



Centre PERFORM Centre



**6<sup>TH</sup> ANNUAL  
PERFORM CENTRE  
RESEARCH CONFERENCE**

**MANAGING CHRONIC  
CONDITIONS THROUGH  
NUTRITION AND ACTIVITY**

**MAY 10, 2019**



## THE CHAIR OF THE PERFORM SCIENTIFIC EVENTS COMMITTEE

As chair of the Scientific Events Committee, I am thrilled to welcome you to the 6th annual PERFORM Centre Research Conference – *Managing Chronic Conditions through Nutrition and Activity*.

The goal of this year's event is not just to investigate the role of nutrition and physical activity but also to explore the role of less traditional approaches to wellness, such as music therapy and mindfulness, when dealing with pain or illness.

Our committee has worked hard to assemble today's program, which encompasses a panel of outstanding national and international scientists, each with a unique perspective linking health and lifestyle interventions. We are also proud to have offered several other events leading up to today, including one in career development, and another in methodologies for and across various disciplines.

We hope that this multidisciplinary approach to health and prevention research – which is one that the PERFORM Centre values and supports – inspires you to reach outside your comfort zone and consider new or emerging approaches when developing your own strategy to optimize wellness.

On this note, I wish you a stimulating and enjoyable conference!

**Sylvia Santosa**

Chair, PERFORM Scientific Events Committee



## THE SCIENTIFIC DIRECTOR

Welcome to the PERFORM Centre Research Conference at Concordia University.

As a colleague so aptly put it recently: scientists have solved the simple questions about the human body, and now we've moved on to deeper investigations about wellness that require holistic, interdisciplinary methods.

The PERFORM Centre fosters innovative thinking about preventive health research in a facility unlike any other hospital, research, community or academic setting.

Our connected network of labs, equipment and experts are unlocking the promise of prevention as a pathway to wellbeing. This unique framework of convergence allows researchers to look at the body as a whole, and is – in my opinion – the future of healthcare.

This year's edition of the PERFORM Centre conference, *Managing Chronic Conditions through Nutrition and Activity*, perfectly represents the transdisciplinary expertise that we have at PERFORM, which ranges from kinesiology to food science to music therapy.

I would like to thank all the invited speakers for being with us today, and express my gratitude to Dr. Sylvia Santosa who chaired the scientific events committee that brought to us this outstanding program.

The PERFORM Centre conference is made possible through the generous support of Concordia University, our valued partner organizations and the hard work of the centre's dedicated staff. I would like to thank them as well for making this day a success.

All the best on this day of discovery!

**Habib Benali**

Scientific Director, PERFORM Centre

# SCIENTIFIC PROGRAM

8:45-9:15	Registration and light breakfast Foyer of Oscar Peterson Hall
9:15-9:30	Opening of conference, <i>Habib Benali</i> , Scientific Director, PERFORM Centre

## SESSION 1

9:30-9:35	Session Chair Oscar Peterson Concert Hall
9:35-10:15	<b>“How Can You Mend a Broken Heart? Music Therapy in the Continuum of Care in Cardiac Disease”</b> Speaker: <i>Cheryl Dileo</i> , Temple University
10:15-10:55	<b>“Cultivating Mindfulness for Healthy Aging”</b> Speaker: <i>Alexandra Fiocco</i> , Ryerson University
10:55-11:25	Coffee break for all registrants and Poster Viewing Loyola Chapel
11:25-12:05	<b>“Neurocognition of Vascular Risk Factors: The Long Path towards Stroke &amp; Dementia”</b> Speaker: <i>Arno Villringer</i> , Max Planck Institute for Human Cognitive and Brain Sciences
12:05-13:45	Lunch for all registrants and poster viewing* Loyola Chapel



## SESSION 2

13:45-13:50	Session Chair Oscar Peterson Concert Hall
13:50-14:30	<b>“We know it works, but how do we get people to do it?” Helping individuals with chronic conditions stick to a recommended diet and physical activity regimen”</b> Speaker: <i>Mary Jung</i> , University of British Columbia
14:30-15:10	<b>“Dietary carbohydrates in the prevention and treatment of Type II Diabetes”</b> Speaker: <i>Thomas Wolever</i> , University of Toronto
15:10-15:30	Group stretch & Break
15:30-16:10	<b>“Metabolic benefits of cold exposure”</b> Speaker: <i>Francois Haman</i> , University of Ottawa
16:10-16:25	Presentation of Ed Whitlock Award <i>Neil Whitlock</i>  Presentation of Ali Ahmed Shams Award <i>Gabriella Conte</i> , Development Officer, Major Gifts, Advancement and Alumni Relations  Presentation of Scientific Poster Competition Awards <i>Sylvia Santosa</i> , Chair Scientific Event Committee, PERFORM Centre
16:25-16:30	Closing remarks, <i>Christophe Guy</i> , VP Research and Graduate Studies
16:30	Reception Foyer of Oscar Peterson Concert Hall

\*Optional tour of PERFORM available during the lunch break.  
Signup required the morning of the event in the foyer of Oscar Peterson Hall.

# INVITED SPEAKERS



**Mary Jung, PhD**

Dr. Mary Jung is an associate professor in the School of Health and Exercise Sciences at the University of British Columbia, Okanagan Campus in Kelowna, BC. Dr. Jung is a Michael Smith Foundation for Health Research Scholar, and a Canadian Institutes of Health Research Early Career Foundation Grant recipient. Her overarching research interests lie in the area of self-regulation of health behaviours, with particular focus on exercise adherence for the prevention of type 2 diabetes. Dr. Jung's current funded studies span health program evaluation, effectiveness of Health technologies, exercise counselling for individuals with prediabetes, exercise adherence RCTs, and nationwide nutrition campaigns. She directs the Diabetes Prevention Research Group at UBC Okanagan.

Keywords: prediabetes, lifestyle modification, exercise and dietary adherence, health program evaluation, behavioural trials



**Francois Haman, PhD**

Dr. Haman's research deals with all aspects of human energetics. It focuses on how humans orchestrate metabolic fuel selection to improve chances of survival and increase performance in adverse environmental conditions such as changing climates and important modifications of dietary behavior. From mechanisms to applications, his work aims to establish principles that dictate fuel use and provide strategies to improve health/performance or chances of survival using alterations in dietary behaviors or physical training. Current work integrates a number of state-of-the-art metabolic methodologies to quantify human responses to climate change (heat/cold) and to provide dietary strategies to reduce the prevalence of obesity and obesity related diseases in First Nations communities of Northwestern Ontario.



## Cheryl Dileo, PhD

Dr. Cheryl Dileo is a Board-Certified music therapist with a number of years of experience as a clinician, consultant educator and researcher. She currently coordinates the PhD Program in Music Therapy in Philadelphia and Tokyo and is the Director of the Arts and Quality of Life Research Center at Temple University. She received her B.M.T., and MMT in Music therapy from Loyola University of the South and her Ph.D. in Music Education for College Teaching, from Louisiana State University. She founded the music therapy program at the University of Evansville, was the Consultant for the development of the Music Therapy program at Berklee College of Music, and has served on the music therapy faculty at Loyola University. She was named the McAndless Distinguished Scholar and Professor in the Humanities for the 2002-3 academic year at Eastern Michigan University. She is currently on the Honorary Faculty at the University of Melbourne Australia, and a member of the PhD Program Advisory Board at Aalborg University, Denmark. She has served on the Editorial Board of the Journal of Music Therapy, Music Therapy: The

Journal of the American Association for Music Therapy, the International Journal of Arts in Psychotherapy and Music | Health (Germany). She has also served as Co-Editor for Voices, and currently serves as a Consulting Editor for The Nordic Journal of Music Therapy.

Dr. Dileo is a Past-President of the World Federation of Music Therapy and the National Association for Music Therapy (USA). She is Vice President of the International Society for Music in Medicine and a Founding Member of the International Association of Music and Medicine.

The American Music Therapy Association has honored her with the Lifetime Achievement Award, the Award of Merit, as well as the Distinguished Research/Publication Award. She was the recipient of the 2006 Temple University Faculty Research Award. She recently received the 2018 Adjunctus Hominum Award from Loyola University,

She has given more than 300 lectures and workshops on 5 continents. She has authored/co-edited 16 books and over 100 book chapters and journal articles. Currently, she is a co-author of 7 Cochrane systematic reviews on medical music therapy for the Cochrane Library.

She has received over \$750,000 of grant funding from a variety of sources, including the State of PA Formula Fund and the Barra Foundation.

# INVITED SPEAKERS



**Alexandra Fiocco, PhD**

Dr. Alexandra J. Fiocco obtained an MSc in Psychology with specialization in Neuroscience from Carleton University in 2002, followed by a PhD in Neuroscience from McGill in 2008. After completing postdoctoral training in clinical and epidemiological research methods at the University of California San Francisco and at Baycrest Centre in Toronto, Dr. Fiocco joined the Department of Psychology at Ryerson University in 2011. She is currently an Associate Professor and Director of the Stress and Healthy Aging Research Lab at Ryerson where she and her team examine biological and psychosocial predictors of cognitive health and emotional wellbeing in late life. Dr. Fiocco's program of research also investigates the effect of interventions on cognitive and emotional wellbeing among older adults living independently in the community and older adults living in residential care. One particular intervention of interest is mindfulness-based stress reduction.



**Thomas Wolever, PhD**

Dr. Wolever obtained a Bachelor of Medicine and Bachelor of Surgery from Oxford University, UK in 1980, a PhD in Nutritional Sciences from the University of Toronto in 1986 and a Doctorate in Medicine from Oxford University in 1993. His current position is Professor and Graduate Coordinator in the Department of Nutritional Sciences, University of Toronto. He holds the following cross appointments: Professor, Department of Medicine, University of Toronto and Member of Active Medical Staff, Division of Endocrinology and Metabolism, St. Michael's Hospital, Toronto. His research interests are the effects of dietary carbohydrates on human physiology and metabolism. He is perhaps, most well known for work on the glycaemic index which was first developed by Dr. David Jenkins with Dr. Wolever, along with other collaborators, while he was a medical student. He has written or co-authored over 340 papers in peer-reviewed scientific journals, and also authored a book entitled: *The Glycaemic*



*Index: A Physiological Classification of Dietary Carbohydrate* published in 2006 by CABI ([www.cabi.org](http://www.cabi.org)). In 1997 he founded GI Testing, Inc. to provide confidential GI testing services to industry. To cope with the high demand for GI testing and to enable a wider range of clinical research services to be provided, Glycemic Index Laboratories, Inc. ([www.gilabs.com](http://www.gilabs.com)) was formed in 2004; a corporation of which he serves as President. More important than anything else, he is married with 3 children aged 30, 28 and 21 years. He enjoys orienteering, cycling and recorder playing.



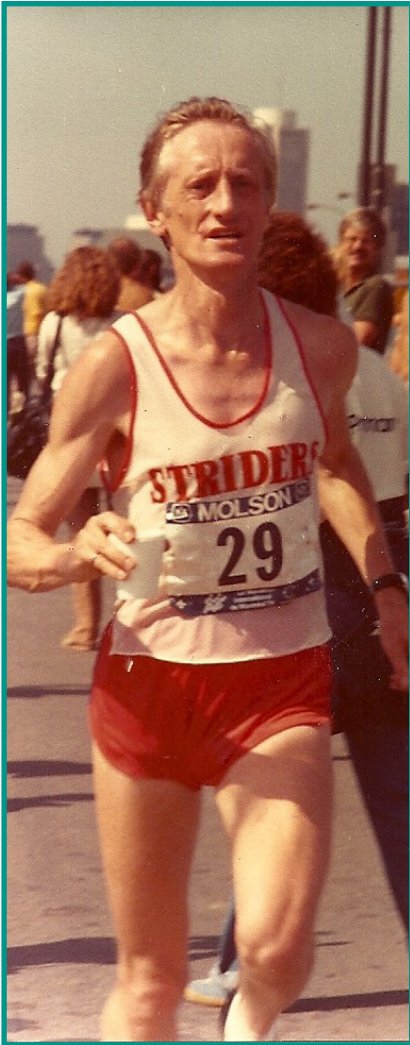
## **Arno Villringer, PhD**

Arno Villringer received his MD from University of Freiburg, did a postdoc at the MGH, Harvard Medical School, Boston, his clinical residency (Neurology) at the University Hospital Munich, was a consultant and subsequent head of Dept. of Neurology at Charité hospital

(Campus Benjamin Franklin) in Berlin. Since 2007 he is the Max Planck Director of the Department of Neurology (Human Cognitive and Brain Sciences, Leipzig), Director of the Cognitive Neurology Clinic of the University Hospital of Leipzig, and Academic Director of the Berlin School of Mind and Brain at Charité and Humboldt-University Berlin. He pursues research on (i) neurocognition of vascular risk factors (obesity, hypertension) and prevention of subsequent stroke & dementia, and (ii) recovery after stroke. He has complementary research foci investigating the hypothesis that (maladaptive) brain plasticity is crucial for the development of vascular risk factors leading to stroke and for the (lack of) recovery after stroke, and that brain plasticity can be beneficially modified. He uses multimodal brain imaging to understand basic neurophysiological mechanisms underlying human brain plasticity in cortical and subcortical brain areas, and their interaction. He is a founding member of numerous organizations (including the International Organization for Human Brain Mapping) and contributes to several nationally and internationally funded large-scale research projects. He is a member of the Leipzig Research Center for Civilization Diseases where he has spearheaded the collection of multimodal imaging and comprehensive behavioral and clinical outcome data in a population of over 2800 adults.

# PERFORM AWARDS AND FELLOWSHIPS

## Ed Whitlock PERFORM Graduate Student Scholarship Award



Ed Whitlock continued to be a consummate competitive marathon runner until his passing at 86 years old. For the last 20 years of his life, he has consistently broken every long distance record in his age group. He was the first person over 70 years old to run a marathon in less than three hours. He continued to pursue record-breaking runs with his final record beating the 4-hour mark at 85 years of age. Ed was an early advocate of PERFORM's mission and encouraged researchers to further investigate the benefits and risks of wellness programs for older adults.

The Ed Whitlock – PERFORM Graduate Award is given to a student registered at Concordia University in either a Masters or PhD program. The total of the award is \$5000 with preference being given to candidates who have a demonstrated interest in conducting research in areas that will help seniors improve their quality of life through active living.

***Winner to be announced.***



## Ali Ahmed Shams Award



**This award is funded by Ali Ahmed Shams**, an inspiring 11 year-old living in Pakistan who wants to give back to Concordia in honor of the education his father received during his time at the university. Owais Uddin Ahmed, Ali's father, overcame many hardships to obtain a university degree in order to provide for his family. When Ali and his father visited Concordia in 2017, he was struck by the academic research mission of the PERFROM Centre, and being passionate about science, was motivated to create and fund this award in order to help lift the financial burden on students receiving an education today.

The Ali Ahmed Shams Award is given to a student registered at Concordia University in an undergraduate program and working with a PERFORM research member. The total of the award is \$2000 with preference given to candidates who require financial assistance as per the donor request.

***Winner to be announced.***

# POSTER PRESENTATIONS

- 1 Long-term physical exercise training program successfully reduces pain intensity and benefits psychological factors in individuals experiencing chronic low back pain.**  
Anna Bendas, Kelly Cool, Scott J Thompson, Florian Bobeuf, Pierre Rainville, PhD, Louis Bherer, Julien Cohen-Adad, Mathieu Roy
- 2 Qst predictors of physical exercise training effects on chronic low back pain**  
Kelly Cool, Anna Bendas, Scott J Thompson, Florian Bobeuf, Pierre Rainville, Louis Bherer, Benjamin Pageaux, Mathieu Roy
- 3 Analysis of oxygen and glucose metabolism in hubs of resting-state brain functional connectivity**  
Fatemeh Razavipour, Kangjoo Lee, Stephane Blinder, Jean-Paul Soucy, Stephan Grimault, Claudine J. Gauthier, Christophe Grova;
- 4 Interaction of DRD2/ANKK1 Taq1A genotype with in-store food displays on diet quality in a cohort of Quebec adults**  
Yang Han, Catherine Paquet, Andre Krumel Portella, Shawn T Brown, Yu Ma, Laurette Dube Daiva E Nielsen;
- 5 Greater presence of pro-inflammatory immune cells in visceral adipose tissue compared to subcutaneous adipose tissue in women undergoing bariatric surgery**  
Kerri Z. Delaney, Jessica Murphy, Vi Dam, Pierre Garneau, Radu Pescarus, Henri Atlas, Ronald Denis, Jose Morais, Sylvia Santos
- 6 Cognitive or physical activity training improves attentional control through specific mechanisms**  
Tudor Vrinceanu, Kristell Pothier, Brittany Intzandt, Maxime Lussier, Nicolas Berryman, Minh T. T. Vu, Karen Li, Louis Bherer
- 7 Medical cannabis for common symptoms among cancer patients in quebec, canada: the cannabis pilot project at the mcgill university health centre**  
Rihab Gamaoun, Popi Kasvis, Filareti Patronidis, Maria-Fernanda Arboleda, Antonio Vignano
- 8 Automatic Frame Selection Using MLP Neural Network in Ultrasound Elastography**  
Abdelrahman Zayed, Hassan Rivaz
- 9 Modulation of attentional allocation during cognitive-motor dual-tasking following cognitive or physical training in healthy older adults**  
Rachel Downey, Louis Bherer, Thien Tuong Minh Vu, Kristell Pothier, Brittany Intzandt, Tudor Vrinceanu, Thomas Vincent, Anil Nigam, Antony D. Karelis, Laurent Bosquet, Nicolas Berryman, Karen Li
- 10 Hemodynamic correlates of changes in neuronal excitability: a simultaneous Transcranial Magnetic Stimulation (TMS) / functional Near Infra-Red Spectroscopy (fNIRS) study**  
Zhengchen Cai, Giovanni Pellegrino, Amanda Spilkin, Alexis Machado, Thomas Vincent, Chifaou Abdallah, Jean-Marc Lina, Christophe Grova
- 11 Sex moderates the relationship between aortic stiffness, cognition and cerebrovascular reactivity in healthy older adults**  
Dalia Sabra, Brittany Intzandt, Laurence Desjardins-Crepeau, Antoine Langeard, Christopher J. Steele, Frederique Frouin, Richard D. Hoge, Louis Bherer, Claudine J. Gauthier
- 12 A Longitudinal Study Examining the Acute to Chronic workload ratio in university runners: a preliminary evaluation of performance and injury**  
Daigle S., Dover GC
- 13 VAdipose  $\alpha/\beta$ -hydrolase domain-6 is a negative modulator of adipose thermogenesis and its inhibition promotes metabolically healthy obesity**  
Pegah Poursharifi, Camille Attane, Yves Mugabo, Anfal Almass, Shangang Zhao, Roxane Lussier, Heidi Erb, Julian Guida, Elite Possik, Marie-Line Peyot, Erik Joly, Andre Tchernof, Christophe Noll, Andre C. Carpentier, S.R. Murthy Madiraju, Marc Prentki



- 14 Hearing loss and cortical atrophy in older adults with (or at risk for) dementia: How strong is the relationship?**  
Nathalie Giroud, Kathy Pichora-Fuller, Paul Mick, Walter Wittich, Faisal Al-Yawer, Sana Rehan, Natalie Phillips
- 15 What motivates FitBit users?**  
Erin O'Loughlin, Tracie Barnett, Catherine Sabiston, Lisa Kakinami, Melissa Dejonge, Kristen Lucibello
- 16 The Effects Of A Short-Term High-Fat Diet On Glutathione Levels And Inflammation In Oxidative Skeletal Muscles Of Young Rats**  
David E. Andrich, Samantha Quinn, Lilya Melbouci, Ya Ou; Nickolas Auclair, Jocelyne Mercier, Jean-Christophe Grenier; Fábio Santos Lira, Luis B. Barreiro, Gawiyou Danialou, Alain-Steve Comtois, Jean-Claude Lavoie, David H. St-Pierre
- 17 The Effects of Cardiolipin on Vascular Smooth Muscle Cell Dedifferentiation and Migration**  
Deema Galambo, Andreas Bergdahl
- 18 A short-term high-fat diet alters lipid metabolism in the skeletal muscle of young rats**  
Samantha Quinn, Andrich D, Dufresne M, Ruiz M, Bareiro L, Grenier JC, Comtois AS, Danialou G, Bergdahl A, Scheede-Bergdahl C, St-Pierre DH
- 19 Catastrophizing in athletes is correlated to pain and changes in physiological variables during a painful cold pressor task**  
Matylda Lentini, Scalia, J., Touma, F., Jhaji, A., Darlington, Pj., Dover GC.
- 20 Association between food insecurity and glycemic control among youth with type 1 diabetes in Haiti**  
A. Pruszyńska, Y. Victor, M.C. Mascary, R. Mondesir Dumerjuste, M.Sainvil, M-P. Dumas, K. Altenor
- 21 Handgrip strength and perceived exertion are related to performance in female university athletes**  
A. Roussac, Bondoc, J., Dover GC.
- 22 Overnight declarative memory retention is associated with coupling between slow-waves and gamma power during slow-wave-sleep in older adults.**  
Oren Weiner, Jordan O'Byrne, Despina Bolanis, Julia Giraud, Lea Homer, Julia Lumia, Eric Lachapelle, Laurianne Bastien, Laurie Truchon, Dylan Smith, Nathan Cross, & Thien Thanh Dang-Vu
- 23 Sensory loss and cognitive function in older adults at different stages of cognitive impairment**  
Faisal Al-Yawer, M. Kathleen Pichora-Fuller, Walter Wittich, Paul Mick, Nathalie Giroud, Sana Rehan, Natalie Phillips;
- 24 Walking and rhythm: Factors that promote gait improvement in aging**  
A. Parker, A. Crestol, Dr. V. Penhune; Dr. L. Young, Dr. S. Dalla Bella, Dr. K. Li
- 25 The influence of fear avoidance on acute concussion symptoms: a case series**  
Gamelin G., Patel J., Dover GC.
- 26 Ventilatory outcomes during a VO<sub>2</sub>max test are related to measures of cerebral vascular health in aging**  
Brittany Intzandt, Dalia Sabra, Kristell Pothier, Louis Bherer, Claudine J Gauthier
- 27 Associations among lumbar multifidus muscle characteristics, body composition and injury incidence in collegiate rugby players**  
Levesque J, Rizk A, Frenette S, Boily M, Rivaz H, Fortin M
- 28 Effects of sleep deprivation on functional connectivity and performances during cognitive tasks**  
Alex Nguyen, Florence B. Pomares, Nathan Cross, Aude Jegoul, Kangjoo Lee, Umit Aydin, Aurore A. Perrault, Dylan Smith, Christophe Grova, Thien Thanh Dang-Vu
- 29 A prehabilitation program promotes functional recovery before and after hepatobiliary and pancreatic cancer surgery**  
Tram Bui, Popi Kasvis, Antonio Vigano, Peter Metrakos, Prosanto Chaudhury, Jeffrey Barkun, Daphnée Lamoussenyery, Franco Carli, Robert Kilgour
- 30 Fine tuning U-Net for ultrasound image segmentation: which layers?**  
Mina Amiri, Rupert Brooks, Nuance, Hassan Rivaz

# POSTER PRESENTATIONS

- 31 Short- and Long-Term Changes in Cognitive Function After Exercise-Based Rehabilitation in People with Chronic Obstructive Pulmonary Disease (COPD)**  
Brent Rosenstein, Anna Smyrnova, Amanda Rizk, Frédérique Escudier, Jean-François Gagnon, Véronique Pepin
- 32 Assessing the deficit in function of injured patients seeking treatment at an Athletic Therapy Student-Run Clinic**  
Kestenbaum R, Berger Lebel F, Miller M, Dover GC
- 33 The effects of an integrative dance program on postural stability for adults living with developmental disability**  
Emma Chen, Mary Roberts, Sarah DiPasquale
- 34 Movement skills Assessment Tool: A Validation Study Using a Modified Delphi Method**  
John Alexander Jimenez-Garcia, Chang Ki Hong, Matthew B. Miller, Richard DeMont
- 35 Interaction Between a Polygenic Risk Score for Fasting Insulin and Socioemotional Development in Children**  
Aashita Batra, Zihan Wang, Irina Pokhvisneva, Michael J. Meaney, Patricia Pelufo Silveira
- 36 Developing a translational polygenic risk score of differential susceptibility.**  
Maeson S. Latsko, Zihan Wang, Tie Yuan Zhang, Michael Meaney, Patricia Pelufo Silveira
- 37 Voluntary running exercise attenuates pain and reduces pathological nerve sprouting in degenerating intervertebral discs in a mouse model of low back pain**  
Peter Lee, Magali Millecamps, Stephanie Gregoire, Alex Danco, Laura S. Stone
- 38 Translational approach showed an interaction between a gene network affected by betamethasone in non-human primates and adversity conditions influencing anxiety response in a healthy child cohort**  
Danusa Mar Arcego, Nick O'Toole, Dr. Jan-Paul Buschdorf, Dr. Nirmala Arul Rayan, Irina Pokhvisneva, Dr. Carla Dalmaz, Barbara Barth, Euclides de Mendonça Filho, Dr. Patricia Pelufo Silveira, Michael Meaney
- 39 Effects of a gene network associated with leptin signaling on eating behavior: a translational approach**  
Randriely Merscher Sobreira de Lima, Carla Dalmaz, Ana Paula Santana de Vasconcelos, Danusa Mar Arcego, Euclides José de Mendolsa Filho, Sachin Patel, Michael Meaney, Patricia Pelufo Silveira
- 40 Sequenom sequencing identifies SNPs associated with anhedonia and fearfulness in rats**  
Li Li, Zihan Wang, Irina Pokhvisneva, Nick O'Toole, Oscar Vasquez, Maria Aristizabal, Marla Sokolowski, Josie Diorio, Amsale Belay, Tie Yuan Zhang, Michael J Meaney
- 41 Effects of Aerobic Training on Smooth Muscle Cell Mitochondrial Respiration in Diabetic Subjects**  
Stephanie MacKenzie, Dana-Rae Reguis Yadao, Andreas Bergdahl
- 42 Effects of AAV-Cre mediated knockout of the circadian clock gene Per2 on cardiomyocyte function**  
Juliana Herrera, Konrad Schöttner, Andreas Bergdahl, Christian Bär, Shimon Amir
- 43 Initial Findings on Age-Related Sensory Loss in Older Adults with (or at Risk for) Dementia**  
Rehan S., Giroud, N., Al-Yawer, F., Wittich, W., Phillips, N. A.,
- 44 Childhood-onset obesity exacerbates cellular senescence in abdominal but not femoral preadipocytes**  
Jessica Murphy, Bjorn Tam, Leila Ghiasi, James Kirkland, Tamara Tchkonina, José Morais, Sylvia Santosa

- 
- 45 **A biologically-informed polygenic score identifies endophenotypes and clinical conditions associated with the insulin receptor function on specific brain regions**  
Shantala Hari Dass, Kathryn McCracken, Irina Pokhvisnev, Lawrence M. Chen, Erika Garg, Thao T. T. Nguyen, Zihan Wang, Barbara Barth, Moein Yaqubi, Lisa M. McEwen, Julie L. Maclsaac, Josie Diorio, Michael S. Kobor, Kieran J. O'Donnell, Michael J. Meaney, P
- 46 **Personalized 3D fNIRS reconstruction of hemodynamic responses elicited by dual tasks involving walking and arithmetic calculation**  
Spilkin, A., Cai, Z., Abdallah, C., Downey, R., Li, K., Grova, C.
- 47 **Global degree centrality (degC) in resting-state functional MRI is higher in nodes near veins and decreases over distance**  
Julia Huck, Anna-Thekla Jäger, Audrey P. Fan, Christopher J. Steele, Sophia Grahl, Uta Schneider, Arno Villringer, Christine L. Tardif, Pierre-Louis Bazin, Claudine J. Gauthier
- 48 **Application of the Distributed Lag Models for Examining Associations Between the Built Environment and Obesity Risk in Children**  
Anna Smyrnova, Tracie A. Barnett, Mélanie Henderson, Marie-Eve Mathieu, Lisa Kakinami
- 49 **Weight bias internalization: Relationships with physical activity, sedentary behavior and psychological well-being**  
Levy, M., Nguyen, A., Kakinami, L. and Alberga, A.S
- 50 **Effect Of Exercise Training Combined With Dietary Caloric Modification On Body Weight And Arm Volume In Women With Breast Cancer-Related Lymphedema: Preliminary Results.**  
Helene Kim, Tamara Cohen, Théa Demmers, Christina Weiss, Dr. Robert Kilgour
- 51 **Evidence for counter-current heat exchange during localized hand cooling using infrared thermography.**  
Natalie Levtova, Dipannita Purkayastha, Emilie-Anne Benoit, Ali Salimi, Gabriel Kakon, Meagane E. I. Maurice-Ventouris, Amir Arshiya Kaffash Mohamadi, Bonnie Crawford, Peter J. Darlington
- 52 **The role of glycogen in proliferation of human helper T cells**  
Brandon Stopnicki, Mahdieh Tabatabaei Shafiei, Catalina M. Carvajal Gonczi, Peter J. Darlington
- 53 **Individual Differences in the Use of Visual Speech Cues and Sentence Context to Aid Speech Perception under Noisy Conditions in Young and Older Bilinguals**  
Anna-Francesca Boatswain-Jacques, Alexandre Chauvin, Jean-Louis René, Natalie Phillips
- 54 **Auditory Discourse Processing in Bilingual Older Adults: An ERP Analysis**  
Tristin Best, Angela Grant, Natalie Phillips
- 55 **The Association Between the Relative Autonomy Index Score and Minutes of Physical Activity**  
Sarah Farhat, Jennifer O'Loughlin, Tracie A. Barnett, Lisa Kakinami
- 56 **Development of a Preference-Based Weight-Related Quality of Life (WRQL): an obesity-specific quality of life measure to evaluate the effectiveness of various obesity treatments**  
Ana-Maria Moga, Nancy E. Mayo, Laurie Twells
- 57 **The effect of low back pain and lower-extremity injuries on multifidus muscle morphology and function in college soccer players**  
Nandlall N, Rizk A, Frenette S, Boily M, Rivaz H, Fortin M.
- 58 **Combined Effects of Acute Exercise and Sleep on Recognition Memory in Young, Sedentary Adults**  
Melodee Mograss, Mhd Diaa Chalati, Joanne Abi-Jaoude, Joelle Ducharme, Kristen Gong, Agata Kasprzyk, Edwin Robertson, Veronique Pepin, Thien Thanh Dang-Vu

# THANK YOU! MERCI!

Special appreciation and our sincerest gratitude is extended to our generous Awards Sponsors for their recognition of students exhibiting excellence in the **PERFORM** Scientific Poster Competition.



RÉSEAU DE RECHERCHE EN SANTÉ  
CARDIOMÉTABOLIQUE,  
DIABÈTE ET OBÉSITÉ

PATRICIA DUDAR



Our thanks to the members of the Scientific Events Committee.

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