

ANNUAL REPORT

DIVISION OF GERIATRIC MEDICINE

JEWISH GENERAL HOSPITAL

January 1 – December 31, 2019

Ruby Friedman, M.D. Site Director

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McGill Division of Geriatric Medicine

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Annual Report Division of Geriatric Medicine Department of Medicine - Jewish General Hospital January 1 - December 31, 2019

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 27 patients who require relocation to a LTC facility on a dedicated ward. This newly renovated ward is now on 6West. It has been integrated with the acute Geriatrics ward 6NW. At any given time, the Division is responsible for over 70 admitted patients. 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. Dr Olivier Beauchet has introduced a Mobility Disorders/Fall Clinic. 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; for Geriatric Oncology Clinic, Dr. Doreen Wan-Chow-Wah & Dr. Johanne Monette. Dr. Haibin 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 76% in the last 5 years.

Consultation requests from the hospital wards have increased by 93% in the last 5 years.

Consultation requests from the Emergency Department have increased by 43% in the last 5 years.

Teaching responsibilities have increased by 13%

Evaluations in our Outpatient Clinics including Geriatrics Assessment Unit, Memory Clinic and Senior Oncology Clinic have increased by 15% in the last 5 years.

The RUIS McGill Centre of Excellence on Longevity (previously known as the RUIS McGill Centre of Excellence on Aging and Chronic Disease – CEViMaC), under the leadership of Dr. Olivier Beauchet has developed markedly in the last 3 years.

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). Doctor Howard Chertkow is the coordinator of the Canadian Consortium on Neurodegeneration and Aging(CCNA). This program coordinates the research across memory clinics in Canada and is based at the Jewish General. The list of publications and grants for our Division members are included in Section II.

2. Teaching and learning (undergraduate and graduate):

Geriatrics is a mandatory rotation during the 4th 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 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:

The Division, once again, had a very successful public lecture, the Goldie Raymer Memorial Lecture on October 28, 2019. The topic was *Dilemmas in the Care of the Person with Advanced Dementia* presented by Dr. Susan Mitchell. Over 100 people attended and the lecture was very well received.

The McGill Division of Geriatrics held 3 Grand Rounds that are open to public as well as to physicians of all backgrounds and allied health professionals. The conferences were held by

Visioconference across the McGill sites which include the Jewish General Hospital, the Montreal General Hospital, the Royal Victoria Hospital-Glen, and St. Mary's hospital. Some of our physicians' act as consultants at Long Term Care Institutions and Rehabilitation Centers of the CSSS Cavendish and de la Montagne, in particular Donald Berman Maimonides Geriatric Centre and The Jewish Eldercare Centre.

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. The leaders of this program are Dr. Ruby Friedman, Isabelle Caron (Director of Nursing) and Maxine Lithwick (Social Services).

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 Center of Excellence on Longevity under the leadership of Dr. Olivier Beauchet, to assist in their orientations and to collaborate in projects involving Emergency Room management of older adults, reduction of antipsychotic medications in CHSLD and promoting healthy aging through visits to the Montreal Museum of Fine Arts.

We have been requested by our CIUSSS community partner to develop a "Corridor de service" for patients with dementia and behavioral disorders. Multiple meetings have been held and the program will be developed in the coming year.

We have been approached by the city of Côte-St-Luc to collaborate with them on their VILLage project. The city of Côte-St-Luc has a significant elderly population, many of which are patients of the Jewish General Hospital. This interesting project proposes to use technology/A1 to maintain seniors safely at home. This is an excellent opportunity for the Division to collaborate on an innovative project.

5. Milestones:

Access for admissions from the Emergency Room has improved since the introduction of the 27-bed unit on ward 6C for patients who are awaiting relocation to nursing homes.

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. 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.

Major Developments

- H.E.L.P. Program (Hospital Elderly Life Program)

 The H.E.L.P. Program has been introduced on 4 Wards in the hospital. It is the 1st in Quebec and 2nd in Canada to have this program which utilizes specialty trained volunteers to assist elderly patients with cognition, nutrition and mobility. In the winter 2020, students from the McGill School of Physical and Occupational Therapy will be in regular attendance as part of their curriculum. Significant private funding has been obtained to develop and expand the H.E.L.P. Program.
- Formal dedication of our new OPD The Susan and Aron Lieberman Wellness in Aging Geriatric Clinic

A formal dedication to our new OPD, which is now called *The Susan and Aron Lieberman Wellness in Aging Geriatric Clinic*, was held in December 2018. Construction will begin in March 2020. The clinic space will be significantly important and expanded which will assist us in reducing wait times. We will also be able to review more cases with students and residents

6. New hires, promotions, and retirements:

Dr. Howard Chertkow, founder and co-director of the Memory Clinic, has assumed a position at the University of Toronto. The Division acknowledges and thanks him for 25 years of leadership in the assessment and treatment of cognitive disorders.

7. Honours, awards, and prizes:

NA

8. Fundraising:

We are grateful to the many donors who continue to support the AAPA program (Approche adaptée à la personne âgée), the H.E.L.P. program (Hospital Elder Life Program) and Division activities. In particular, we are appreciative of the support of Mrs. Anita David and the Gustav Levinschi Foundation for the Division activities.

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 A. Morais, Director, McGill Division of Geriatric Medicine, Jewish General Hospital and McGill University Health Centre, Associate Professor, Active

Dr. Ruby Friedman, Site Director, JGH, Division of Geriatric Medicine, Associate Professor, Active

- Dr. Olivier Beauchet, Professor, Active
- Dr. Nacera Belkhous, 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. François, Béland, Active
- Dr. Howard Bergman, Active
- Dr. Catherine Brodeur, Active
- Dr. Howard Chertkow, Active
- Dr. Shek Fung, Active
- Dr. Francine Gaba Idiamey, Active
- Dr. Gary Inglis, Active
- Dr. Vladimir Khanassov, Active
- Dr. Hyman Schipper, Active
- Dr. Patrice Tremblay, Active
- Dr. Doreen Wan-Chow-Wah, Active

SECTION II - GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE OF McGILL

This detailed list, generally organized by faculty member and drawn from each individual activity report, should include:

1. Grants and awards received

Honours and Awards

Beauchet, Olivier

Clinical research award, Department of Medicine, Jewish General Hospital

Canadian Museum Association (CMA) Award of Excellence in the Research Art Category, for the A-Health project exhibition at the Musée des beaux-arts de Montréal

Levinoff, Elise

Clinical research award, Department of Medicine, Jewish General Hospital

Grants

Beauchet, Olivier

Geriatric Inclusive Art: Effects of painting sessions on older in-patients with cognitive decline. Saint-Germain Foundation. \$12,500

Co-développement et déploiement d'un cycle de visites muséales pour lutter contre l'isolement social des personnes aînées montréalaises. Beauchet O (PI). FRQSC, Programme Actions concertées / Action sur le vieillissement actif de la population au Québec / Projet de rechercheaction. \$173,137. 2020-2023

Bergman, Howard

Évaluation de l'implantation de l'accès adapté et de ses effets dans les groupes de médecine familiale universitaires. Breton M, Duhoux A, Landry G, Maillet L (PIs) et al. Bergman H (Knowledge user). CIHR. \$520,000. 2018-2022

CO-desiGning demeNtia dIagnoSis ANd post-diagnostic CarE (COGNISANCE). Vedel I (PI), McAiney CA, Bergman H (co-investigators). CIHR Institute of Aging-Joint Programme Neurodegenerative Disease (JPND) transnational call: "Multinational research projects on Health and Social Care for Neurodegenerative Diseases". \$350,000. 2019-2021

Co-designing Dementia Care in New Brunswick: Building the Future Together. Doucet S (PI), Bergman H (co-investigator). Government of New Brunswick, Healthy Seniors Pilot Project Operating Grant. \$495,259. 2019-2021

Assessing care models implemented in primary health care for persons with Alzheimer's disease and related disorders. Bergman H & Vedel I (Lead investigators) et al. CIHR - Canadian Institutes of Health Research - Canadian Consortium for Neurodegeneration and Aging (CCNA). \$1,520,000. (Full application \$49,000,000-NPI: H Chertkow) 2019-2024

Xi-Care: eXplainable intelligent system for Cardiovascular disease management among women in primary Care; NPI: S Abbasgholizadeh-Rahimi, Co-Investigators: P Pluye, R Grad, R Rodriguez, H Bergman, I Vedel, MP Gagnon, SH Yousefi, P Ghadiri; CIHR-Strategy for Patient-Oriented Research (SPOR). \$100 + \$152,500 (in-kind) 2020-2021

Monette, Johanne

The PREvention Program for Alzheimer's Related Delirium (Prepared) Cluster Randomized Trial. Wilchesky M (PI), Champoux N, Ciampi A, Lungu VO, McCusker J, Monette J, Vu TTM, Voyer P. CIHR. \$439,826. 2016-2020

Clinical and cost-effectiveness of a comprehensive geriatric assessment in Canadian elders receiving chemotherapy: the 5C study. Puts M (PI), Alibhai S, Amir E, Beland F, Bergman S, Elser C, Emmenegger U, Hsu T, Jang R, Koneru R, Kozlowski N, Krahn M, Krzyzanowska M, Lemonde M, Mariano C, Mehta R, Monette J, Papadakos J, Prica A, Szumacher E, Wan-Chow-Wah D. Canadian Cancer Society \$900,816. 2017-2021

Morais, José A.

Grants as Principal Applicant

Unraveling the mechanisms underlying bed rest-induced muscle atrophy and of an exercise countermeasure. PI: José A. Morais. Co-Investigators: Chevalier S, Churchward-Venne T, Ferron M, Gouspillou G, Hussain S, Wing S. CIHR – Canadian Space Agency – Canadian Frailty Network: Understanding the Health Impact of Inactivity Operating Grant. \$200,000. 12/2018 – 06/2020

Investigating the contributions of mitochondrial dysfunction and impaired neuromuscular junction integrity to the aging-related loss of muscle mass and function in humans. Nominated PI: Gouspillou G. Co-PIs: Morais JA, Bélanger M, Aubertin-Leheudre M, Gaudreau P, Robitaille R. CIHR - Operating Grant: Geroscience Demonstration Grants. \$450,000. 06/2019 – 05/2022

NuAge: une cohorte unique pour l'étude des trajectoires de vieillissement selon une perspective globale et multidimensionnelle. Nominated PI : Presse N. Co-PIs: Morais JA, Gaudreau P, Chevalier S. FRQS - Plateforme de financements de la recherche intersectorielle sur le vieillissement. \$1500,000.06/2019 - 05/2022

Understanding the cellular mechanisms sustaining functional capacity improvement with prehabilitation in colorectal cancer patients. PI: José A. Morais. Co-Applicants: Franco Carli and Gilles Gouspillou. MITACS Accelerated proposal. \$90,000. 2018/01 - 2020/12

Grants as Co-Principal Applicant

Quebec Network for Research on Aging (RQRV). PI: Pierette Gaudreau, José A. Morais, Coapplicants: 15 investigators from various Quebec institutions. FRQS Provincial Network Funding Program. \$800,000/yr. 2017/04–2021/03

Grants as Co-investigator

Real-time Auditory Feedback for Improving Gait and Walking in People with Parkinson's Disease. PI: Mayo N. Co-PIs: Morais JA, Fellows KL, Sharp M. Healthy Brains for Healthy Lives (HBHL) Innovative Ideas Competition 2 Application. \$200,000. 2019/05 – 2021/04

Protein and Exercise to Reverse Frailty in OldeR Men and women undergoing TAVR: The PERFORM-TAVR Trial. PI: Afilalo, J. Co-Applicants: Morais JA, Beauchet O, Grover S, Janaudis-Ferreira T, Joseph L, Lauck S, Lowensteyn I, Madden K, Piazza N, Webb J. CIHR – Project Grant. \$ 1,082,476. 08/2017 - 7/2021

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, Middleton L, Morais JA, McIlroy W. CIHR. \$924,000.00 (04/2014 – 04/2019) and \$1 300,000 (05/2019 – 04/2024)

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

Schipper, Hyman

Nutritional Intervention with the Dietary Supplement, Immunocal® in MCI Patients: Promotion of Brain Health. PI: H. M. Schipper; Co-I: H. Chertkow, D. Arnold, S. Narayanan. ClinicalTrials.gov Identifier: NCT03448055. Immunotec Inc. \$142,350. 2017-2019

Validation of salivary heme oxygenase-1 as a biomarker of idiopathic Parkinson disease. PI's: A. Velly, H. M. Schipper, M. Gornitsky, N. Lasry. MITACS Accelerate. \$186,667. 2018-2021

Validation of salivary heme oxygenase-1 as a biomarker of idiopathic Parkinson disease. PI's: M. Gornitsky & H.M. Schipper. Parkinson Canada. \$49,200. 2018-2019

Role of heme oxygenase-1 in aging and parkinsonian neural tissues (IV). PI: H. Schipper Canadian Institutes of Health Research. \$481,950. 2018-2021

2. Scholarly works published in the 2019 calendar year

Olivier Beauchet

Beauchet O, Launay CP, Galery K, Vilcocq C, Dontot-Payen F, Rousseau B, Benoit V, Allali G. Effects of Vitamin D and Calcium Fortified Yogurts on Gait, Cognitive Performances, and Serum 25-Hydroxyvitamin D Concentrations in Older Community-Dwelling Females: Results from the GAit, MEmory, Dietary and Vitamin D (GAME-D2) Randomized Controlled Trial. Nutrients. 2019 [Epub ahead of print]

Foucault G, Duval GT, Simon R, **Beauchet O**, Dinomais M, Annweiler C. Serum Vitamin D and Cingulate Cortex Thickness in Older Adults: Quantitative MRI of the Brain. Curr Alzheimer Res. 2019 [Epub ahead of print]

Cossette B, Bruneau MA, Couturier Y, Gilbert S, Boyer D, Ricard J, McDonald T, Labarre K, Déry V, Arcand M, Rodrigue C, Rhéaume AA, Moreault S, Allard C, Pépin MÉ, **Beauchet O**; OPUS-AP investigators. Optimizing Practices, Use, Care and Services-Antipsychotics (OPUS-

AP) in Long-term Care Centers in Québec, Canada: A Strategy for Best Practices. J Am Med Dir Assoc. 2019 [Epub ahead of print]

Allali G, Montembeault M, Griffa A, **Beauchet O**. Default mode network and the timed up and go in MCI: A structural covariance analysis. Exp Gerontol. 2019 [Epub ahead of print]

Beauchet O, Sekhon H, Launay CP, Rolland Y, Schott AM, Allali G. Motoric cognitive risk syndrome and incident dementia: results from a population-based prospective and observational cohort study. Eur J Neurol. 2019 [Epub ahead of print]

Sekhon H, Allali G, **Beauchet O**. The association of anxio-depressive disorders and depression with motoric cognitive risk syndrome: results from the baseline assessment of the Canadian longitudinal study on aging. Geroscience. 2019;41(4):409-418.

Sekhon H, Allali G, **Beauchet O**. Motoric cognitive risk syndrome and cardiovascular diseases and risk factors in the Canadian population: Results from the baseline assessment of the Canadian longitudinal study on aging. Arch Gerontol Geriatr. 2019 [Epub ahead of print]

Crockett RA, Hsu CL, Best JR, **Beauchet O**, Liu-Ambrose T. Head over heels but I forget why: Disruptive functional connectivity in older adult fallers with mild cognitive impairment. Behav Brain Res. 2019 [Epub ahead of print]

Beauchet O, Sekhon H, Schott AM, Rolland Y, Muir-Hunter S, Markle-Reid M, Gagne H, Allali G. Motoric Cognitive Risk Syndrome and Risk for Falls, Their Recurrence, and Postfall Fractures: Results From a Prospective Observational Population-Based Cohort Study. J Am Med Dir Assoc. 2019;20(10):1268-1273.

Beauchet O, Fung S, Launay CP, Cooper-Brown LA, Afilalo J, Herbert P, Afilalo M, Chabot J. Screening for older inpatients at risk for long length of stay: which clinical tool to use? BMC Geriatr. 2019;19(1):156

Allali G, Montembeault M, Saj A, Wong CH, Cooper-Brown LA, Bherer L, **Beauchet O**. Structural Brain Volume Covariance Associated with Gait Speed in Patients with Amnestic and Non-Amnestic Mild Cognitive Impairment: A Double Dissociation. J Alzheimers Dis. 2019;71(s1):S29-S39.

Beauchet O, Montembeault M, Barden JM, Szturm T, Bherer L, Liu-Ambrose T, Chester VL, Li K, Helbostad JL, Allali G; Canadian Gait Consortium. Brain gray matter volume associations with gait speed and related structural covariance networks in cognitively healthy individuals and in patients with mild cognitive impairment: A cross-sectional study. Exp Gerontol. 2019;122:116-122.

Sekhon H, Allali G, Launay CP, Barden J, Szturm T, Liu-Ambrose T, Chester VL, Wong CH, **Beauchet O**; Canadian Gait Consortium. Motoric cognitive risk syndrome, incident cognitive impairment and morphological brain abnormalities: Systematic review and meta-analysis. Maturitas. 2019;123:45-54.

De Cock AM, Fransen E, Perkisas S, Verhoeven V, **Beauchet O**, Vandewoude M, Remmen R. Comprehensive Quantitative Spatiotemporal Gait Analysis Identifies Gait Characteristics for Early Dementia Subtyping in Community Dwelling Older Adults. Front Neurol. 2019;10:313.

Chabot J, **Beauchet O**, Fung S, Peretz I. Decreased risk of falls in patients attending music sessions on an acute geriatric ward: results from a retrospective cohort study. BMC Complement Altern Med. 2019;19(1):76.

Beauchet O, Launay CP, Chabot J, Dejager S, Bineau S, Galery K, Berrut G. Prediction of unplanned hospital admissions in older community dwellers using the 6-item Brief Geriatric Assessment: Results from REPERAGE, an observational prospective population-based cohort study. Maturitas. 2019;122:1-7.

Sekhon H, Launay CP, Chabot J, Allali G, **Beauchet O**. Motoric Cognitive Risk Syndrome: Could It Be Defined Through Increased Five-Times-Sit-to-Stand Test Time, Rather Than Slow Walking Speed? Front Aging Neurosci. 2019;10:434.

Beauchet O, Sekhon H, Launay CP, Chabot J, Rolland Y, Schott AM, Allali G. Motoric cognitive risk syndrome and mortality: results from the EPIDOS cohort. Eur J Neurol. 2019;26(5):794-e56.

Beauchet O, Launay CP, Sekhon H, Montembeault M, Allali G. Association of hippocampal volume with gait variability in pre-dementia and dementia stages of Alzheimer disease: Results from a cross-sectional study. Exp Gerontol. 2019;115:55-61.

Blumen HM, Allali G, **Beauchet O**, Lipton RB, Verghese J. A Gray Matter Volume Covariance Network Associated with the Motoric Cognitive Risk Syndrome: A Multicohort MRI Study. J Gerontol A Biol Sci Med Sci. 2019;74(6):884-889.

Allali G, Montembeault M, Brambati SM, Bherer L, Blumen HM, Launay CP, Liu-Ambrose T, Helbostad JL, Verghese J, **Beauchet O**. Brain Structure Covariance Associated With Gait Control in Aging. J Gerontol A Biol Sci Med Sci. 2019;74(5):705-713.

Blumen HM, Brown LL, Habeck C, Allali G, Ayers E, **Beauchet O**, Callisaya M, Lipton RB, Mathuranath PS, Phan TG, Pradeep Kumar VG, Srikanth V, Verghese J. Gray matter volume covariance patterns associated with gait speed in older adults: a multi-cohort MRI study. Brain Imaging Behav. 2019;13(2):446-460.

Hsu CL, Best JR, Voss MW, Handy TC, **Beauchet O**, Lim C, Liu-Ambrose T. Functional Neural Correlates of Slower Gait Among Older Adults With Mild Cognitive Impairment. J Gerontol A Biol Sci Med Sci. 2019;74(4):513-518.

Bergman, Howard

Boychuck, Z., Andersen, J., Bussières, A., Fehlings, D., Kirton, A., Li, P., Oskoui, M., Rodriguez, C., Shevell, M., Snider, L., Majnemer, A., & the **PROMPT group**. (2019). Use of consensus methods to determine the early clinical signs of cerebral palsy. Paediatrics & Child Health. 2019 May. DOI: 10.1093/pch/pxz061

Karunananthan S, Moodie EEM, **Bergman H**, Payette H, Wolfson D, Diehr PH, Wolfson C. The association between physical function and proximity to death in older adults: a multilevel analysis of 4,150 decedents from the Cardiovascular Health Study. Ann Epidemiol. 2019 Jul;35:59-65.e5. doi: 10.1016/j.annepidem.2019.04.005. Epub 2019 Apr 18.

Vedel I, Sourial N, Arsenault-Lapierre G, Godard-Sebillotte C, **Bergman H**. Impact of the Quebec Alzheimer Plan on the detection and management of Alzheimer disease and other neurocognitive disorders in primary health care: a retrospective study. CMAJ Open 2019;7(2):E391-8. doi:10.9778/cmajo.20190053.

Waltson J, Bandeen-Roche K, Buta B, **Bergman H**, Gill T, et al. Moving Frailty Towards Clinical Practice: NIA Intramural Frailty Science Symposium Summary. J Am Geriatr Soc. 2019 Aug;67(8):1559-1564. doi: 10.1111/jgs.15928. Epub 2019 May 2.

Guillette M, Couturier Y, Moreau O, Gagnon D, **Bergman H**, Vedel I. Gouvernance et accompagnement du changement : le cas de la phase expérimentale du Plan Alzheimer du Québec. <u>Innovations</u> **2019/3** (N° 60), pages 145 à 168

Dent E, Finbarr N, **Bergman H**, Woo J, Romero-Ortuno R, Walston J. The Management of Frailty: Opportunities, Challenges, and Future Directions. The Lancet. 2019; Vol. 394, Issue 10206:1376-86. https://doi.org/10.1016/S0140-6736(19)31785-4

Boychuck Z, Andersen J, Bussières A, Fehlings D, Kirton A, Li P, Oskoui M, Rodriguez C, Shevell M, Snider L, Majnemer A, & the **PROMPT group**. (2020). International expert recommendations of clinical features to prompt referral for diagnostic assessment of cerebral palsy. Developmental Medicine & Child Neurology. 2019 Jan;62(1), 89-96. DOI: 10.1111/dmcn.14252

Abstracts

Hardouin M, Arsenault-Lapierre G, Godard-Sebillotte C, Sourial N, **Bergman H**, Vedel I. Measuring the fidelity of a policy implementation: Insights from the Quebec Alzheimer Plan. 2018 Canadian Consortium on Neurodegeneration in Aging (CCNA) Science Day. October 1-3, 2018. Montreal, QC. Poster. Can Geriatr J. 22(1):34-48, March 2019. DOI:10.5770/cgj.21.320

Arsenault-Lapierre G, Hardouin M, Sourial N, **Bergman H**, Vedel I. Family Physicians' Attitude, Knowledge and Practice Regarding Dementia Care and Dementia Initiatives in Quebec, Ontario and New Brunswick (poster presentation). 2018 Canadian Consortium on Neurodegeneration in Aging (CCNA) Science Day. October 1-3, 2018. Montreal, QC. Canadian Geriatrics Journal, volume 22, issue 1 pages 34-48, March 2019. doi: 10.5770/cgj.22.358

Arsenault-Lapierre G, Hardouin M, Sourial N, Pakzad S, **Bergman H**, Vedel I. The Attitude, Knowledge and Practice Regarding Dementia Care and Dementia Initiatives of family doctors in Quebec, New Brunswick and Ontario. 10e retraite scientifique de l'Institut Lady Davis en recherches médicales. Montréal, Québec, Canada (May 2, 2019)

Arsenault-Lapierre G, Hardouin M, Sourial N, Pakzad S, Vedel I. Attitudes, connaissances et pratiques des médecins de famille du Québec, du Nouveau-Brunswick et de l'Ontario à l'égard des soins en matière de démence. 39èmes Journées Annuelles de la Société Française de Gériatrie et

Gérontologie, Paris, France. Poster (25-27 novembre 2019)

Monette, Johanne

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Morais, José A.

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

Beauchet, Olivier International Academic Presentations Emergency Department and older adults/ Geriatric triage et related recommendations, Kaohsiung, Taiwan, August 29, 2019

Museum, Health and well-being. ICOM, Kyoto, September 2, 2019

National Academic Presentations

Art-based activity, Health and older community Dwellers: The A-Health study, Montreal, March12, 2019

Emergency room evaluation & recommendations (ER2): Geriatric triage and related recommendations - Canadian Frailty Network, National Conference 2019 – Toronto, Ontario, Canada; September 2019

Bergman, Howard

International Academic Presentations

The Key Role of Family Medicine as a Clinical and Academic Discipline in Canada. The Second National Postgraduate Education and Faculty Training Conference for Family Medicine & The Tenth Shanghai Sino-US Family Medicine Forum. Shanghai, China. 2019 (October 18-20)

An ageing population: challenges for health care systems. Aging Well. Canada-UK Colloquium 2019, Cambridge University. 2019 (November 22-24)

International Academic Presentations

Improving the Quality of Life and Care of Persons Living with Dementia and Their Caregivers: Preparing for a Canadian Dementia Strategy. 10th CCD (Canadian Conference on Dementia). Ouébec, OC (October 3-5, 2019)

Insights into the Impact of the Canadian Dementia Strategy on the Ongoing Implementation of the Quebec Alzheimer Plan. Alzheimer Society Montreal, 1st Annual Barclay Family Colloquium. Montreal, QC (November 18)

Morais, José

International Scientific Meetings

College of Public Health and Health Professions - Department of Physical Therapy, University of Florida. Effects of combined leucine and resistance exercise training on physical perormance, muscle protein synthesis and mitochondrial function. Gainesville, Florida. Oct 9, 2019. **Keynote Speaker**

Rencontre Inserm-Québec sur le vieillissement. Suivi de cohortes, facteurs de susceptibilités au vieillissement, politiques de santé et approches socio-économiques. *Cohorte NuAge : une plateforme de recherche agile*. Biopark, rue de la Croix Jarry. Paris, France. October 15, 2019.

Rencontre Inserm-Québec sur le vieillissement. Aspects cellulaires et moléculaires du vieillissement. *Biomarquers reliés à la dysfonction musculaire : exploiration des arrimages possibles entre la signature myocytaire et plasmatique*. Biopark, rue de la Croix Jarry. Paris, France. October 15, 2019.

Synergies Franco-Québécoises « Déclin cognitif, obésité, diabète et autres troubles métaboliques ». Compliance thérapeutique chez le patient diabétique souffrant de troubles cognitifs. Académie Nationale de Médecine. Paris, France. October 18, 2019. **Keynote Speaker**

3rd Biology of Aging Symposium. *Leucine is not required in conjunction with resistance training and optimized protein intake to reverse frailty*. Hotel Zero. Montreal, Quebec. November 9, 2019. 14th International Congress of Geriatrics: Opportunities and Challenges of Geriatric Practice. Module II: Frailty, sarcopenia and gait. *Sarcopenia: from mechanisms to outcomes*. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubiran. City of Mexico, Mexico. November 28, 2019.

14th International Congress of Geriatrics: Opportunities and Challenges of Geriatric Practice. Module III: Endocrinology and diabetes in the older adult. *Treatment goals in the frail older adult with diabetes*. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubiran. City of Mexico, Mexico. November 28, 2019.

National Scientific Meeting

39th Annual Scientific Meeting of the Canadian Geriatrics Society. Workshop entitled: Malnutrition in older adults is linked to Frailty: One cannot treat what is not identified. *Malnutrition and Frailty*. Halifax Marriott Harbour Front Hotel, Halifax. May 4, 2019.

Local Meetings

MeDiC program Seminar Series – MUHC Research Institute. *Effects of exercise training and leucine supplementation on frail older women's muscle*. MUHC, Bloc E - Room E02.2225. January 17, 2019

MUHC - Prehabilitation program. Assessment of frailty to prevent post-operative complications. MGH, Room D10.173. August 15, 2019

CME presentations

Wednesday E-learning Series 2018 - 2019. Nutritional Issues in Older Adults. One hour. McGill University. February 27, 2019

First International Geriatrics Symposium - Albany Medical College and Division of Geriatric Medicine, McGill University. Nutrition and Frailty. One hour. Olympic Conference Centre. Lake Placid, New York. September 20, 2019.

Committee Work

Beauchet, Olivier

Executive Committee, McGill Division of Geriatric Medicine

Chair of the "Quebec Caregiving Observatory"

Chair of the Special interest group of the Canadian Geriatric society on Emergency Department and older adults

Member of Division of Experimental Medicine, Department of Medicine, McGill University,

Montreal, Quebec, Canada

Member of the McGill Research Center for Physical Activity and Health

Member of the Canadian Falls and Memory Impairment Network

Member of the Committee Art and Health of the Fine Arts Museums of Montreal

Bergman, Howard

Chair, Canadian Academy of Health Sciences (CAHS) Panel for the Assessment of Evidence and Best Practices for the development of a Canadian Dementia Strategy

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

Levinoff, Elise

Site Program Director, Internal Medicine, Jewish General Hospital

Fall Prevention Committee, Jewish General Hospital

Membership committee, Canadian Geriatrics Society

Yin, Haibin

Program Director: Undergraduate Geriatrics Clerkship program at McGill

Member, Restraint Committee, Jewish General Hospital

Morais, José A

Director of the MUHC Division of Geriatric Medicine

Lead of the McGill Dementia Education Program

Director of the McGill University Division of Geriatric Medicine

Chair of the Executive Committee of the Division of Geriatric Medicine

Chair of the Education & Training Committee of the Division of Geriatric Medicine

Member of the Undergraduate Committee of the Division of Geriatric Medicine

Member of the Department of Medicine Division Directors Committee

Co-Chair of the First International Geriatrics Symposium - Albany Medical College and Division of Geriatrc Medicine, McGill Ubniversity (CPD Event). Olympic Conference Centre. Lake Placid, New York. September 18-20, 2019

Member of the CIHR Institute Community Support (ICS) Travel Awards (Winter 2019)

Leader of the Summer Program on Aging of the CIHR – Institute of Aging, May 26-31, 2019

Member of the scientific committee of the CIFGG – 2022 Montreal, Canada

Moderator of the Conference by Professor Jeffery Jutai at the 3th Quebec Congress in Adaptation-Rehabilitation Research. Centre Mont-Royal, Montreal. May 17, 2019

Co-Director, Quebec Network for Research on Aging

Schipper, Hyman

Founding director and Chair of the Alzheimer Risk Assessment Clinic (ARAC) at the Jewish General Hospital (2009-present)

SECTION III - CONFIDENTIAL INFORMATION

1. Consulting activities:

Name of Faculty Member	Private Sector Consulting	Public Sector Consulting	Other (# of days –	Total
	(# of days)	(# days)	please explain)	
Levinoff, Elise		Jewish Eldercare		
		2 days/month		
Morais, José A.	Merck			

Submitted by:

Ruby Friedman, MD

Site Director, Division of Geriatric Medicine

José A. Morais, MD

Director, McGill Division of Geriatric Medicine