergraduate Geriatrics Clerkship program at McGill. There have been major changes in the administration and teaching of this clerkship. Dr Yin provides an important link to the Department of Family Medicine.

The Division continues to be jointly run by Dr. Ruby Friedman, JGH Site Director, and by Dr. José A. Morais, Director, McGill Division of Geriatric Medicine.

Admissions to the Geriatrics ward have increased by 40%.

Consultation requests from the hospital wards have increased by 30%.

Evaluations in our Outpatient Clinics including Geriatrics Assessment Unit, Memory Clinic and Senior Oncology Clinic have increased by 35% in the last 5 years.

The implementation in 2015 of Bill 10 and Bill 20 will result in major changes across the healthcare system. Division members sit on several committees in the hospital and at McGill that are dealing with these issues. With regards to Bill 10 and the realignment of healthcare institutions, the Division of Geriatrics is well positioned. Division members already have cross-appointments to several of the institutions in the newly formed *Centre intégré universitaire de santé et de services sociaux (CIUSSS) du Centre-Ouest-de-l'Île-de Montréal* (Maimonides Hospital, Jewish Eldercare, CSSS Cavendish). The implications of Bill 20 are not known at this

time.

### **1. Research and publications:**

Dr. Elise Levinoff's research on the prevalence and management of hospitalized orthopedic patients with delirium continues to progress.

Research in neurobiology and dementia, health services, frailty, pharmacoepidemiology, long term care, and education continue to represent the existing strengths of the Division with programs that cross hospital, department and university lines and in some cases integrate bench-to-bedside-to population. Oncology and older persons, as well as empowering primary care to manage elderly patient with chronic diseases are emerging interests. There is increasing collaboration with colleagues from Quebec, Canada and internationally. Members of the Division lead major research programs with funding from the Canadian Institutes on Health Research (CIHR) and the Fonds de la recherche du Québec – Santé (FRQS). The list of publications and grants for our Divisions members are included in Section II.

### **2. Teaching and learning (undergraduate and graduate):**

*Number of degrees awarded; particular initiatives and achievements and innovations related to teaching programs; initiatives with respect to graduate supervision; and extraordinary student success stories should be included.*

Geriatrics is a mandatory rotation during the 4<sup>th</sup> year of medical clerkship. Our teaching responsibilities have increased markedly since we have 50% more medical students on rotation. This year, we had 2 residents in the Geriatric Fellowship program and in the Care of the Elderly Program (Family Medicine stream) rotating at the JGH. We also have many Internal Medicine and Family Medicine residents spending a month rotating in the Division. The student evaluations have been very good to excellent and an increasing number of students have expressed interest in geriatric medicine as a career. Those of the Residents are also very positive. These positive evaluations are a testimony to the hard work and dedication of all the teachers in our Division. An annual Prize is given to a Medical Student with a superior performance in the rotation during the Graduation Day in May of each year.

### **3. Involvement in the community:**

*Involvement in both the academic field of the unit and involvement in the larger non-academic community by either the unit or individuals (faculty, staff, and students) should be included. Examples are: conferences organized; outreach programs (local, national, and international) related to the academic mission of the unit as well as volunteer activities not directly related to teaching and research.*

The Division, once again, had a very successful public lecture, the Goldie Raymer Memorial Lecture on October 31, 2016. The topic was *The Longevity Marathon-Lessons in Living to 100* presented by Dr. Thomas T. Perls. Over 250 people attended and there was widespread coverage in local newspapers and on radio.

The McGill Division of Geriatrics held 4 Grand Rounds that are open to public as well as to physicians of all backgrounds and allied health professionals. Half of these conferences took place at the JGH. Some of our physicians act as consultants at Long Term Care Institutions and Rehabilitation Centers of the CSSS Cavendish and de la Montagne.

#### **4. Partnerships:**

At the level of the JGH, we continue working with the Departments of Nursing and Social Services in the implementation of the Approche adaptée à la personne âgée (AAPA). Significant progress in the implementation of the AAPA (Approche adaptée à la personne âgée) throughout the JGH has been made. The goal of this program is to introduce principles of elder care throughout the hospital.

Isabelle Lamontagne is the coordinator of the H.E.L.P. Program (Hospital Elder Life Program). This program, developed at Yale University, utilizes specially trained volunteers to assist the elderly in maintaining cognition, mobility and nutrition. This program has been in over 200 hospitals in the USA for the last 20 years. The program has been shown to reduce the incidence of delirium and to reduce length of stay. The JGH is the first hospital in Quebec and the second in Canada to implement this program. Our gratitude to the JGH Auxiliary for supporting this program.

We continue to collaborate with the Department of Family Medicine, as part of the provincial Plan Alzheimer, to implement a memory clinic in their UMF/GMF. The Division works also in partnership with the Solidage Research Group (Dr. Johanne Monette, co-director) to innovate in the services and care to elderly patients.

At the level of the RUIS McGill, several members of the Division participate in the Subcommittee of Aging and the Center of Excellence in Aging and Chronic Disease to assist in their orientations and to collaborate in projects.

At the provincial level, we are also participating in the orientation of the MSSS-Table Nationale of Aging to improve the services and care to elderly patients and the Working group on the Implementation on the provincial Alzheimer Plan.

#### **5. Milestones:**

A major development this year has been the introduction of the Approche adaptée à la personne âgée (AAPA). This is a hospital wide program to introduce principles of geriatric care on all units. The main focus of this program is on delirium diagnosis and management, mobility and nutrition. Dr. Ruby Friedman is co-chair along with Judy Bianco (Director of Nursing for Medicine and Geriatrics), Sonia Joly (Nursing), and Maxine Lithwick (Director of Social Services). A large dedicated multidisciplinary team has played a leading role in the introduction of this Program. We have been recognized by the Agence de Montréal to be leaders in the implementation of this Program that could be the most advanced in its introduction onto the clinical wards of any hospital on the island of Montréal.

The Geriatric Ward 6 NW is a fully renovated 32-bed unit which incorporates the principles of

an “elderly friendly hospital”. The great concern in previous years was the increasing length of stay of patients on the Ward. This was mostly attributed to inefficiencies in the Program 68 placement process. This year we have seen a marked improvement in this process, now called PHPE for Programme d’Hébergement pour Évaluation. Dr. Friedman continues to work closely with nursing administration and the director of social service to ensure the functioning of this program.

In response to the increasing request from the community, the hospital and the Emergency Room, the Outpatient Geriatric Clinics have markedly reduced waiting times for patient evaluation. The Outpatient Clinics include the Geriatric Assessment Unit, the Memory Clinic, and the Senior Oncology Clinic. The waiting period for new requests for consultation has been reduced to 2-4 weeks. Furthermore, the Rapid Response Clinic has been established whereby patients who require urgent follow-up from the Emergency Room, or are post-discharge, can be evaluated within days.

In the past year, the Geriatric consultation services in the Emergency Room and for the hospital Wards have been reorganized. For hospital ward consultations, 90% are completed within 48 hours. A similar percentage is achieved for ER consultations but within 24 hours.

#### **6. New hires, promotions, and retirements:**

Dr. Olivier Beauchet, Professor at McGill University, is the Director of the RUIS McGill Centre of Excellence on Aging and Chronic Disease - CEViMaC. Dr Beauchet is an internationally recognized researcher in the evaluation of gait disorders in the elderly. Dr. Beauchet will be establishing a Falls and Gait Disorders Evaluation Clinic at the JGH.

The Division of Geriatrics extends to Judy Bianco, Director of Nursing for Medicine and Geriatrics, best wishes on her retirement. Her devotion and passion for geriatrics for over 20 years has inspired many. The Division of Geriatrics has developed and grown markedly during her leadership.

#### **7. Honours, awards, and prizes:**

NA

#### **8. Fundraising:**

Funding has been secured from a private donor to completely renovate our outpatient department. We hope to begin renovations in 2019.

### **SECTION I - DIVISION STATUS UPDATE**

#### **1. Mission and objectives of the Division**

The Mission of the Division is to provide comprehensive, compassionate, client-centered care to frail older persons and their caregivers to enhance their health and quality of life.

Our objectives are:

- To provide exemplary geriatrics comprehensive assessment, consultation and direct care to our inpatient and outpatient elderly population
- to provide excellent education and training of students and residents to enhance their capacity to take care of future older persons
- to provide leadership in ongoing research to advance knowledge of aging and aging related diseases and their management

## **2. A nominative list of academic staff, their academic rank**

Dr. José Morais, Director, McGill Div. of Geriatric Medicine, Associate Professor, Active  
Dr. Ruby Friedman, Site Director, JGH, Div of Geriatric Medicine, Associate Professor, Active  
Dr. Olivier Beauchet, Professor, Active  
Dr. Nacera Belkous, Faculty Lecturer, Active  
Dr. Susan Gold, Assistant Professor, Active  
Dr. Paul Heilpern, Assistant Professor, Active  
Dr. Elise Levinoff, Assistant Professor, Active  
Dr. Johanne Monette, Assistant Professor, Active  
Dr. Sanda Popescu-Crainic, Active  
Dr. Susan Vaitekunas, Faculty Lecturer, Active  
Dr. Haibin Yin, Faculty Lecturer, Active  
Dr. Sylvia Marques, Faculty Lecturer, Leave

### **Associate Members**

Dr. Yves Bacher, Active  
Dr. François, Béland, Active  
Dr. Howard Bergman, Active  
Dr. Catherine Brodeur, Active  
Dr. Howard Chertkow, Active  
Dr. Shek Fung, Active  
Dr. Francine Gaba, Active  
Dr. Gary Inglis, Active  
Dr. Vladimir Khanassov, Active  
Dr. Nadine Larente, Active  
Dr. Andréa Leblanc, Active  
Dr. Ziad Nasreddine, Active  
Dr. Hyman Schipper, Active  
Dr. Patrice Tremblay, Active  
Dr. Isabelle Vedel, Active  
Dr. Doreen Wan-Chow-Wah, Active

## SECTION II - GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE OF MCGILL

### 1. Grants and awards received

#### *Honours and Awards*

##### **Bergman, Howard**

Co-honorary President, Société francophone d'oncogériatrie

Prix reconnaissance. Membre s'étant engagé dans le développement de la gériatrie au Québec.  
Société Québécoise de Gériatrie

#### *Grants*

##### **Beauchet, Olivier**

Geriatric Inclusive Art: Effects of painting sessions on older inpatients with cognitive decline.  
Fondation de Bienfaisance T.A. Saint-Germain. \$12,000

Alzheimer Aging Care Coping Empowerment webPlatform (A2CCEPT). Private donation.  
\$25,000

Hypovitaminosis D & artificial intelligence: identifying elders with non-optimal serum vitamin  
D concentration using clinical information. General Mills. \$52,000

##### **Bergman, Howard**

PROMPT Identification of Cerebral Palsy: Primary-care Referral Of Motor-impaired children:  
Physician Tools. Majnemer A (PI), Fehlings D, Radzioch Guerin A, Ahmed S, Bergman H,  
Bussieres A, Dagenais L, et al (co-applicants). CIHR. Knowledge Translation Research  
Committee, \$330,576 (\$82,644/year). 2014-2018

Assessing care models implemented in primary health care for persons with Alzheimer's disease  
and related disorders. Canadian Team for Healthcare Services/System for Improvement in  
Dementia Care/Canadian Consortium on Neurodegenerative Disease of Aging (CCNA).  
Bergman H & Vedel I (PI), et al. CIHR, \$1,200,000. 2014-2019

Canadian Frailty Priority Setting Partnership. McGilton Katherine, Puts Martine, Bethell  
Jennifer (Co-PIs); Steering Committee and Project Team members: Andrew M, Ayala P,  
Bergman H, Choate A, DeAngelis C, Fitch M, Frank C, Keatings M, McElhaney J, Pitters E,  
Ploeg J, Sidani S. Canadian Frailty Network (known previously as Technology Evaluation in the  
Elderly Network, TVN). (\$50,000 project + \$27,360 workshop) = \$77,360. 2016-2017

##### **Chertkow, Howard**

Broad and deep analyses in neurodegeneration (BRAIN). Chertkow, H., Hogan, D., Smith, E.,  
Rockwood, K., Phillips, N. et al. CIHR (Canadian Institutes of Health Research) New Directions  
in Dementia Research: Big Data on Dementia, \$4,750,000.00. 2016-2021

Typical and atypical Alzheimer Disease: salivary tau biomarkers, therapy with neuromodulation,

and disease subtypes. Chertkow, H. (P.I.), A. Evans, H. Feldman, E. Nikelski, H. Paudel, C. Roncero, H. Schipper, N. Sourial, & A. Thiel. CIHR (Canadian Institutes of Health Research) Foundation operating grant of \$1,695,052.00. 2015-2023

Canadian Consortium on Neurodegeneration in Aging (CCNA). Chertkow, H. (Scientific Director). CIHR (Canadian Institutes of Health Research) and Partners - 34.5 million/5 years. 2014-2019

Comparing the nature and evolution of Mild Cognitive Impairments in individuals with and without Parkinson's disease. Monchi, O. (P.I.), Belleville, S., Chertkow, H., Lafontaine, A.L., Collins, D.L. CIHR (Canadian Institutes of Health Research). \$753,540.00. 2013-18

The impact of beta-amyloid burden on cognition in normal aging. Joubert, S (P.I.), Bocti, C., Chertkow, H., Holcroft, C. CIHR (Canadian Institutes of Health Research). \$645,866. 2012-17

Virtual reality based spatial memory intervention for patients with Mild Cognitive Impairment. Bohbot, V (P.I.), Bherer, L., Chertkow, H., Gauthier, S., Lerch, J., Rajah, M. CIHR (Canadian Institutes of Health Research) operating grant of \$197,225.00/year: 2012-16

### **Leblanc, Andréa**

Consortium Québécois de la Recherche sur la maladie Alzheimer au Québec (CIMA-Q). Co-PI. FRSQ-Pfizer. \$2,500,000. 2013-2016.

Using stem cell-derived neurons for sporadic Alzheimer Disease modeling and drug discovery. PI. Alzheimer Society of Canada. \$150,000. 2015-2017

### **Morais, José**

#### **Co-Principal Applicant**

Health impacts and characteristics of deprescribing interventions in older adults - a systematic review. PI: Koger E, Morais JA, Co-applicants: Breton M, Farrell B, Giguère A, Laurin D, Lemire S, Morin M., Sirois C, Tourigny A, Vedel I. CIHR - Partnerships for Health System Improvement (PHSI). \$100,000. 06/2016-05/2017

PI: Pierette Gaudreau, José A. Morais, Co-applicants: 15 researchers from various Quebec institutions. FRQS Provincial Network Funding Program to the Quebec Network for Research on Aging (RQRV). \$900,000/yr. 04/2012-03/2016

Vers des Urgences Accueillantes pour les Aînés: Agir Ensemble pour une Meilleure Gestion de la Douleur. PI : Morin S. Co-PI : Daoust R, Gélinas C, Mayo N, Morais JA, Richer M-P. CIHR - Partnerships for Health System Improvement (PHSI). \$400,000. 6/2015-05/2016.

Faisabilité et contrôle du diabète de type 2 avec la combinaison d'une alimentation contenant des glucides à index glycémique faible et d'un entraînement par intervalles chez la femme âgée diabétique. PI : Riesco E. Co-PI : Dionne I, Boulay P, Brochu M, Langlois M-F, Tessier D, Morais JA. FRQS – RQRV. \$15,000. 06/2015 – 05/2016



Étude pilote du pancréas artificiel pour patients diabétiques de type 2. PI : Rabasa-Lhoret R. Co-PI : Carpentier A, Morais JA. FRQS – CMDO. \$15,000. 06/2015 – 05/2016

Measurement of Frailty to Identify High-Risk Elderly Patients Referred for Surgical and Transcatheter Aortic Valve Replacement. PI: Afilalo J. Co-investigators: Morais JA, Bergman H, Perrault L, Popma J, Rodes Cabau J, Shahian D. CIHR. \$115,351/y. 04/2012-03/2016

Technology Evaluation in the Elderly Network. Acute care frailty ladder. PI: Nancy Mayo and Jose A. Morais. TVN. \$50,000. 06/2015-07/2016

### **Co-investigator**

Motor, Exercise and Cognition Team (MEC), Canadian Consortium on Neurodegeneration in Aging (CCNA). PI: Montero M O. Co-Applicants: Bherer L, Almeida Q, Camicioli R, Doyon J, Li K, Liu-Ambrose T, Middleto Ln, Morais JA, McIlroy W. CIHR. \$924,000.00. 04/2014 – 04/2019

Nutrition, Exercise & Lifestyle Team (NELT), Canadian Consortium on Neurodegeneration in Aging (CCNA). PI: Greenwood C. Co-applicants: Parrott MD, Fiocco AJ, Anderson ND, Laurin D, Ferland G, Shatenstein B, Gaudreau P, Payette H, Belleville S, Morais JA, Kergoat MJ. CIHR. \$924,000.00. 04/2014 – 04/2019

Towards an Elder-Friendly Emergency Department: Partnerships for Better Pain Management following a Fracture. PI : Morin S. Co-PI : Assouline I, Gélinas C, Mayo N, Morais JA, Richer M-P. CIHR - Partnerships for Health System Improvement (PHSI). \$25,000. 09/2015-08/2016

## **2. Scholarly works published in the 2016 calendar year**

### **Bergman, Howard**

Farcet A, De Decker L, Pauly V, Rousseau F, **Bergman H**, Molines C, Retornaz F. Frailty markers and treatment decisions in patients seen in oncogeriatric clinics: results from the ASRO Pilot study. PLoS One. 2016 Feb 26;11(2):e0149732. doi: 10.1371/journal.pone.0149732. eCollection 2016.

Puts M, Toubasi S, Atkinson E, Ayala A, Andrew M, Ashe M, **Bergman H**, Ploeg J, McGilton K. Interventions to prevent or reduce the level of frailty in community-dwelling older adults: a protocol for a scoping review of the literature and international policies. BMJ Open. 2016 Mar 2;6(3):e010959. doi: 10.1136/bmjopen-2015-010959.

Puts M, Toubasi S, Andrew M, Ashe M, Ploeg J, Atkinson E, Ayala AP, Roy A, Rodriguez Monforte M, **Bergman H**, McGilton K. Interventions to prevent or reduce the level of frailty in community-dwelling older adults: a scoping review of the literature and international policies. Jan 7 2017. Age and Ageing 1-10. DOI: <https://doi.org/10.1093/ageing/afw247>.

### **Chertkow, Howard**

Tam, A., Dansereau, C. Badhwar, A., Orban, P., Belleville, S., Chertkow, H., Dagher, A., Hanganu, A., Monchi, O., Rosa-Neto, P., Shmuel, A., Wang, S., Breitner, J., & Bellec, P. (2016). A dataset of multiresolution functional brain parcellations in an elderly population with no or

mild cognitive impairment. *Data in Brief*, 9, 1122-1129.  
<http://dx.doi.org/10.1016/j.dib.2016.11.036>.

### **Leblanc, Andrea**

Peters S, MA Dery, **LeBlanc AC**: Familial prion protein mutants inhibit Hrd1-mediated retrotranslocation of misfolded proteins. *Human Molecular Genetics* 2016 25(5):976-88. doi: 10.1093/hmg/ddv630. *Recommended in F100Prime as being of special significance in its field.*

Foveau B, Albrecht S, Bennett, DA, Correa, JA, **LeBlanc, AC**. Increased Caspase-6 activity in the human anterior olfactory nuclei of the olfactory bulb is associated with cognitive impairment. *Acta Neuropathologica Communication*, 2016, 4: 127 (pp1-13)

### **Monette, Johanne**

Voyer P, Champoux N, Desrosiers J, Landreville P, McCusker J, **Monette J**, Savoie M, Carmichael PH, Richard H, Richard S. RADAR : A Measure of the Sixth Vital Sign? *Clin Nurs Res.* 2016 Feb;25(1):9-29. doi: 10.1177/1054773815603346. Epub 2015 Sep 2

Voyer P, Champoux N, Landreville P, **Monette J**, Savoie M, Carmichael PH, Richard S, Bedard A. Assessment of inattention in the context of delirium screening: one size does not fit all! *International Psychogeriatrics*. 2016 Aug;28(8):1293-301. doi: 10.1017/S1041610216000533. Epub 2016 Mar 23.

### **Morais, Jose A**

Rahi B, **Morais JA**, Gaudreau P, Payette H, Shatenstein B. Energy and protein intakes and their association with a decline in functional capacity among diabetic older adults from the NuAge cohort. *Eur J Nutr.* 2016;55(4):1729-39. doi: 10.1007/s00394-015-0991-1

Shatenstein B, Gauvin L, Keller H, Richard L, Gaudreau P, Giroux F, Gray-Donald K, Jabbour M, **Morais JA**, Payette H. Individual and collective factors predicting change in diet quality over 3 years in a subset of older men and women from the NuAge Cohort. *Eur J Nutr.* 2016;55:1671-1681. <http://www.ncbi.nlm.nih.gov/pubmed/26169872>

Power GA, Minozzo FB, Spendiff S, Filion ME, Konokhova Y, **Morais JA**, Herzog W, Hepple RT, Taivassalo T, Rassier DJ. Reduction in single muscle fiber rate of force development with aging is not attenuated in world class older masters athletes. *Am J Am J Physiol Cell Physiol.* 2016;310:C318-327. doi: 10.1152/ajpcell.00289.2015.

Matta J, Mayo N, Dionne IJ, Gaudreau P, Fulop T, Tessier D, Gray-Donald K, Shatenstein B, Scott S, **Morais JA**. Muscle mass index and animal source of protein intake are positively associated with insulin resistance in elderly participants of the NuAge Study. *J Nutr Health Aging* 2016;20:90-97 (June 15 2015 DOI: 10.1007/s12603-015-0554-4)

Mamane S, Mullie L, Piazza N, Martucci G, **Morais JA**, Vigano A, Levental M, Nelson K, Lange R, Afilalo J. Psoas Muscle Area and All-Cause Mortality After Transcatheter Aortic Valve Replacement: The Montreal-Munich Study. *Can J Cardiol.* 2016 Feb;32(2):177-82. doi: 10.1016/j.cjca.2015.12.002.

Lam R, **Morais JA**. Choosing Wisely Canada: Geriatrics. Don't recommend percutaneous feeding tubes in patients with advanced dementia: instead offer oral feeding. CGS Journal of CME Vol. 6, Issue 1, 2016

Hayes BD, Gosselin S, Calello DP, Nacca N, Rollins C, Abourbih D, Morris M, Nesbitt-Miller A, **Morais JA**, Lavergne V. Systematic review of clinical adverse events reported after acute intravenous lipid emulsion administration. *Clinical Toxicology*, 2016;54(5):3665-404. doi.org/10.3109/15563650.2016.1151528.

Farsijani S, **Morais JA**, H Payette, P Gaudreau, B Shatenstein, K Gray-Donald, S Chevalier. The relationship between mealtime distribution of protein intake and lean mass loss in free-living older adults of the NuAge study. *Am J Clin Nutr*. 2016;104:694-703.

St-Jean-Pelletier F, Pion CH, Leduc-Gaudet JP, Sgarioto N, Zovilé I, Barbat-Artigas S, Reynaud O, Alkaterji F, Lemieux FC, Grenon A, Gaudreau P, Hepple RT, Chevalier S, Belanger M, **Morais JA**, Aubertin-Leheudre M, Gouspillou G. The impact of ageing, physical activity, and pre-frailty on skeletal muscle phenotype, mitochondrial content, and intramyocellular lipids in

men. *J Cachexia, Sarcopenia Muscle*. 2016. DOI: 10.1002/jcsm.12139

Laverdière E, Payette H, Gaudreau P, **Morais JA**, Shatenstein B, Généreux M. Risk and protective factors for heat-related events among older adults of Southern Quebec: The NuAge study. *Can J Public Health* 2016;107(3):e258–e265. doi: 10.17269/CJPH.107.5599

Spendiff S, Vuda M, Gouspillou G, Aare SR, Perez A, **Morais JA**, Jagoe RT, Filion ME, Kapchinsky S, MacMillan N, Pion CH, Aubertin-Leheudre M, Hettwer S, Corre JA, Taivassalo T, Hepple R. Denervation Modulates Mitochondrial Function in Skeletal Muscle of Octogenarians. *J Physiol*. 2016 Sep 13. doi: 10.1113/JP272487.

Gougeon L, Payette H, **Morais JA**, Gaudreau P, Shatenstein B, Gray-Donald K. Vitamin B6 and B12 from food, but not folate, are protective for depression in a cohort of healthy community-dwelling older. *Eur J Clin Nutr*. 2016;70(3):380-5. doi: 10.1038/ejcn.2015.202

Matta J, Mayo N, Dionne IJ, Gaudreau P, Fulop T, Tessier D, Gray-Donald K, Shatenstein B, Scott S, **Morais JA**. Determining the development of insulin resistance in older adults of the NuAge Cohort using trajectory modeling of the Homeostatic Model Assessment of insulin resistance score. *J Diab Obes* 2016;3(2): 1- 8. DOI: 10.15436/2376-0494.16.1042

Burgos S, Chandurkar V, Tsoukas MA, Chevalier S, **Morais JA**, Lamarche M, Marliss EB. Insulin Resistance of Protein Anabolism accompanies that of Glucose Metabolism in Lean, Glucose-tolerant Offspring of Persons with Type 2 Diabetes. *BMJ Open Diabetes Research & Care* 2016;4:e000312.doi:10.1136/bmjdr-2016-000312

Zuckerman J, Ades M, Mullie L, Trnkus A, Morin JF, Langlois Y, Ma F, Levental M, **Morais**

**JA**, Afilalo J. Psoas Muscle Area and Length of Stay in Older Adults Undergoing Cardiac Surgery. *Ann Thorac Surg.* 2016 Nov 15. pii: S0003-4975(16)31167-5. doi: 10.1016/j.athoracsur.2016.09.005.

Vigano AL, **Morais JA**, Ciutto L, Rosenthal L, Di Tomasso J, Khan S, Olders H, Borod M, Kilgour RD. Use of routinely available clinical, nutritional, and functional criteria to classify cachexia in advanced cancer patients. *Clin Nutr.* **2016** Sep 20. pii: S0261-5614(16)31246-8. doi: 10.1016/j.clnu.2016.09.008.

### **3. Academic and community engagement service outside of McGill by individual members of the unit**

**Beauchet, Olivier**

#### **International Academic Presentations**

Quantitative gait parameters from MCI to moderate dementia: results from the GOOD initiative. The American Academy of Neurology 68th Annual Meeting – Vancouver, British Columbia, Canada, April 15-21, 2016 (poster communication)

Does Poor Gait Performance Predict Risk of Developing Dementia? Results From a Meta-analysis. The American Academy of Neurology 68th Annual Meeting – Vancouver, British Columbia, Canada, April 15-21, 2016 (poster communication).

Big data and gait: a major step forward for researchers – International Society of posture and gait research (ISPGR) 2016 World Congress - Fort Lauderdale, USA; May 25, 2016 (oral communication).

Hippocampal volume, early cognitive decline and gait variability: which association? International Conference on Aging and Gerontology. International conference on Aging and Gerontology 2016 – Las Vegas, Nevada, USA, August 8-9, 2016 (oral communication).

Hippocampal volume, early cognitive decline and gait variability: which association? International Conference on Aging and Gerontology. International conference on Aging and Gerontology 2016 – Las Vegas, Nevada, USA, August 8-9, 2016 (oral communication).

#### **National Academic Presentations**

Age effect on the prediction of risk of prolonged length hospital stay in older emergency department visitors: results from a large prospective geriatric cohort study. The Canadian Geriatrics Society's Annual Scientific Meeting (ASM) – Vancouver, British Columbia, Canada, April 14-15 (poster communication).

Recommendations for the management of geriatric patients visiting emergency department and risk of death: a pre-post quasi-experimental pilot study The Canadian Geriatrics Society's Annual Scientific Meeting (ASM) – Vancouver, British Columbia, Canada, April 14-15 (poster communication).

Quantified self and comprehensive geriatric assessment: Older adults are able to evaluate their own health and functional status. Congress of the Canadian Association of Gerontology 2016:

Fostering Innovation in Research on Aging - Montreal, Quebec; October 20-22, 2016 (oral communication).

Web-administration of a 'quantified self' questionnaire for elderly people: a user satisfaction survey Congress of the Canadian Association of Gerontology 2016: Fostering Innovation in Research on Aging - Montreal, Quebec; October 20-22, 2016 (oral communication).

Artificial neural network and falls in community-dwellers: a new approach to identify the risk of recurrent falling. Congress of the Canadian Association of Gerontology 2016: Fostering Innovation in Research on Aging - Montreal, Quebec; October 20-22, 2016 (poster communication).

### **Provincial Academic Presentations**

Gait, cognition and emotion: what have we learned? – Institut Universitaire de Gériatrie de Montréal, University of Montreal – Montreal, Quebec, Canada; January 13, 2016 (oral communication).

Development of Geriatric Inclusive Art: concept, evidences and perspectives - International Laboratory for Brain, Music and Sound Research, University of Montreal – Montreal, Quebec, Canada; January 29, 2016 (oral communication).

Évaluation gériatrique standardisée : intérêt de l'auto-évaluation dans le processus de prise de décision – Division de gériatrie de l'hôpital Saint Luc, université de Montréal – Montreal, Quebec, Canada; February 9, 2016 (oral communication).

Anomalies de la marche : biomarqueurs du déclin cognitif ? – 84e congrès de l'Association francophone pour le savoir (ACFAS), Université du Québec à Montréal – Montreal, Quebec, Canada; May 9-13, 2016 (oral communication).

Hippocampal volume, early cognitive decline and gait variability: which association? The 3rd Annual PATH. Symposium: Balance and mobility - Montreal, Quebec, Canada; November 4, 2016 (oral communication).

### **Bergman, Howard**

#### **International Academic Presentations**

The Patient-centered Medical Home: The Evolving Practice of Family Medicine in Canada. The 3rd Annual Academic Meeting of the Committee of General Practice, Cross-Straits Medicine Exchange Association. Shenzhen, China (March 4 – 6)

National Alzheimer Plans. What is actually happening on the ground: Practical lessons from Canada. 14th International Athens/Springfield Symposium on Advances in Alzheimer Therapy. Athens, Greece (March 12)

Future Practice of Family Medicine: Patient Centered Medical Home (Speaker). 12th Scientific Forum. Family Practice The Ultimate Solution. Khobar, Saudi Arabia (March 30)

Evolution and Experience of Family Medicine in Canada (Speaker). 12th Scientific Forum.

Family Practice. The Ultimate Solution. Khobar, Saudi Arabia (March 31)

Family Medicine: Foundation of the Canadian healthcare system: An Emerging Academic Discipline. Santa Marcelina, Sao Paulo, Brazil (June 2016)

Distance/Blended Education to Promote Primary Medical Care: a McGill University Department of Family Medicine Program. The 2016 International Cardiovascular Frontiers – utian Forum. Shenzhen, China (July 15-17)

Frailty as a Clinical Tool : A Cautionary Tale. CHU Grenoble, France (September 16)

La médecine de famille: une discussion au cœur du système de santé. Université Lyon-Sud, Lyon, France (September 23)

Family Medicine as key academic discipline at McGill and in Canada. King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia. (November 28)

Family Medicine as key academic discipline at McGill and in Canada. King Saud University, Riyadh, Saudi Arabia. (November 28)

### **Provincial Academic Presentations**

Une gouvernance clinique renouvelée : comment y arriver? (Table Ronde – Speaker). La Gouvernance Clinique: L'Heure des Choix! + Programme préliminaire. 18e Congrès Annuel de l'Association Médicale du Québec. (April 15)

Leçons et perspectives. L'Implantation du plan Alzheimer. Colloque : Soutien à domicile des aînés atteints d'Alzheimer : rôle des gestionnaires. Organisé par le Centre d'excellence sur le vieillissement du Québec et services spécialisés. Québec, QC (September 1)

L'Implantation des recommandations du plan Alzheimer : Progrès et défis. 29e Congrès Scientifique Annuel de la Société Québécoise de Gériatrie. Québec, QC (6 et 7 Octobre)

### **Chertkow, Howard**

#### **Formal Presentations, Rounds, Lectures and Invited Talks**

A Canadian consensus: Defining MCI for clinical and research purposes. 14th Annual Mild Cognitive Impairment (MCI) Symposium, the Annual Early Alzheimer's Diagnostic and Treatment Workshop and the Annual Alzheimer's Public Educational Forum. Miami: January 17, 2016.

Biomarqueurs de la MA: En vue du diagnostique et à titre de résultats des essais de traitement à différents stades de la maladie. Health Products and Foods Branch Science Symposium. Alzheimer's Disease: New Therapies, Challenges and Hope. Ottawa: April 11, 2016.

13 Things You Will Be Able to Do with the CCNA. Healthy Brain Aging and Dementia. Banff: May 25, 2016.

Impact de CCNV sur les soins à court, medium, et long term. 3e Congrès québécois sur la

maladie d'Alzheimer et les maladies apparentées. Sherbrooke: November 4, 2016.

General overview of the Canadian dementia research initiative. Apples to Apples? Comparing National Alzheimer's Research Programs and Global Research Priorities. Alzheimer's Association International Conference 2016 (AAIC). Toronto: July 25, 2016.

Imaging-related research in Canada. WW-ADNI Meeting. Alzheimer's Association International Conference 2016 (AAIC). Toronto: July 2016.

Current state of cohorts in Canada. GAP Workshop. Alzheimer's Association International Conference 2016 (AAIC). Toronto: July 2016.

Consortium Canadien sur la neurodégénérescence liée au vieillissement (CCNV). Congrès québécois sur la maladie d'Alzheimer. Sherbrooke: November 4, 2016.

The frontline in the research battle against dementia: The Canadian Consortium on Neurodegeneration in Aging (CCNA). McGill Neurology Grand Rounds. (December 7, 2016).

#### **Public Lectures:**

AGI Awareness Conference - Alzheimer Disease: To be informed is to be armed. Montreal: February 4, 2016.

#### **Friedman, Ruby**

Alzheimer Disease: To be Informed is to be Armed. 2016 Marva Whyte Alzheimer Awareness Conference, Alzheimer Group Inc. February 4, 2016.

#### **LeBlanc, Andrea**

CIMA-Q et maladie d'Alzheimer: Un nouveau consortium, de nouveaux outils, un nouvel espoir? Institut Gériatrique de l'Université de Montréal, le 7 avril, 2016 (Conférence Grand Public).

#### **Morais, José**

##### **Non-scientific conferences**

MUHC - Department of Medicine Grand Rounds (shared with Dr. Wendy Chiu and Mrs. Joann Creager, RN). *AAPA – Bureaucratic requirement or essential approach to improving outcomes in elderly patients*. MGH – Osler Amphitheater. January 19, 2016.

Visio-conference-midi RUSHGQ. . Gestion médicamenteuse du diabète de type 2 en UCDG. Lecture delivered with Mrs. Liliane Raduly. Institut universitaire de gériatrie de Montréal. Montreal. October 5 and 25, 2016

##### **Scientific conferences**

First Canadian Network on Aging and Cancer Conference. *Canada's aging population – where we are and where we're going. How are aging and cancer connected?* Health Science Building. University of Toronto. Toronto. April 27, 2016

Research Day of the Centre de recherche de l'Institut universitaire de gériatrie de Montréal (IUGM). *Le rôle des apports énergétiques et protéiques dans le maintien de la capacité fonctionnelle chez la personne âgée diabétique de la Cohorte NuAge*. IUGM – Amphithéâtre Le groupe Maurice. Montreal. May 26 2016.

XX<sup>th</sup> Congress of the Brazilian Society of Geriatrics and Gerontology. Symposium on Diabetes and Functionality: New Guidelines. *Canadian Guidelines*. Centre of Events of Ceará, Fortaleza, Brazil. June 8, 2016.

XX<sup>th</sup> Congress of the Brazilian Society of Geriatrics and Gerontology. Keynote speaker. Models of care in Canada: Age-friendly Hospital. Centre of Events of Ceará, Fortaleza, Brazil. June 9, 2016.

Second International Symposium «Biology of Aging: Paving the Way for Healthy Aging». Satellite Symposium of the 45<sup>TH</sup> Annual Scientific Meeting CAG 2016. 6<sup>TH</sup> Session on Cell metabolism, diabetes and aging. *Effects of Aging and Insulin Resistant States on Protein Anabolic Responses in Older Persons*. Hotel Bonaventure, Montreal, October 20, 2016

### **Committee Work**

#### **Beauchet, Olivier**

Executive Committee, McGill Division of Geriatric Medicine

Member of the Organizing Committee of the 36<sup>th</sup> ASM of the Canadian Geriatrics Society.

#### **Chertkow, Howard**

Scientific Director, Canadian Consortium on Neurodegeneration in Aging (CCNA). A considerable effort in the next five years will go into my coming position as Scientific Director of the **Canadian Consortium for Neurodegeneration in Aging (CCNA)**. This is an administrative position, but the CCNA is being established as a 34.5 million dollar five-year grant via CIHR. I submitted the LOI in May 2013, which was approved, and the full grant was approved in March 2014. As PI of the CCNA application, I am Scientific Director of CCNA and the administrative centre has been established at McGill at the Lady Davis Institute. There are 40 co-applicants from across Canada, and 340 researchers (the entire Canadian neurodegenerative diseases research community!) involved in this application.

Executive member (elected), ISTAART (Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment, a professional society for individuals interested in Alzheimer's and dementia science ).

Member of the Executive committee (representing CIHR and Canada), Alzheimer's Disease NeuroImaging Initiative (ADNI).

#### **Friedman, Ruby**

Policy Committee and Clinical Services Committee, Department of Medicine, Jewish General Hospital



Executive Committee, McGill Division of Geriatric Medicine

Co-Chair, Approche adaptée à la personne âgée (AAPA) Committee, Jewish General Hospital

**LeBlanc, Andréa**

Alzheimer Society of Canada 2016 (20 grant reviews)

CIHR Foundation grants Stage 1 2016-2017 (10 grant reviews)

Ad hoc

MRC UK (1)

Foundation for Alzheimer Research (SAO-FRA) Belgium (1)

**Morais, José A**

Frailty Intervention Workshop. Lawrence S. Bloomberg Faculty of Nursing. University of Toronto. May 18 2016

CIHR – Canadian Chronic Disease Prevention Initiative Think Thank. Sheraton Gateway Hotel, Toronto. September 13, 2016.

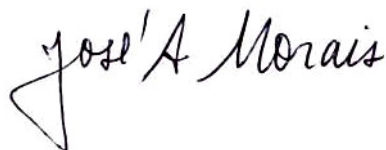
**SECTION III - CONFIDENTIAL INFORMATION**

**1. Consulting activities:** None to report

Submitted by:



Ruby Friedman, MD  
Site Director, Division of Geriatric Medicine



José A. Morais, MD  
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