

# Parkwood Institute Research

## **The PIR Newsletter**

A message from the PIR Ivey Research Chair....



I am excited and honoured to introduce myself as the new Beryl and Richard Ivey Research Chair in Aging, Mental Health, Rehabilitation and Recovery. As I commence my term, I would like to extend my sincere thanks to the outgoing PIR Interim Chairs for their invaluable leadership and contributions.

My research team and I have moved into the PIR Administration Office (with its beautiful views and plants!) and we welcome you to drop by and say hello. I have already met many of the staff, students and volunteers here at PIR, and hope to connect with many more of at our festive "Open House" event on the 1<sup>st</sup> of December.

This an exciting time with many positive changes on the horizon. St. Joseph's Health Care is in the process of

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shaping its strategic priorities for the next three years, and PIR will likewise be seeking opportunities for innovation. By continuing to foster a spirit of teamwork and collaboration among our research groups, we can build upon the established strengths of PIR and have a powerful impact on our community. *Cheryl* 

## COMMUNICATION UPDATES...

### **PIR OPEN HOUSE**

Dr. Cheryl Forchuk is pleased to announce a PIR Open House scheduled for December 1, 2017. This will be an opportunity to become more familiar with PIR Colleagues and the work they do in a fun and participatory way. Stay tuned for further details.

#### EDUCATIONAL SESSIONS

Please find attached to this Newsletter a composite listing of all PIR Education Sessions which, we hope you will find useful. Kindly provide any educational updates care of <u>PIR\_Info@sjhc.london.on.ca</u>

#### PIR LOUNGE – SUITE B3-118

Changes will be forthcoming to the PIR Lounge such as a full size Refrigerator, a commercial Coffee maker as well as a full size Bulletin Board making this room a comfortable gathering place for PIR staff.

## "Welcome" New Research Personnel~

We would like to extend a special welcome to our new research personnel, who have joined the Parkwood Institute Research (PIR) program over these past few months:

Renato Freire Junior- Renato is a Physiotherapist with a Master's degree in Science of Rehabilitation from Caratinga's University Centre, Minas Gerais, Brazil. He is currently pursuing a PhD in Rehabilitation Sciences and Functional Performance at the University of Sao Paulo, Brazil. Renato's PhD research focuses on the influence of the Human Development Index (HDI) on gait patterns and postural control of elderly individuals. The HDI is composed of educational, socioeconomic and health status of each region in a country. During his exchange period at Western University with the Gait & Brain Lab, supervised



by Dr. Montero-Odasso, he will be analysing gait and demographic data from various existing databases. Renato's research aims to compare the impact of HDI on gait performance of elderly individuals living in Brazil and Canada. Renato is excited to be working with Dr. Montero-Odasso for the next few months and to have a valuable opportunity to increase his expertise in gait analysis from new perspectives.

Samantha Marshall – In September 2017, Samantha joined the Wound Care team lead by Dr. Keast as a Research Student. She is in her third year at the University of Waterloo, where she is studying to obtain a Bachelor of Science in Honors Health Studies with a Specialization in Research, and a Minor in Gerontology. She has volunteered at Parkwood Institute in the Mental Health Care building, the Canadian Cancer Society, and she continues to volunteer at the Canadian Blood Services. In her free time, Samantha enjoys working out, eating sushi, and spending time with her golden retriever "Poppy".



Kaitlin Saxton – Under the direction of Dr. Arlene MacDougall, Kait started at St. Joseph's Health Care London in August as the Research and Innovation Facilitator for Mental Health Care. In this role, Kait is responsible for developing, facilitating, supporting and translating research and innovation initiatives relevant to the core vision, mission and mandate of Mental Health Care Programs, with a focus on building and strengthening capacity across mental health-relevant research and innovation platforms. Kait is passionate



about global and community health and the ways in which innovative, interdisciplinary strategies could address complex health equity challenges. She earned her BSc in Biological and Medical Sciences from Western University and MSc in Global Health from Duke University. Her Master's studies included research ethics, epidemiology, and health systems in developing countries and her research focused on the influence of grandparent-grandchild relationships on socioemotional and cognitive outcomes of youth in rural Sri Lanka. Prior to joining St. Joseph's, Kait was a Research Associate at the Ivey International Centre for Health Innovation at the Ivey Business School, where she is still actively involved in multiple projects focused on advancing health system innovations through a value-based health care approach.

## NOTABLE ACCOMPLISHMENTS...Congratulations to:



## **GRANTS & RESEARCH FUNDING...**

Principal Investigator: Diachun L Study Title: Curing Vs. Caring: How do Residents manage expectations of caring and curing when looking after older adults Agency: SRTP Year: 2017 - 2018 Amount: \$9,000

Principal Investigator: Iruthyrajah J
Study Title: Title of research project: An evaluation of the predictive potential of the AlphaFIM towards inpatient rehabilitation outcomes
Agency: St. Joseph's Hospital Foundation
Year: 2017-2018
Amount: \$36,000.00

Co-Investigator(s): Miller T, Doherty T, Teasell R, Viana R, Macaluso S, Sequeira K
Study Title: Long-Term Stroke Rehabilitation Project
Agency: Allergan
Year: 2017-2018
Amount: \$50,000.00 (Co-PI)

Principal Investigator: Montero-Odasso M Study Title: Gait and Brain Lab Agency: London St. Joseph's Foundation Year: 2017 Amount: \$46,825

Principal Investigator: O'Regan N
Co-Investigators: Vasudev A, Burhan A
Study Title: Delirium in Older Medical Inpatients
Agency: The Academic Medical Organization of Southwestern Ontario (AMOSO Opportunities Fund Project)
Year: 2017 - 2019
Amount: \$130,000

Principal Investigator: Teasell R
Study Title: Developing New Models of Care through Integrating World Class NeuroRehabilitation Research Evidence-Based Reviews: Creating an Evidence-Based Center for Best Practices
Agency: St. Joseph's Health Care Foundation
Year: 2017- 2018
Amount: \$54,500.00

Principal Investigator: Teasell R
Study Title: Stroke Rehabilitation – Building the Hospital/Community Connection.
Agency: St. Joseph's Health Care Foundation
Year: 2017- 2018
Amount: \$54,500.00

Principal Investigator: Wolfe D
Study Title: Planning Process for Developing Recommendations for a National Research and Implementation Network
Agency: Rick Hansen Institute and Ontario Neurotrauma Foundation
Year: 2017-2018
Amount: \$73,980

## **PRESENTATIONS & INVITED LECTURES...**

#### JUNE

Anderson K, John-Baptiste J, MacDougall A, Kurdyak P, Osuch E The Health System Impact of an Early Intervention Treatment Program for Youth with Mood and Anxiety Disorders Department of Psychiatry Academic Research Day. London, ON

Anderson K, Norman R, MacDougall A, Edwards J, Palaniyappan L, Lau C, Kurdyak P Who Gets in to Early Psychosis Intervention Services? A Comparison of Service Users and Non-Users in Health Administrative Datay Disorders Department of Psychiatry Academic Research Day. London, ON

Barwick M, Bullock H, Danesco E, Jaouich A, Saito A, Wolfe D Implementation 101: Local, Regional, and National Application in Canada Global Implementation Conference. Toronto ON

Cullen S, Lingum N, Montero-Odasso M Can Dual-Task Gait Assessment Differentiate Cognitive Impairment Subtypes in a Clinical Setting? Combined City Research Day 2017. London, ON

Edwards J, Anderson K, Norman R, MacDougall A, Palaniyappan L, Kurdyak P Falling Through the Cracks: The Characteristics and Ongoing Service Use of Patients Screened but Ineligible for Early Psychosis Intervention Department of Psychiatry Academic Research Day. London, ON

Fick D, Kolanowski A, Marcantonio E, O'Regan N Delirium Research in Clinical Practice: Challenges in Translating Evidence from Bench to Bedside, Breakout Session American Delirium Society 7th Annual Meeting. Nashville, TN

Gutmanis I, Hillier L

Geriatric Cooperatives in the South West Local Health Integration Network: Assessing Partnerships in the Care of Older Adults Living with Responsive Behaviours Academic Research Day, Department of Psychiatry, Western University. London, ON

Iruthayarajah J, Mehta S, Alibrahim F, Janzen S, McIntyre A, Teasell R Cognitive Behavioural Therapy (CBT) for Anger and Aggression among individuals with Moderate to Severe Acquired Brain Injury: A Systematic Review and Meta-Analysis GTA Best Practices Day. Toronto, ON

Kras-Dupuis A, Koning C, Scovil C, Wolfe D, Mumme L, Flett H, Walia S, Guy S The Transformative Nature of the Spinal Cord Injury Knowledge Mobilization Network: An Exploration of Innovative and Systematic Approaches to Sustainable Implementation Across a Pan-Canadian Community of Practice.

Global Implementation Conference. Toronto ON

MacDougall A, Krupa T, Lysaght R, Casey R, Price E, Janzen M, Le Ber O, Branzei V, Mutiso V, Kidd S, Ndete D

Community REcovery Achieved through Entrepreneurism (CREATE): A new paradigm for promoting recovery from serious mental illness in low-income settings Department of Psychiatry Academic Research Day. London, ON Manor B, Dagan M, Montero-Odasso M

*Noninvasive brain stimulation: a research and rehabilitative tool for gait and postural control* International Posture and Gait Research. Fort Lauderdale, FL

Montero-Odasso M *TMS as a potential intervention to enhance mobility and cognition* International Posture and Gait Research. Fort Lauderdale FL

Pieruccini-Faria F, Montero-Odasso M Gait disturbances in older individuals with mild cognitive impairment: Are they caused by a motor planning problem? International Posture and Gait Research. Fort Lauderdale FL

Pieruccini-Faria F, Muir-Hunter S, Montero-Odasso M Depression increases the risk of injurious falls in older individuals with Mild Cognitive Impairment. Results from the Gait & Brain Study International Posture and Gait Research. Fort Lauderdale FL

Teasell R

*Community stroke rehabilitation: The shift from hospital to the community* PEI Stroke Symposium. Charlottetown, PEI

Teasell R Stroke telerehabilitation: Is it another constraint-induced movement therapy PEI Stroke Symposium. Charlottetown, PEI

#### JULY

Montero-Odasso M A Proposed Core Set of Mobility and Cognitive Measures International Association of Gerontology and Geriatrics. San Francisco, CA

Montero-Odasso M *Canadian Gait and Brain Study: Cognition, Gait and the Risk of Falling* International Association of Gerontology and Geriatrics. San Francisco, CA

Montero-Odasso M Vitamin D Deficiency in Gait and Cognition. Lessons Learned From the Gait & Brain Study International Association of Gerontology and Geriatrics. San Francisco, CA

Montero-Odasso M Alternative Forms of Gait and Cognition Syndromes. Lessons Learned From the Gait & Brain Study International Association of Gerontology and Geriatrics. San Francisco, CA

Montero-Odasso M *Multimodal Interventions to Prevent and Manage Cognitive Frailty* International Association of Gerontology and Geriatrics. San Francisco, CA

Montero-Odasso M, Sarquis-Adamson Y, Speechley M, Muir-Hunter S, Sposato L, Wells J, Borrie M, Camicioli R Gait and Cognition Syndrome and Risk of Dementia in the Gait & Brain Study

Alzheimer's Association International Conference. London UK

Pierucini-Faria F, Muir-Hunter S, Montero Odasso M

*Thinking, Feeling and Moving in Aging: The Role of Cognition and Depression in Balance Control* International Association of Gerontology and Geriatrics. San Francisco, CA

Sakurai R, Montero-Odasso M, Bartha M Atrophy of the Entorhinal Cortex Is Related to Increased Dual-Task Gait Cost Among MCI Older Adults. International Association of Gerontology and Geriatrics International Association of Gerontology and Geriatrics. San Francisco, CA

Schapira M, Outumuro M, Giber F, Pino C, Mattiussi M, Perman G, Montero Odasso M, Garfi L. *Effectiveness of an Interventional Program to Reduce Re-Admission Rates Acute Care of the Elderly* International Association of Gerontology and Geriatrics. San Francisco, CA

Wong D, Bellyou M, Beauchet O, Montero-Odasso M, Annweiler C, Bartha R Vitamin D supplementation may protect against oxidative stress in a vitamin D deficient doubletransgenic mouse model of Alzheimer's Disease Alzheimer's Association International Conference. London, UK

Wong D, Bellyou M, Beauchet O, Montero-Odasso M, Annweiler C, Bartha R Combined Memantine and Vitamin D treatment provides the same cognitive benefit as Memantine alone in a chronically Vitamin D deficient double-transgenic mouse model of Alzheimer's Disease Alzheimer's Association International Conference. London, UK

## **PUBLICATIONS...**

**Peer-Reviewed Articles:** 

Bayley M, Bowen A, English C, Teasell R, Eng J Where to now? AVERT answered an important question but raised many more. *International Journal* of Stroke 2017; Oct 12(7):683-686.

Gibbs J, Gagnon D, Bergquist A, Arel J, Cervinka T, El-Kotob R, Maltais D, Wolfe D, Craven B Rehabilitation Interventions to modify endocrine-metabolic disease risk in Individuals with chronic Spinal cord injury living in the Community (RIISC): A systematic review and scoping perspective. J Spinal Cord Med, 2017; July 13;1-16 (Epub ahead of print)

Gutmanis I, Speziale J, Hillier L, van Bussel E, Girard J, Simpson K Health system redesign using Collective Impact: implementation of the Behavioural Supports Ontario initiative in Southwest Ontario. *Neurodegenerative Disease Management. 2017 Aug 30. doi:* 10.2217/nmt-2017-0015. [Epub ahead of print]

Gutmanis I, Hillier L

Geriatric Cooperatives in Southwestern Ontario: A novel way of increasing inter-sectoral partnerships in the care of older adults with responsive behaviours. Health and Social Care in the Community. 2017 Jul 24. doi: 10.1111/hsc.12484. [Epub ahead of print]

Hansen K, McDonald C, O'Hara S, Post L, Silcox S, Gutmanis I A formative evaluation of a nurse practitioner-led interprofessional geriatric outpatient clinic. *Journal of Interprofessional Care. 2017 Jul; 31(4): 546-549. doi: 10.1080/13561820.2017.1303463. Epub 2017 Apr 7* 

Mehta S, Rice D, Shapiro A, Chan A, Sequeira K, Teasell R Impact of abuse on adjustment and chronic pain disability: A Structural Equation Model. *Clinical Journal of Pain 2017; 33(8):687-693.*  Meyer M, Kelloway L, Teasell R, Meyer S, Willems D, O'Callaghan C. Timely access to inpatient rehabilitation after stroke: a qualitative study of barriers and solutions in Ontario, Canada. *Disability and Rehabilitation (accepted)*.

Montero-Odasso M, Sarquis-Adamson Y, Speechley M, Borrie M, Hachinski V, Wells J, Riccio P, Schapira M, Sejdic E, Camicioli R, Bartha R, McIlroy WE, Muir-Hunter S Association of Dual-Task Gait With Incident Dementia in Mild Cognitive Impairment: Results From the Gait and Brain Study. *JAMA Neurol*, 2017 Jul 1; 74 (7): 857-865, Coauthor, DOI: 10.1001/jamaneurol.2017.0643.

Munce S, Allin S, Wolfe D, Anzai K, Linassi G, Noonan V, Jaglal S Using the theoretical domains framework to guide the development of a self-management program for individuals with spinal cord injury: Results from a national stakeholder advisory group. *J Spinal Cord Med*, 2017; July 30: 1-20 (Epub ahead of print)

Munce S, Graham I, Jaglal S, Richards C, Eng J, Desrosiers J, MacKay-Lyons M, Wood-Dauphinee S, Korner-Bitensky N, Mayo N, Teasell R, Zwarenstein M, Mokry J, Black S, Bayley M Perspectives of health care professionals on the facilitators and barriers to the implementation of a stroke rehabilitation guidelines cluster randomized controlled trial. *BMC Health Services Research 2017; June 26; 17(1): article number 440* 

Norman R, MacDougall A, Manchanda R, Harricharan R An examination of components of recovery after five years of treatment in an early intervention program for psychosis. *Schizophrenia Research. [In Press], Aug 2017, Coauthor* 

Norman R., MacDougall A, Manchanda R, Harricharan R, Subramanian P, Richard J, Northcott S Stability of Outcomes After Five Years of Treatment in an Early Intervention Program. *Early Intervention in Psychiatry. 2017 Jun 19. doi: 10.1111/eip.12450, Coauthor* 

Rice D, McIntyre A, Mirkowski M, Janzen S, Viana R, Britt E, Teasell R Patient-centered goal setting in a hospital-based outpatient stroke rehabilitation center. *PMR 2017; Sept; 9(9):856-865* 

Rice D, Mehta S, Serrato J, Pope J, Harth J, Sequeira K, Morley-Forster P, Shapiro A, Teasell R Stress in Patients Diagnosed with Rheumatoid Arthritis Compared to Chronic Pain. *Rehabilitation Psychology 2017; 62(3) (in press).* 

Sakurai R, Fujiwara Y, Yasunaga M, Suzuki H, Kanosue K, Montero-Odasso M, Ishii K Association between Hypometabolism in the Supplementary Motor Area and Fear of Falling in Older Adults. *Front Aging Neurosci. 2017; 9: 251. doi: 10.3389/fnagi.2017.00251* 

Salbach N, Wood-Dauphinee S, Desrosiers J, Eng J, Graham I, Jaglal S, Korner-Bitensky N, MacKay-Lyons M, Mayo N, Richards C, Teasell R, Zwarenstein M, Bayley M Facilitated interprofessional implementation of a physical rehabilitation guideline for stroke in inpatient settings: process evaluation of a cluster randomized trial. *Implementation Science 2017; Aug 1;* 12(1):100

Seitz, D., Macri, J., Iaboni, A., Kirkham, J, Maxwell, C., Sudeep S Gill, Vasudev, A., & Whitehead, M. Association between Antidepressants and Fall-Related Injuries among Long-Term Care Residents. *American Journal of Geriatric Psychiatry*, 2017; 0(0).

Soros P, Teasell R, Hanley DF, Spence JD

Widespread bilateral cerebral distribution of motor recovery beginning 23 years after ischemic stroke. *Journal of Neurophysiology 2017; Aug 1; 118(2):778-781* 

Teasell R, Cotoi A

Second-order peer reviews of clinically relevant articles for the physiatrist: Additional weekend therapy may reduce length of rehabilitation stay after stroke: A meta-analysis of individual patient data. *Am J Physical Medicine and Rehab 2017 July 28 [epub ahead of print].* 

van der Scheer J, Martin Ginis K, Ditor D, Goosey-Tolfrey V, Hicks A, West C, Wolfe D Effects of exercise on fitness and health of adults with spinal cord injury: A systematic review. *Neurology*, *2017; July 21 (Epub ahead of print)* 

Vasudev, A., Firbank, M., Gati, J., Ionson, E., & Thomas, A BOLD activation of the ventromedial prefrontal cortex in patients with late life depression and comparison participants. *International Psychogeriatrics*, 2017; 1: 1-6.

### **Published Abstracts:**

Fielding M, Askes H, Cornell S, Hsieh J, Marrocco S, Wolfe D Feasibility of a locomotor training protocol in an inpatient acquired brain injury program. *Brain Injury*, 2017; 31(6-7): 872

O'Regan N, Adamis D, Molloy D, Meagher D, Timmons S Frequency and Stability of Motor Subtypes in Older Medical Inpatients With Delirium. *Global Aging and Health: Bridging Science, Policy, and Practice; Conference Proceedings. p. 99.* 

Pillai A, Richard L, Shariff S, Vasudev A

Is there seasonality in hospitalizations for Major Depressive Disorder in Canada? *Archives of Clinical Psychiatry*, 2017

## CALENDAR OF EVENTS...

#### PIR "Passport to PIR" Open House

## December 1, 2017

- ✤ 3:00 to 4:00 p.m.
- Various research locations throughout Parkwood Main and Parkwood MHC
- Greeters stationed at Main Entrances