

# Parkwood Institute Research

## The PIR Newsletter

### *A message from the Interim Chairs . . .*

*Greetings,*

As the days get cooler and shorter and we begin to see the trees changing colour, another Fall is certainly upon us with Winter just around the corner...yes, it will arrive again this year!

This Fall sees us reach a full year of Parkwood Institute Research, including the development of our three research themes, Cognitive Vitality & Brain Health, Mobility & Activity and Mental Health. The Interim Co-Chairs would like to thank researchers and staff for their ongoing support of our programs; as you will see within the current PIR Newsletter there continues to be considerable success within each of our research teams and ongoing growth in their research programs. There is certainly much to be excited about and we take pride in the accomplishments of our research programs.

A very important step in our development and strategic plan is the recruitment of the Beryl & Richard Ivey Research Chair in Aging, Mental Health, Rehabilitation and Recovery. The formal application process has now begun and we look forward to hearing the applicant's vision for Parkwood Institute Research as we go forward.

In follow-up to the very successful Parkwood Institute Research half day event held in the spring of 2016, we are in the process of planning a similar event for this spring. Please hold April 21, 2017 in your calendars. This will again be an opportunity for our researchers to share their current and future research. We also plan to highlight the work of our trainees and research associates in this year's event. Stay tuned for more information early in the New Year.

As always, please feel free to contact any of the Interim Co-Chairs with questions or feedback. We are always open to your comments and constructive feedback.

On behalf of the Co-Chairs and staff please enjoy the PIR Newsletter, and what remains of the beautiful Fall weather.

### **Inside this Issue –**

<i>A message from the Interim Chairs</i>	1
<i>New Research Personnel</i>	2
<i>Notable Accomplishments</i>	3
<i>Student's Corner</i>	3
<i>Research Funding</i>	4
<i>Presentations &amp; Invited Lectures</i>	5
<i>Publications</i>	6
<i>Calendar of Events</i>	7



Dr. Tim Doherty

Dr. Michael Borrie

Dr. Dick O'Reilly

## “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:

- ❖ **Nimi Bassi** – Nimi, recently, graduated from Western University with a degree in Software Engineering. In August, she joined the Cognitive Clinical Trials Team under Drs. Borrie and Wells, as a software developer. Currently, Nimi is testing and refining the COMPASS-ND application and is also available as tech support for the study. 
- ❖ **Alanna Black** - Alanna Black, MSc, CCRP is the Research Coordinator for Dr. Manuel Montero-Odasso's lab. Alanna studied Brain and Mind Science (MSc.) at The University of Sydney and returned to Western University to complete her Post-Graduate Diploma in Clinical Trials Management. She is, currently, managing the national SYNERGIC Trial, which evaluates the effect of aerobic and progressive resistance training exercises, isolated or combined with cognitive training and vitamin D supplementation, in older adults with Mild Cognitive Impairment (MCI). This trial is conducted by the Motor Exercise and Cognition Team, which is part of the Canadian Consortium in Neurodegeneration and Aging (CCNA). In addition, she also manages the Gait study (waves 1 and 2) that explores whether or not changes in the way an individual walks, while doing a mental activity, might be able to help predict how long it will take people with MCI to progress to dementia. 
- ❖ **Scott Janssen** – Scott attended the University of Waterloo where he completed an undergraduate degree in kinesiology and a MSc in neuroscience. Scott is interested in research regarding post-stroke and post-TBI motor rehabilitation optimizing both upper and lower limb recovery. As a Research Assistant with the Collaboration of Rehabilitation Research Evidence (CORRE), Scott is contributing to the Evidence-Based Reviews for Stroke Rehabilitation (EBRSR) and Acquired Brain Injury (ERABI).
- ❖ **Chad Tiffin** – In August, Chad joined Dr. Borrie's team, under the supervision of Joe Lindsay, as a software developer within the Cognitive Clinical Trials group. Chad, successfully, ran his own web development company for the previous 3 years and, is also an accomplished Commercial Pilot. He will be working with Joe Lindsay to continue development on the Collaborative Health Research & Informatics System (C.H.R.I.S.). 
- ❖ **Yanina Sarquis-Adamson** - Yanina is a volunteer Research Assistant in Dr. Manuel Montero-Odasso's lab. Yanina obtained her BA from the University of Buenos Aires, and a PhD from the Biology Department at Western University in 2016. Her role at the Gait and Brain Lab involves helping to create and manage databases as well as analyze research findings and report results. Yanina is also involved in grant preparation and assisting other members of the lab with project support. 
- ❖ **Chloe Stewart** – Chloe is a Western PhD Neuroscience student; she joined Dr Elizabeth Finger's team in September and is working on frontotemporal dementia with a focus on moral and emotional decision-making. Previously, 

she completed her BSc at the University of Toronto, and her Masters of Cognitive Neuroscience at University College London, UK.

- ❖ **Joshua Wiener** –Joshua is a Bachelor of Health Sciences (Honours) graduate from McMaster University with a background in psychology and neuroscience. He is interested in research regarding mental health and its role within physical medicine and rehabilitation such as, post-stroke depression and post-traumatic stress disorder. As a Clinical Research Assistant with the Collaboration of Rehabilitation Research Evidence (CORRE), he is contributing to the Evidence-Based Reviews for Stroke Rehabilitation (EBRSR) and Acquired Brain Injury (ERABI).



## NOTABLE ACCOMPLISHMENTS.

- ❖ Stout A, Dreyfuss P, Swain N, Roberts S, **Loh E**, Agur A,  
**Description of Award:** Best Clinical Abstract, 2016 Spine Interventional Society Annual Meeting  
**Date earned:** July 27, 2016

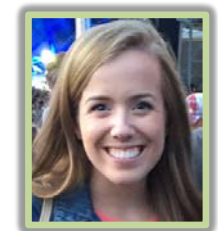


## STUDENT'S CORNER...

- ❖ **Alishya Burrell** (Supervisor: Dr. L. Diachun)  
**Description of Award:** Placed 1st in poster competition.  
**Poster Presentation:** The Canadian Geriatric Society's Core Competencies: their place in the undergraduate medical education curriculum at the Schulich School of Medicine & Dentistry. Presented at the 2016 Combined City Geriatric Resident Research Day. Waterloo, ON.  
**Date earned:** June 22, 2016



- ❖ **Stephanie Cullen** - Stephanie is a third-year undergraduate student at Western University in the Kinesiology program. Throughout her studies at Western and her volunteer work with the Canadian Centre for Activity and Aging, she became interested in the mental and physical impairments common in older adults and how they relate to each other. Her research interests include injury rehabilitation and prevention strategies, body composition changes in older populations, and the effects of cognitive impairment on human kinematics. As a volunteer student at the Gait and Brain Lab, Stephanie assists in several tasks around the lab for ongoing research projects and will be helping with the exercise component of the SYNERGIC Trial at UWO Campus.



- ❖ **Jacqueline Kueper**, Master's student  
**Description of Award:** The School of Graduate and Postdoctoral Studies Master's Scholarship.  
The Gait and Brain Lab is pleased to announce that Jacqueline Kueper, co-supervised by Drs. Montero-Odasso and Speechley, is the recipient of "The School of Graduate and Postdoctoral Studies Master's Scholarship." This award is sponsored by the Alzheimer Society of London and Middlesex to the top ranked candidate selected by a panel of Associate Deans, who reviewed all applications and ranked the candidates based on relevance of the research to



Alzheimer's disease and other dementias. Great work, Jacqueline!"

**Date earned:** August 2016

❖ **Andrea Lee** - Andrea is an undergraduate student at Western who worked with Dr. Teasell's group this summer.

❖ **Dr. Jon Snir** Post-Doctoral Fellow  
**Description of Accomplishment/Award/Honour:** Medical Physics Residency, London Regional Cancer Program  
**Date earned:** August 2016 for the upcoming academic year



## GRANTS & RESEARCH FUNDING. . .



**Principal Investigator:** Houghton P

**Co-Investigators:** Wolfe D, Lala D, Kras-Dupuis A, Potter P, Loh E, Orr L, Marsh J, Shantz A

**Study Title:** Best practice implementation of electrical stimulation therapy for healing pressure ulcers in community dwelling individuals with spinal cord injury

**Agency:** Rick Hansen Institute

Amount: \$300,000

**Year:** 2015-2016

**Principal Invertigator:** Leibovitch F

**Co-Investigators:** Bayley M, Corbett D, Black S, McIlroy W, Ploughman M, Dukelow S, Eng J, Strother S, MacKay-Lyons, Teasell R

**Study Title:** Canadian partnership for stroke recovery

**Agency:** Brain Canada (Canadian partnership for stroke recovery clinical trials platform)

**Amount:** \$3,000,000

**Year:** 2016-2018

**Principal Investigator:** VanBussel L

**Co-Investigators:** Gutmanis I, Marlatt N

**Study Title:** Problem problem-solving therapy (PST) for treating depression in community-dwelling older adults.

**Agency:** Bell Let's Talk

**Year:** 2016-2018

**Amount:** \$20,000

**Principal Investigator:** Wells J

**Co-Investigators:** Borrie M

**Study Title:** Phase III, multicenter, randomized, double-blind, placebo-controlled, parallel-group, efficacy and safety study of Crenezumab in patients with prodromial to mild AD

**Agency:** Roche

**Year:** 2016-2020

**Amount:** \$800,000

**Principal Investigator:** Wolfe D

**Co-Investigators:** Bailey C, Duggal N, Urquhart J, Potter P, Sequeira K

**Study Title:** Rick Hansen Spinal Cord Injury Registry (RHSCIR) – London

**Agency:** Rick Hansen Institute

**Year:** 2016 - 2017

**Amount:** \$60,000

## PRESENTATIONS & INVITED LECTURES. . .

### JUNE

Diachun L, Burrell A

*The Canadian Geriatric Society's core competencies: their place in the undergraduate medical education curriculum at the Schulich School of Medicine & Dentistry.* 2016 Combined City Geriatric Resident Research Day. Waterloo, ON

Scovil C, Koning C, Kras-Dupuis A, Brown J, Mumme L

*Development of systems and tools to build knowledge mobilization capacity and sustainability in rehabilitation through a national community of practice.* 2016 Canadian Knowledge Mobilization Forum Spinal Cord Injury Knowledge Mobilization Network (SCI KMN) Workshop. Toronto, ON

Teasell R

*Effectiveness of interventions to improve upper extremity function following stroke.* 10th ISPRM (International Society Physical Medicine) World Congress. Kuala Lumpur, MY

### JULY

Conway C, Harvey D, Hillier L

*The finding your way™ program: Improving community safety for persons with dementia.* Alzheimer Association International Conference. Toronto, ON

Diachun L, Helmich E, Joseph R, LaDonna K, Poel N, Lingard L, Cristancho S

*"Help, I'm out of control!". Students' emotional and behavioral responses to complexity.* International ASME Conference. Belfast, IE

Lee L, Hillier L, Weston W

*Dementia care learning needs among Primary Care Clinicians: Does this vary by practice setting?* Alzheimer Association International Conference, Toronto, ON

Schettler W, Chambers L, Caffery P, Hillier L, Watts D

*Building capacity of local Alzheimer Society offices through an innovative program for newly diagnosed persons with dementia.* Alzheimer Association International Conference, Toronto, ON

Snir J, Bartha R, Montero-Odasso M

*Asymmetrically low white matter integrity in seniors with MCI and poor gait.* AAIC (Alzheimer's Association International Conference). Toronto, ON

Stout A, Dreyfuss P, Swain N, Roberts S, Loh E, Agur A

*"Optimal fluoroscopic targets for cooled radiofrequency neurotomy of the sacral lateral branches: An anatomical study."* Spine Intervention Society 24th Annual Scientific Meeting. New Orleans, LA

### AUGUST

Borrie, M

*Mild cognitive impairment, Alzheimer disease, diagnosis, treatment and research.* Alzheimer Outreach, McCormick Home. London, ON

Diachun L, Joseph R, Lingard L, Helmich E, Cristancho S

*Oral communication. Health care systems, not medical knowledge: Trainees' experiences of complexity in clinical training.* International AMEE (Association of Medical Educators of Europe) Conference. Barcelona, ES  
Teasell R  
*Stroke rehabilitation; The next revolution in stroke care. Stroke rehabilitation rounds.* St. Thomas Elgin General Hospital, St. Thomas, ON

## PUBLICATIONS . . .

### Peer-Reviewed Articles:

Cameron J, O'Connell C, Foley N, Salter K,... Teasell R, Lindsay P  
Canadian Stroke Best Practices Recommendations: Managing transitions of care following stroke, Guidelines Update 2016. *International Journal of Stroke* 2016;11(7):807-822

Fogarty J, Almklov E, Borrie M, Wells J, Roth R  
Subjective rating of executive functions in mild Alzheimer's disease.  
*Ageing Mental Health* 2016;33(3):1-8

Guy S, Mehta S, Casalino A, Côté I, Kras-Dupuis A,... Teasell R, ...Wolfe D, Loh E  
The CanPain SCI Clinical Practice Guidelines for Rehabilitation Management of Neuropathic Pain after Spinal Cord: Recommendations for treatment. *Spinal Cord*. 2016; (54):S14-S23

Guy S, Mehta S, Bradbury C, Bryce T, ...Teasell R, Townson A, Truchon C, Widerström-Noga E, Wolfe D, Loh E.  
CanPainSCI Rehabilitation Clinical Practice Guideline for Management of Neuropathic Pain after Spinal Cord Injury: Recommendations for Treatment. *Spinal Cord* 2016; (54):S14-S23  
Iruthayarajah J, McIntyre A, Cotoi A, Macaluso S, Teasell R  
The Use of Virtual Reality for Balance among Individuals with Chronic Stroke: A Systematic Review and Meta-Analysis. *Topics in Stroke Rehabilitation* 2016(June); 16:1-12

Janzen S, McIntyre A, Richardson M, Britt E, Teasell R  
Building a Knowledge to Action program in stroke rehabilitation. *Canadian Journal of Neurological Sciences* 2016(July);26:1-7

Juma S, Taabazuing M, Montero-Odasso M  
Clinical Frailty Scale in an Acute Medicine Unit: a Simple Tool That Predicts Length of Stay.  
*Can Geriatr J* 2016;19(2):34-39

Lee L, Patel T, Hillier L, Milligan J  
Office-based Case-Finding for Chronic Obstructive Pulmonary Disease in Older Adults in Primary Care.  
*Canadian Respiratory Journal*. Article ID 1083270

Loh E, Guy S, Mehta S, Moulin D, ...Teasell R, Townson A, Truchon C, Bradbury C, Wolfe D  
The CanPain SCI Clinical Practice Guidelines for Rehabilitation Management of Neuropathic Pain after Spinal Cord: Introduction, methodology and recommendation overview. *Spinal Cord* 2016; (54): S1-S6

Marlatt N, Gutmanis I, Van Bussel L  
Introducing Problem-Solving Therapy Training: Changing current practices of care for older adults living with mental health issues. *Research Insights*, 2016,13(1):10-16

McMillan C, Lee J, Milligan J, Hillier L, Bauman C  
Physician Perspectives on Care of Individuals with Severe Mobility Impairments in Primary Care in Southwestern Ontario, Canada. *Health and Social Care in the Community* 2016;24(4):463- 472

Mehta S, Guy S, Bryce T, Craven B, ...Teasell R, Townson A, Truchon C, Wolfe D, Bradbury C, Loh E

The CanPain SCI Clinical Practice Guidelines for Rehabilitation Management of Neuropathic Pain after Spinal Cord: Screening and diagnosis recommendations. *Spinal Cord* 2016; (54): S7-S13

Mehta S, McIntyre A, Janzen S, Loh E, Teasell R  
A systematic review of pharmacological treatments of pain after spinal cord injury: An update. *Archives Physical Medicine and Rehabilitation* 2016; 97(8): 1381-1391

Salter K, McClure J, Foley N, Sequeira K, Teasell R  
Pharmacotherapy for depression post traumatic brain injury: A meta-analysis. *Journal of Head Trauma Rehab* 2016; 31(4): E21-32

Saposnik G, Cohen L, Mamdani M, Pooyania S, ...Teasell R, McIlroy W, Cohen A, Thorpe K, Laupacis A, Bayley M on behalf of the EVREST Investigators for the Stroke Outcomes Research Canada.  
Efficacy of non-immersive virtual reality exercising in stroke rehabilitation (EVREST Multicenter): A randomized controlled trial. *Lancet Neurology* 2016; 15(10): 1019-1027

Walton D, Elliott J, Lee J, Loh E, et al Research priorities in the field of posttraumatic pain and disability: Results of a transdisciplinary consensus-generating workshop. *Pain Res Manag* 2016: 1859434 doi: 10.1155/2016/1859434. Epub 2016 Jun 14

Walton D, Kwok T, Mehta S, Loh E, et al  
Cluster analysis of an international pressure pain threshold database identifies 4 meaningful subgroups of adults with mechanical neck pain. *Clin J Pain* August 2016. doi: 10.1097/AJP.0000000000000421

#### Published Abstracts:

Stout A, Dreyfuss P, Swain N, Roberts S, Loh E, Agur A  
Optimal fluoroscopic targets for cooled radiofrequency neurotomy of the sacral lateral branches: An anatomical study. *Pain Medicine* 2016; 17: 1594-1595

## CALENDAR OF EVENTS . . .

### 10th Annual Gait and Brain Seminar Series

“Gait and Cognition: What We Learned 10 Years Later”

**October 18, 2016**

❖ London, Ontario

Details: [Alanna.Black@sjhc.london.on.ca](mailto:Alanna.Black@sjhc.london.on.ca)

### The Canadian Association on Gerontology

“CAG2016: Fostering Innovation in Research on Aging”

**October 20-22, 2016**

❖ Montreal, Quebec

Details: <http://cag2016.ca/>

