

Research Institute

Healthy Active Living and Obesity Research

Institut de recherche

Recherche sur les saines habitudes de vie et l'obésité

2017 ANNUAL REPORT

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WELCOME FROM THE DIRECTOR



HALO was proud to celebrate Canada's 150th birthday in 2017 by promoting the [ParticipACTION 150 Playlist](#) with our strategic partner ParticipACTION. In partnership with the Canadian Society for Exercise Physiology, ParticipACTION, the University of Alberta, and the Public Health Agency of Canada we released the [Canadian 24-Hour Movement Guidelines for the Early Years \(0-4 years\)](#). We launched the [Canadian Assessment of Physical Literacy Second Edition](#) and the [Sedentary Behaviour Research Network terminology consensus project](#) findings. With leadership from HALO, the [Active Healthy Kids Global Alliance](#) initiated the development of the Global Matrix 3.0, collaborating with 53 countries to produce and compare physical activity report cards for children and youth around the world. With support from the Government of Ontario, Pat Longmuir initiated collaborations with colleagues in China to measure physical literacy in healthy children and children with medical conditions and disabilities. As well, with support from the Social Sciences and Humanities Research Council of Canada and the Public Health Agency of Canada, Dr. Gary Goldfield has launched a large randomized controlled trial to test whether training kindergarten teachers to promote physical activity during school hours can improve children's cognitive development. If this novel study shows the program is effective, this could lead to changes in the kindergarten curriculum involving the promotion of physical activity that could improve children's cognitive development, resulting in improved learning and performance in school. Finally, Dr. Chaput initiated research collaborations with scientists in Australia to better understand the effects of screen media exposure on sleep patterns of children.

In 2017 HALO signed inter-institutional Memoranda of Understanding with the Research Center of Sports and Physical Activity - Pedagogic University Mozambique and hosted visiting scholars and students from Hong Kong, Brazil and Canada. We also celebrated two births (Justin Lang's son Jack and Kylie Schiblie's daughter Eva) and H  l  ne Sinclair's engagement in Hawaii in April.

Through research, leadership, knowledge translation, partnerships, training and education, and advocacy HALO works diligently to promote and preserve healthy active lifestyles while managing and treating childhood inactivity and obesity. This Annual Report provides a catalogue of the activities and accomplishments made by HALO in 2017 and is intended to inform partners, stakeholders, funders, potential students and staff, and other interested parties about our group. It is available in print form upon request and also on our website at www.haloresearch.ca. HALO remains indebted to the donors, contributors, researchers, stakeholders, alumni and partners, who fund, facilitate, support and synergize our efforts. To all of you, please accept our most sincere thanks and our pledge to continue to work together for the health of our children.

Best wishes for a healthy, active 2018!



*Mark Tremblay, Ph.D., D.Litt. (hons), FACSM, CSEP-CEP
Director, Healthy Active Living and Obesity Research Group (HALO), CHEO Research Institute
Professor/Scientist, Department of Pediatrics, University of Ottawa
Chair, Active Healthy Kids Global Alliance*

ABOUT HALO

Our History and Impact

The Healthy Active Living and Obesity Research Group (HALO) was established in 2007 in response to the escalating obesity crisis and the increasing complexity of related co-morbidities. Today the HALO team consists of 14 staff (including 5 research scientists), a childhood obesity clinical team (Centre for Healthy Active Living), 19 graduate students, trainees, undergraduate students, and many community volunteers.

Some of our practice-changing contributions include:

<ul style="list-style-type: none"> Development of the Kenyan International Development Study – Canadian Activity Needs Research Alliance (KIDS-CAN) 	<ul style="list-style-type: none"> Creation of the Centre for Healthy Active Living (CHAL)
<ul style="list-style-type: none"> Development of the Canadian Assessment of Physical Literacy (CAPL) and CAPL-2 	<ul style="list-style-type: none"> Development of the Canadian Physical Activity Guidelines and Canadian Sedentary Behaviour Guidelines
<ul style="list-style-type: none"> Development of the Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep - a world first 	<ul style="list-style-type: none"> Development of Canadian 24-Hour Movement Guidelines for the Early Years
<ul style="list-style-type: none"> Creation of the Sedentary Behaviour Research Network (SBRN) 	<ul style="list-style-type: none"> Development of the Active Healthy Kids Canada Position Stand on Active Video Games for Children and Youth
<ul style="list-style-type: none"> Contribution to the development of the Canadian Obesity Network's (CON) 5 As of Healthy Pregnancy Weight Gain 	<ul style="list-style-type: none"> Development of an "Obesity in Preconception and Pregnancy" Resource for maternity care providers
<ul style="list-style-type: none"> Creation of the Active Healthy Kids Global Alliance (AHKGA) 	<ul style="list-style-type: none"> Leadership/contribution to Ottawa Public Health's Childcare Healthy Eating and Active Living Guidelines
<ul style="list-style-type: none"> Position Statement on Active Outdoor Play 	<ul style="list-style-type: none"> Co-creation of the Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth which is now the ParticipACTION Report Card

Since its inception in 2007, HALO has received over \$16 million in research funding; produced more than 650 peer-reviewed publications; has given more than 1200 scholarly presentations locally, nationally and internationally; and secured more than 1.5 billion media impressions!



Our Vision

HALO will...

Provide international leadership and research excellence as it relates to healthy active living and obesity in children and youth.

Our Mission

HALO will...

Be a multidisciplinary centre of excellence in healthy active living and obesity research for children and youth that will:

- *Advance the understanding and promotion of health and wellness where children live, play and learn.*
- *Develop, evaluate, and mobilize innovative strategies to prevent, manage, and treat obesity and lifestyle-related diseases.*

Our Lines of Business

Research

Promote and assess healthy active living among children and youth.

Identify, examine and address environmental, behavioural, psychosocial, and biological factors related to healthy active living and obesity in children and youth.

Develop, implement, and evaluate strategies to prevent, manage, and treat obesity and lifestyle-related diseases in children and youth.

Leadership

Be a credible, innovative, and authoritative source for child-focused healthy active living and obesity research, information and planning.

Training and Education

Be an internationally recognized centre for trainees, researchers and professionals interested in healthy active living and obesity research, leadership and advocacy for children and youth.

Knowledge Translation

Show leadership and innovation in translating, disseminating, and mobilizing child-focused healthy active living and obesity research.

Partnership

Use municipal, provincial, national, and international partnerships to create, promote, and evaluate healthy active living initiatives for children and youth.

Advocacy

Serve as a professional, informed, and authoritative voice to promote healthy active living and prevent obesity in children and youth.

Good Governance

Be effective, efficient, and transparent in all aspects of our work.



Education

- Postdoctoral Fellow, Department of Human Nutrition, University of Copenhagen (2010)
- Ph.D. in Kinesiology, Department of Kinesiology, Laval University (2008)
- M.Sc. in Kinesiology, Faculty of Physical Education and Sport, University of Sherbrooke (2004)
- B.Sc. in Biology, Faculty of Science, University of Sherbrooke (2003)

Academic Appointments

- Associate Professor, Department of Pediatrics, Faculty of Medicine, University of Ottawa
- Cross-Appointment, School of Human Kinetics, University of Ottawa
- Cross-Appointment, School of Epidemiology and Public Health, University of Ottawa
- Faculty Appointment in the Ph.D. Program in Population Health, University of Ottawa
- Research Scientist, Children's Hospital of Eastern Ontario Research Institute

Biography

Dr. Chaput's research focuses on obesity prevention and the adoption of a healthy lifestyle. He is also interested in new determinants of obesity such as lack of sleep and mental stress. Dr. Chaput has published more than 250 peer-reviewed scientific articles, has an h-index of 41 and >5,000 citations according to Scopus. He serves on many journal editorial boards and advisory committees, and has contributed to a large number of conferences around the world (>150 lectures). He received several awards for his research, including the Canadian Society for Exercise Physiology (CSEP) Young Investigator Award (2016), the Roger Broughton Young Investigator Award from the Canadian Sleep Society (2015), the International Journal of Obesity New Faculty Award from the World Obesity Federation (2014), the New Investigator Award from the Canadian Obesity Network (2011), and the New Investigator Award from the International Association for the Study of Obesity (2010).

Research, Clinical, Professional and Scholarly Focus and Service

Current research interests include: i) childhood obesity; ii) sleep; iii) physical activity, sedentary behaviour and health; and iv) the promotion of a healthy lifestyle

- Editorial Board Member, Nutrition and Diabetes
- Editorial Board Member, Obesity Science and Practice
- President of the Chapter Executive Committee, Gatineau-Ottawa Canadian Obesity Network Chapter (CON-YOW)
- Faculty Representative – Canadian Obesity Network – Students & New Professionals (CON-SNP) University of Ottawa Chapter
- Steering Committee Member for the development of the Canadian 24-Hour Movement Guidelines for the Early Years
- Steering Committee Member for the revision of the Canadian Society for Exercise Physiology–Physical Activity for Health (CSEP-PATH) Resource Manual
- Advisory Member for the Public Health Ontario's Healthy Kids Community Challenge Scientific Reference Committee
- Advisory Member for the Public Health Agency of Canada's Physical Activity, Sedentary Behaviour, and Sleep Surveillance Framework
- Co-Chair of the Pediatric Committee, Canadian Sleep and Circadian Network
- Report Card Research Committee Member, ParticipACTION Report Card on Physical Activity for Children and Youth
- Spokesperson for the release of the ParticipACTION Report Card on Physical Activity for Children and Youth
- Reviewer for many scholarly journals and granting agencies
- Senior Management Committee Member, CHEO Research Institute

Graduate Students, Supervision and Training

- Hugues Sampasa-Kanyinga (University of Ottawa) – Ph.D. Supervisor (2017-)
- Caroline Dutil (University of Ottawa) – Ph.D. Supervisor (2017-)
- Ryan Featherstone (University of Ottawa) – M.Sc. Supervisor (2017-)
- Holly Livock (University of Ottawa) – M.Sc. Supervisor (2016-)
- Jaime-Lee Yabsley (University of Ottawa) – M.Sc. Supervisor (2016-)
- Claire Johnson (University of Ottawa) – Ph.D. Co-supervisor (2015-)
- Caroline Dutil (University of Ottawa) – M.Sc. Supervisor (2015-2017)
- Taru Manyanga (University of Ottawa) – Ph.D. Committee (2016-)
- Michael Borghese (Queen's University) – Ph.D. Committee (2016-)
- Shakibasadat Fatemi (University of Ottawa) – M.Sc. Committee (2017-2018)
- Catherine Pouliot (University of Ottawa) – M.Sc. Committee (2017-2018)
- Alessandro Tirelli (University of Ottawa) – M.A. Committee (2014-2017)

Memberships

- Canadian Obesity Network
- The Obesity Society
- World Obesity Federation
- Canadian Society for Exercise Physiology
- Canadian Sleep Society
- World Association of Sleep Medicine
- Canadian Sleep and Circadian Network
- Sedentary Behaviour Research Network



Education, Credentials, Academic Appointments

- MA and PhD, Department of Psychology, Carleton University
- Post-Doctoral Fellow, Behavioural Medicine, State University of New York at Buffalo
- Registered Clinical Psychologist – College of Psychologists of Ontario
- Associate Professor, Department of Pediatrics, Faculty of Medicine, University of Ottawa
- Adjunct Professor, School of Psychology, University of Ottawa
- Adjunct Professor, School of Human Kinetics, University of Ottawa
- Adjunct Professor, Department of Population Health, University of Ottawa
- Adjunct Research Professor, Department of Psychology, Carleton University
- Senior Scientist, Children's Hospital of Eastern Ontario Research Institute

Biography

Dr. Goldfield is a Senior Scientist with HALO and an Associate Professor of Pediatrics, Human Kinetics, Psychology and Population Health at the University of Ottawa. He is also a registered clinical psychologist practicing in the community and sees children, adolescents and adults. Dr. Goldfield began the childhood obesity research program at the CHEO Research Institute 17 years ago and is a founding member of HALO. He has held an Endowed Scholar Award from the CHEO Volunteer Association Board, a New Investigator Award from the Canadian Institutes of Health Research, and won an Award of Excellence as Outstanding Research Mentor from the CHEO Research Institute. Dr. Goldfield's main research interests involve evaluating novel behavioural and pharmacological interventions for the treatment and prevention of childhood obesity and related complications. He has published over 105 peer reviewed papers, has an h-index of 27 and >2,700 citations according to Scopus. Dr. Goldfield has over 150 scholarly conference presentations and published abstracts.

Research, Clinical, Professional and Scholarly Focus and Service

Current research interests include: i) childhood obesity treatment and prevention ii) psychological determinants and consequences of child obesity iii) Effects of physical activity and sedentary behavior on body composition and mental health; iv) determinants of the rewarding value of food and eating behavior.

- Member, Canadian 24-hour Movement Guidelines Development Committee for the Early Years.
- Member, International Network on Eating Behaviour in Children
- Member Treatment and Research of Obesity in Pediatrics in Canada (TROPIC)
- Member, Advisory Board and Program Evaluation Committee, Centre for Healthy Active Living (CHAL) at CHEO
- Member of numerous graduate student thesis Committees and external examiner, University of Ottawa and Carleton University
- Reviewer for many granting agencies and academic organizations (CIHR, Canadian Diabetes Association, CHEO Research Growth Awards, CHAMO)
- Reviewer for many scholarly journals
- Registered clinical psychologist, College of Psychologists of Ontario

Graduate Students, Supervision and Training

- Alessandro Tirelli (University of Ottawa), M.Sc. Supervisor (2013-2017)
- Kaamel Hafizi (University of Ottawa), M.Sc. Supervisor (2016-2018)
- Shakiba Bani Fatemi (University of Ottawa), M.Sc. Supervisor (2016-2018)
- Darcie Valois (Carleton University), MA supervisor (2015-2017)
- Kent Bastell (University of Calgary), MSc Co-Supervisor (2016-2018)
- Angela Wilson (University of Ottawa) – Ph.D. Supervisor (2010-2017)
- Marisa Murray (University of Ottawa) – Ph.D. Supervisor (2011-2018)
- Fatima Mougharbel (University of Ottawa)-Ph.D. Supervisor (2017-2021)
- Luzia Jaeger Hintze (University of Ottawa)-Ph.D. Co-Supervisor (2012-2018)
- Fatme El Amine (University of Ottawa)-Ph.D. Co-Supervisor (2017-2020)
- Stephanie Leon (University of Ottawa), Ph.D. Committee (2012-2018)
- Genevieve Monaghan (University of Ottawa), Ph.D Committee (2013-2017)
- Jaime-Lee Yabsley (University of Ottawa), MSc Committee (2016-2018)
- Salma Mahmoodianfard (University of Ottawa)-Ph.D. Committee (2017-2021)
- Hugues Sampasa-Kanyinga (University of Ottawa)-Ph.D. Committee (2017-21)

Memberships

- College of Psychologists of Ontario
- Canadian Psychological Association
- American Psychological Association
- Canadian Obesity Network
- The Obesity Society
- Sedentary Behaviour Research Network



Education, Credentials, Academic Appointments

- Post-Doctoral Fellowship, School of Psychology and Human Kinetics, the University of Ottawa, Ottawa, Canada (2014)
- PhD, School of Kinesiology, sub-specialization in Measurement, Evaluation, and Research Methodology, the University of British Columbia, Vancouver, Canada (2013)
- MA, Applied Health Sciences, Brock University, St. Catharines Ontario, Canada (2009)
- BKIN, Department of Physical Education and Kinesiology, Brock University, St. Catharines Ontario, Canada (2007)
- Adjunct Assistant Professor, School of Human Kinetics, University of Ottawa
- Junior Research Scientist, Children's Hospital of Eastern Ontario Research Institute

Biography

Dr. Gunnell is a Junior Research Scientist with HALO at the Children's Hospital of Eastern Ontario Research Institute and an Adjunct Professor in the School of Human Kinetics at the University of Ottawa. Dr. Gunnell joined HALO in September of 2014. In addition to holding a PhD in Kinesiology with a specialization in Exercise Psychology, Dr. Gunnell also holds a sub-specialization in Measurement, Evaluation, and Research Methodology. Her Masters, PhD, and post-doctoral research were funded by the Social Sciences and Humanities Research Council of Canada (SSHRC).

Research, Clinical, Professional and Scholarly Focus and Service

Dr. Gunnell's research focuses on three broad streams. First, she is interested in understanding the factors that lead to greater psychological well-being and physical activity participation as well as less screen time and ill-being. In this line of research, she examines the role of goals, different sources of physical activity or screen time motivation, and experiences of competence, autonomy, and relatedness as predictors of psychological and behavioural outcomes. In a second line of research, she examines measurement properties of instruments used to assess psychological variables related to physical activity and screen time. Finally, Dr. Gunnell is interested in longitudinal research (examining factors over time) and interventions aimed at increasing physical activity and well-being as well as reducing screen time and ill-being.

- Associate Editor for International Review of Sport and Exercise Psychology
- Editorial board member for Psychology of Sport and Exercise
- Reviewer for many scholarly journals including the Journal of Sport and Exercise Psychology, Sport Exercise and Performance Psychology
- Guest Lecturer at the University of Ottawa
- Member, Children's Hospital of Eastern Ontario Research Institute Joint Health and Safety Committee

Graduate Students, Supervision and Training

- Salomé Aubert (University of Ottawa) – Ph.D. Committee (2015-2019)

Memberships

- The Canadian Society for Psychomotor Learning and Sport Psychology (SCAPPS)
- North American Society for Psychology of Sport and Physical Activity (NASPPA)
- European Congress of Sport Psychology
- Sedentary Behaviour Research Network



Education, Credentials, Academic Appointments

- MSc (1985), Department of Community Health, University of Toronto
- PhD (2010), Institute of Medical Sciences, University of Toronto
- Post-Doctoral Fellowship (2011), Labatt Family Heart Centre, SickKids, Toronto
- Research Scientist, Children's Hospital of Eastern Ontario Research Institute
- Assistant Professor, Department of Pediatrics, Faculty of Medicine, University of Ottawa
- Cross-appointed to Department of Human Kinetics, Faculty of Health Sciences, University of Ottawa
- Cross-appointed to School of Graduate and Post-graduate Studies, University of Ottawa
- College of Kinesiology of Ontario – Registered Kinesiologist
- Canadian Society for Exercise Physiology – Certified Exercise Physiologist

Biography

Dr. Longmuir is a Scientist in the Healthy Active Living and Obesity Research Group at the Children's Hospital of Eastern Ontario Research Institute. Dr. Longmuir's research interests are the promotion of physical activity to children with medical conditions and disabilities, and the use of physical activity to prevent and/or treat morbidity. Her undergraduate, Masters and Ph.D. theses examined the impact of interventions to increase physical activity among children with heart defects or cystic fibrosis. Dr. Longmuir's post-doctoral fellowship was a community health promotion initiative targeting parents of young children. Dr. Longmuir has published more than 50 papers and 6 book chapters in the peer-reviewed literature. She has delivered over 150 scholarly conference presentations, and more than 80 invited and keynote addresses.

Research, Clinical, Professional and Scholarly Focus and Service

Current research interests include: i) pediatric exercise medicine, ii) role of physical activity in the physical and mental health of children with cardiac conditions, iii) physical literacy and health, iv) physical activity among children with medical conditions and disabilities, v) motivation for physical activity in paediatric clinical populations, vi) patient and family engagement, and vii) knowledge translation and mobilization.

- Invited member of the Canadian Society for Exercise Physiology Physical Activity and Lifestyle Appraisal Strategic Planning Committee
- Member of the Writing Committee on the Promotion of Physical Activity Participation in Children and Adults with Congenital Heart Disease of the American Heart Association
- Invited member of the Ontario Trails Coordinating Committee
- Member of the City of Toronto Department of Parks, Forestry and Recreation Disability Advisory Committee
- Reviewer for many scholarly journals, including Circulation, Heart, Journal of Paediatrics and Child Health, BMC Public Health, American Journal of Cardiology, and PlosOne
- Faculty and course development for many post-graduate education courses related to recreation and fitness access, inclusion of people with disabilities, accessibility of natural environments, and accessibility of public rights of way

Graduate and Undergraduate Student Research Supervision and Training

- Angelica Blais (University of Ottawa) – M.Sc. candidate (2015-2017)
Active lifestyles via community sport for children with congenital heart defects
- Kevin Moncion (University of Ottawa) – M.Sc. candidate (2016-2018)
Physical activity and exercise in paediatric cardiomyopathy
- Tyler Kung (University of Ottawa) – M.Sc. candidate (2016-2018)
Exercise capacity and physical activity in cyanotic congenital heart disease
- Jacqueline Lee (University of Ottawa) – M.Sc candidate (2017-2019)
Exercise impacts executive function in adolescents with mental health problems
- Emil Prikryl (University of Ottawa) – M.D. candidate (2017)
Physical literacy screening in paediatric clinical settings

Graduate and Undergraduate Student Clinical Supervision and Training

- Reenal Shah (U. of Ottawa) – M.HK. Intervention & Counselling (2017)

Memberships

- North American Society for Paediatric Exercise Medicine
- Canadian Society for Exercise Physiology
- American College of Sports Medicine
- American Heart Association



Education, Credentials, Academic Appointments

- MSc and PhD, Department of Community Health, University of Toronto
- Canadian Society for Exercise Physiology – Certified Exercise Physiologist
- Full Professor, Department of Pediatrics, Faculty of Medicine, University of Ottawa
- Faculty appointment in Ph.D. Program in Population Health, University of Ottawa
- Senior Research Scientist, Children's Hospital of Eastern Ontario Research Institute
- Adjunct Professor, School of Graduate Studies, University of Toronto
- Visiting Professor, Kenyatta University, Nairobi, Kenya
- Visiting Professor, University of Strathclyde, Glasgow, Scotland
- Visiting Professor, Southwest University, Chong Qing, China
- Chief Scientific Officer, ParticipACTION
- Fellow of the American College of Sports Medicine

Biography

Dr. Tremblay is the Director of HALO at the Children's Hospital of Eastern Ontario Research Institute and Professor of Pediatrics in the Faculty of Medicine, University of Ottawa. He is a Fellow of the American College of Sports Medicine, Chair of the Active Healthy Kids Global Alliance, Chief Scientific Officer of the ParticipACTION Report Card, Chair of the Canadian Physical Activity Guidelines Committee, and Founder of the Sedentary Behaviour Research Network. Dr. Tremblay has published more than 370 papers and book chapters in the peer-reviewed literature, has an h-index of 57 and his published research has been cited >14,000 times according to Scopus. He has delivered over 700 scholarly conference presentations, including more than 150 invited and keynote addresses, in 20 different countries. Dr. Tremblay received an honorary doctorate from Nipissing University, the Queen Elizabeth II Diamond Jubilee Medal, the Lawson Foundation 60th Anniversary Award, and the Canadian Society for Exercise Physiology Honour Award for his leadership contributions to healthy active living in Canada.

Research, Clinical, Professional and Scholarly Focus and Service

Current research interests include: i) pediatric exercise science ii) childhood obesity iii) physical literacy and health iv) physical activity, fitness and health measurement v) sedentary physiology vi) health surveillance vii) knowledge translation and mobilization.

- Chair of the Active Healthy Kids Global Alliance
- Founder of the Sedentary Behaviour Research Network (SBRN)
- Chair of Public Health Ontario's Healthy Kids Community Challenge Scientific Reference Committee
- Chief Scientific Officer and spokesperson for the ParticipACTION Report Card on Physical Activity for Children and Youth
- Chair, Canadian Physical Activity Guidelines Committee, Canadian Society for Exercise Physiology, including the release of the Canadian 24-Hour Movement Guidelines for the Early Years (0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep
- Research Affiliate with the Alberta Centre for Active Living
- Chair, Scientific Advisory Committee and Steering Committee for the Canadian Assessment of Physical Literacy Project
- Member, ParticipACTION Research Advisory Group
- Member, Expert Advisory Committee of the Canadian Health Measures Survey, Statistics Canada
- Invited member of the World Health Organization's 24-Hour Movement Guidelines for the Early Years Guideline Development Group
- Member of the CIHR College of Reviewers
- Reviewer for many scholarly journals, granting agencies, and tenure and promotion applications

Graduate Students, Supervision and Training

- Taru Manyanga (University of Ottawa) – Ph.D. Supervisor (2015-2019)
- Salomé Aubert (University of Ottawa) – Ph.D. Supervisor (2015-2019)
- Silvia Gonzalez (University of Ottawa) – Ph.D. Supervisor (2017-2020)
- Justin Lang (University of Ottawa) – Ph.D. Supervisor (2013-2017)
- Samantha Stephens (University of Toronto) – Ph.D. Committee (2008-2017)
- Richard Larouche (University of Ottawa) – PDF Supervisor (2013-17)
- Jeremy Walsh (University of Ottawa) – PDF Supervisor (2017-2018)
- EunYoung Lee (University of Ottawa) – PDF Supervisor (2017-2019)
- Christine Delisle Nyström – PDF Supervisor (2017-2018)

Memberships

- NASPEM
- CSEP
- ACSM
- Canadian Obesity Network
- CPHA
- PHE Canada
- ISPAH
- ISBNPA
- SBRN (Founder)
- African Physical Activity Network
- International Physical Literacy Association



JOEL BARNES completed a B.Sc. in 2001 from the University of New Brunswick and a M.Sc. in 2003 from the University of Saskatchewan. In 2010, Joel joined HALO as Knowledge Synthesis and Analysis Manager. His main responsibilities include managing the ParticipACTION Report Card on Physical Activity for Children and Youth (www.participaction.com/reportcard) and providing web programming and data management services for the HALO suite of websites (www.haloresearch.ca, www.capl-eclp.ca, www.sedentarybehaviour.org, www.activehealthykids.org). Outside of work, Joel enjoys running, whitewater canoeing, fingerstyle guitar, home renovations and reading.



KEVIN BELANGER has a BSc and MSc in Human Kinetics from the University of Ottawa. Kevin's Master's work, completed at HALO under the supervision of Dr. Kristi Adamo, involved measuring cardiorespiratory fitness levels of children with obesity, and evaluating their risk profiles after the children were stratified by a newly developed pediatric obesity screening tool. Kevin re-joined HALO in the summer of 2014 as a Research Coordinator for the CAPL-RBC Learn to Play project. Kevin enjoys several active pursuits outside of HALO which include hockey, soccer, tennis, golf, football and more!



DR. JAMEASON CAMERON is a research coordinator with the HALO group, working under Dr. Gary Goldfield. Dr. Cameron attained his M.Sc. while at Montfort Hospital in the Behavioural and Metabolic Research Unit, and in 2013 completed his doctorate looking at the role of appetite-related hormones, food reward, and olfaction in predicting appetite and food intake in normal weight and obese adults. Currently he is coordinating a project titled "The Effects of Prenatal Smoking on Adiposity and Metabolism in Young Children". Dr. Cameron has also attained a NOL from Health Canada to begin a clinical drug trial examining the off-label use of the ADHD medication methylphenidate and its role in appetite and weight loss. Dr. Cameron's main interests are explored using randomized controlled trials, often in paradigms of energy depletion, with the intention of identifying how physiological and behavioural changes are inter-related in the context of fasting and weight loss. New topics of interest include how the microbiome and genetic markers of impulsivity may impact obesity. Jameason has over 20 peer-reviewed papers, 2 book chapters, and over 30 scholarly conference presentations, and recently received an Investigator-Initiated grant from Shire to examine the role of dopamine genes in predicting treatment response in women with binge-eating disorder.





NATASHA CINANNI graduated from University of Ottawa with a Bachelor of Science with honours in Human Kinetics. Since then she has been an active member of rehab and physical activity in her community. As a certified Kinesiologist, she enjoys creating personalized programs for injured individuals based on their rehabilitation needs, as well as providing education on muscles surrounding injured areas and their functional purpose. With her growing interest in physical activity promotion, Natasha now enjoys completing assessments and working to find healthy lifestyles for children with heart defects. With her love for children and physical activity, Natasha passionately works on the Toddler Study here at CHEO. Working under the supervision of Pat Longmuir, she helps with an array of projects: Access ON, CHEO Physically Literacy, Fearless, Putting PL, Exercise Counselling, ReACH, CSEP GAQ, Teen Cardiac, etc. Through the British Association of Teachers of Dancing, Natasha has completed her Associate Teachers Certification in tap, jazz, modern, stage and hip hop. Natasha continues to be an active member of the British Association of Teachers of Dancing by attending dance classes and teaching at Cumbrae School of Dance. She has been able to use all these acquired skills for several years to continuously aid in her extensive experience in community health, raising awareness to increase physical activity, and active rehabilitation.



DR. CASEY GRAY joined the HALO team in March 2013 as Project Manager. Her main research areas are risky active outdoor play, systematic reviews, and guideline development. Casey moved to Ottawa in 2011 after completing her Ph.D. in Kinesiology at Western University where she examined psycho-social determinants of children's physical activity. Prior to this, she earned an MA in Applied Health Sciences from Brock University and a BHK in Leisure and Sport Management from the University of Windsor. Outside of work Casey enjoys being Ruby's mom and spending time at "the cottage".



NINA HEDAYATI was a research coordinator with HALO at the Children's Hospital of Eastern Ontario Research Institute. Nina has earned two BSc degrees (Biochemistry and Psychology). She worked as a full-time research assistant before going on to complete a Masters in Neuroscience. At HALO, Nina worked on a variety of side projects with Dr. Mark Tremblay. Her main project was with Dr. Katie Gunnell, where Nina explored the impact of physical activity and sedentary behaviour on neurodevelopment. Some of Nina's current research interests include psychological and physical wellbeing, the link between neuroscience and obesity, and the effect of physical activity, mindfulness, and sleep on health outcomes. At the end of August 2017, Nina left HALO to pursue a PhD in Psychology (Cognitive Neuroscience field) at Wilfrid Laurier University. During her spare time, Nina enjoys going on spontaneous road trips with her family, doing yoga, hiking in nature, and salsa dancing. She also likes to take part in fitness/charity challenges.





DR. GENEVIÈVE LEDUC completed a Bachelors and a Masters degree in kinesiology, as well as a Doctoral Degree in nutrition at Université Laval in Quebec City where she studied environmental influences on adiposity and fitness levels in elementary school-aged children. She joined HALO in 2012 and worked on several school-based projects, namely ISCOLE, ATIM and the CAPL. Coming from a francophone background, she also contributed to the French version of various projects alongside Dr. Mark Tremblay. She had to move back to Québec city with her family during the course of this year and therefore had to leave her good friends and colleagues at HALO. She is now working as Programs and Evaluation Advisor for the FitSpirit Foundation.



CLARA MOORE completed her BSc in Human Kinetics in 2015 and MSc in Human Kinetics in 2017, both from the University of Ottawa. During her Masters Clara investigated different methods through which people can learn novel motor skills. Clara joined the HALO team in 2017 as a Research Assistant coordinating the Access ON project focusing on assessing and supporting the physical literacy of children with medical conditions and disabilities. Outside her work at HALO Clara enjoys running, biking, playing hockey and spending time with family and friends.



DR. VERONICA POITRAS completed her PhD in Kinesiology at Queen's University in September of 2014. Her graduate work focused on: 1) the impact of lifestyle factors (psychosocial stress and consumption of a high-fat diet) on cardiovascular health and function, and 2) the cardiovascular consequences of type 2 diabetes and the preliminary development of an intervention to enhance exercise tolerance in this population. She joined HALO in December 2014 as part of the team working to develop the world's first "24-Hour Movement Guidelines for Children and Youth" that were released in 2016. In 2017 she managed an ongoing analogous guideline development project for children in the early years (ages 0-4 years), and served as a Methodology Consultant in the ongoing development of "Clinical Practice Guidelines for Exercise during Pregnancy" in partnership with the Canadian Society for Exercise Physiology. Outside of work, Veronica loves spending time in the Great Outdoors. She enjoys cycling, hiking, snowshoeing, group exercise/fitness classes, reading, baking/cooking, and spending time with family and friends.



KYLIE SHIBLI completed an MSc In Neuroscience and a BA in Child Studies at Carleton University. She has combined both fields of research to focus on the influence of intervention programs aimed at improving children's cognitive development, which positioned her well for exploring the influence of physical activity and sedentary behaviour on children's neurocognitive development through a series of systematic reviews as a HALO Research Coordinator. She is a strong advocate for community-run children's programs and feels strongly about improving opportunities for all children. Currently, her most important endeavour is ensuring that her daughter Eva, born November 2017, gets plenty of tummy-time!



HÉLÈNE SINCLAIR is a Certified Administration Professional – with additional certifications in Organizational Management and Technology Applications (CAP-OM-TA – International Association of Administrative Professionals – IAAP). She provides administrative, human resource and financial services assistance to the Director and the HALO team (since November 2010). Originally from Northern Ontario (Sudbury), she brings over 30 years of experience in office administration. She is an active volunteer within CHEO as the Staff Forum Co-Chair. She has been a member of the IAAP since January 2009 and served as President in 2014/2015 and 2010/2011 for the Ottawa Chapter. Beyond her role with HALO, Hélène’s passion and interest for walking the HALO talk is evident as she launched the Staff Forum Fit Club organizing weekly walking group meetings and monthly Lunch and Learn sessions focused on healthy living. She is also a long time active member (> 10 years) as a Community Team Member, Team Leader and Coach with reputable online fitness and healthy living programs. Other areas of interest include walking/hiking, swimming, dancing, traveling to sunny destinations, continuous personal development, teaching and writing.



JENNA YARASKAVITCH completed a Bachelor of Science in Kinesiology at Queen’s University in 2015. She continued on to pursue a Master of Human Kinetics (MHK) in Intervention and Consultation at the University of Ottawa. Jenna is a Registered Kinesiologist with the College of Kinesiologists of Ontario. She joined the HALO team as a Research Assistant in 2016. Jenna is responsible for the coordination of the Fearless Physical Activity project as well as the upcoming Physical Activity ToolKit study which aims to promote physical activity in those living with congenital heart defects. Outside of her work at HALO, Jenna keeps busy as a competitive volleyball coach, participating in recreational sports, and being active outdoors with friends and family.

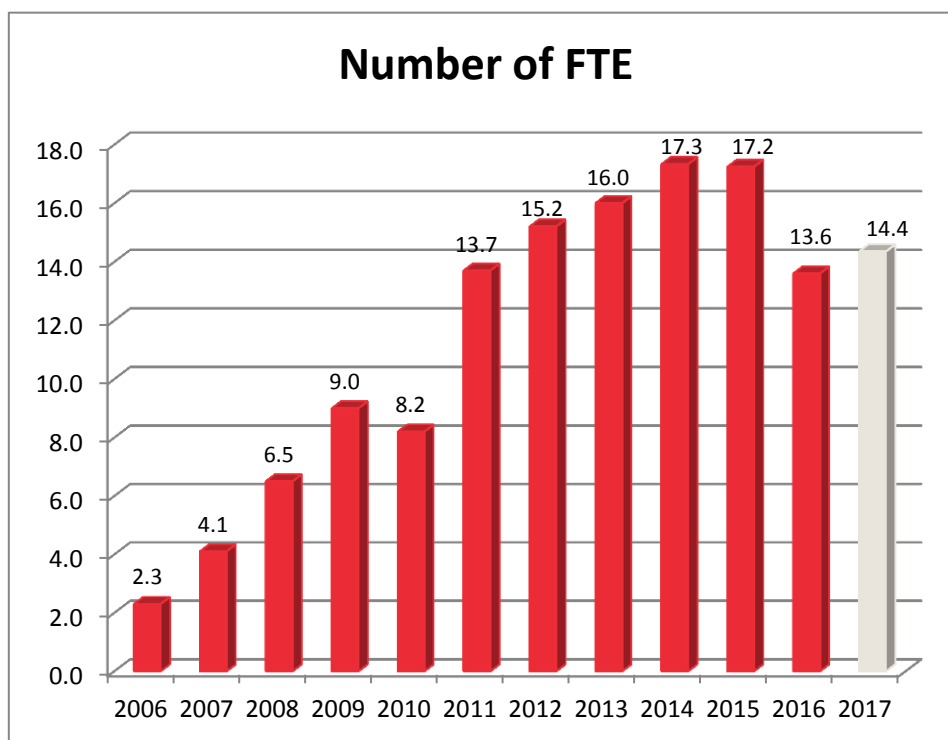


Figure 1: Number of Full Time Equivalent (FTE) positions in HALO Research Group from 2006 to 2017. Between 2006 and 2017, there was a 526% increase in FTE, and between 2016 and 2017, there was a 6% increase in FTE.

GRADUATE STUDENTS

HALO proudly displays the names of graduate students on a plaque in the main office. In 2017, the following students were added to the plaque (for a total of 22 graduate students):

- Caroline Dutil – M.Sc.
- Darcie Valois – M.A.
- Justin J Lang – Ph.D.
- Alessandro Tirelli – M.A.



SALOMÉ AUBERT

Ph.D. Candidate

Supervisor:

Dr. Mark Tremblay

Research Program:

Ph.D. Population Health, University of Ottawa

Dissertation Topic:

International and intercultural childhood physical activity comparison for the promotion of healthy active living among children in countries around the world.



SHAKIBASADAT BANI FATEMI

M.Sc. Candidate

Supervisor:

Dr. Gary Goldfield and Dr. Eric Doucet

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Thesis Topic:

The effect of MPH on Energy Intake and Body composition.



ANGELICA BLAIS

M.Sc. Candidate

Supervisor:

Dr. Pat Longmuir and Dr. Kristi Adamo

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Thesis Topic:

Looking at the participation of children with congenital heart disease in a recreational, after-school physical activity program.



CAROLINE DUTIL

Ph.D. Candidate

Supervisor:

Dr. Jean-Philippe Chaput and Dr. Anthony Carlsen

Research Program:

Ph.D. Human Kinetics, University of Ottawa

Thesis Topic:

Effect of manipulating sleep on systemic and brain functions in adolescents at risk of type II diabetes.



SILVIA GONZÁLEZ

Ph.D. Candidate

Supervisor:

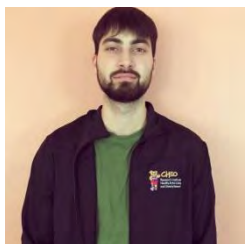
Dr. Mark Tremblay

Research Program:

Ph.D. Epidemiology, University of Ottawa

Dissertation Topic:

Physical activity and sedentary behaviors among Colombian children and adolescents: Patterns, correlates and international comparisons in the context of the epidemiological transition.



KAAMEL HAFIZI

M.Sc. Candidate

Supervisor:

Dr. Gary Goldfield

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Dissertation Topic:

Examining the effect of Methylphenidate on Energy Expenditure and Energy intake in obese populations.



TYLER KUNG

M.Sc. Candidate

Supervisor:

Dr. Pat Longmuir and Dr. Kristi Adamo

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Thesis Topic:

The relationship between submaximal exercise capacity and physical activity behaviours in children with complex congenital heart disease.



JUSTIN LANG

Ph.D. Candidate

Supervisor:

Dr. Mark Tremblay

Research Program:

Ph.D. Population Health – University of Ottawa

Dissertation Topic:

Exploring the Utility of Cardiorespiratory Fitness as a Population Health Surveillance Indicator for Children and Youth: An International Analysis of Results from the 20m Shuttle Run Test.



JACKIE LEE

M.Sc. Candidate

Supervisor:

Dr. Pat Longmuir

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Thesis Topic:

The effect of exercise on executive control: Improving the effectiveness of therapy for youth with mental illness.



HOLLY LIVOCK

M.Sc. Candidate

Supervisor:

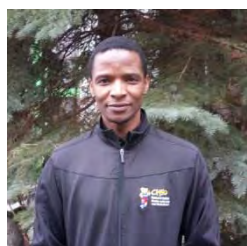
Dr. Jean-Philippe Chaput

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Thesis Topic:

Does exercising with a screen or music lead to post-exercise energy compensation in adolescent boys?



TARU MANYANGA

Ph.D. Candidate

Supervisor:

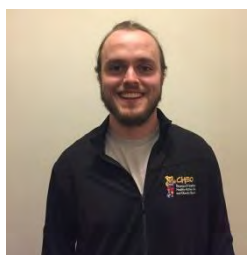
Dr. Mark Tremblay

Research Program:

Ph.D. Epidemiology, University of Ottawa

Dissertation Topic:

Relationships between lifestyle behaviours and weight status in Mozambican children: a search to understand lifestyle transitions in a developing country.



KEVIN MONCION

M.Sc. Candidate

Supervisor:

Dr. Pat Longmuir and Dr. Kristi Adamo

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Dissertation Topic:

Investigating the exercise capacities and physical activity behaviours in children with cardiomyopathy.



FATIMA MOUGHARBEL

Ph.D. Student

Supervisor:

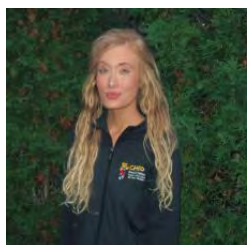
Dr. Gary Goldfield

Research Program:

Ph.D. Population Health, University of Ottawa

Dissertation Topic:

Investigating the longitudinal impact of weight- based teasing in overweight and obese children and adolescents on mental health, disordered eating behaviour and eating disorders, and BMI longitudinally, and identifying the moderating effect of gender, weight status, social support and attachment on this relationship.



MARISA MURRAY

Ph.D. Candidate

Supervisor:

Dr. Gary Goldfield

Research Program:

Ph.D. Clinical Psychology, University of Ottawa

Dissertation Topic:

Screen Time Activities and Depressive Symptomatology Among Adolescents: A Longitudinal Investigation of Cognitive, Behavioural, Affective, and Interpersonal Factors.



HUGHES SAMPASA-KANYINGA

Ph.D. Candidate

Supervisor:

Dr. Jean-Philippe Chaput and DR. Ian Colman

Research Program:

Ph.D. in Epidemiology and Public Health

Dissertation Topic:

Movement behaviours and mental health in children and adolescents.



ALESSANDRO TIRELLI

M.A. Student

Supervisor:

Dr. Gary Goldfield

Research Program:

M.A. Student

Dissertation Topic:

How our perceptions influence our eating behaviour.



DARCIE VALOIS

M.A. Student

Supervisor:

Dr. Gary Goldfield

Research Program:

M.A. Psychology, Carleton University

Thesis Topic:

Identifying projective factors for body esteem in overweight/obese youth who have experienced weight teasing.



ANGELA WILSON

Ph.D. Student

Supervisor:

Dr. Gary Goldfield

Research Program:

Ph.D. Clinical Psychology, University of Ottawa

Dissertation Topic:

Identifying mediators and moderators of the obesity-depression link in children and adolescents.



JAMIE-LEE YABSLEY

M.Sc. Candidate

Supervisor:

Dr. Jean-Philippe Chaput and Dr. Kristi Adamo

Research Program:

M.Sc. Human Kinetics, University of Ottawa

Dissertation Topic:

Validation of a child version of the three-factor eating questionnaire.

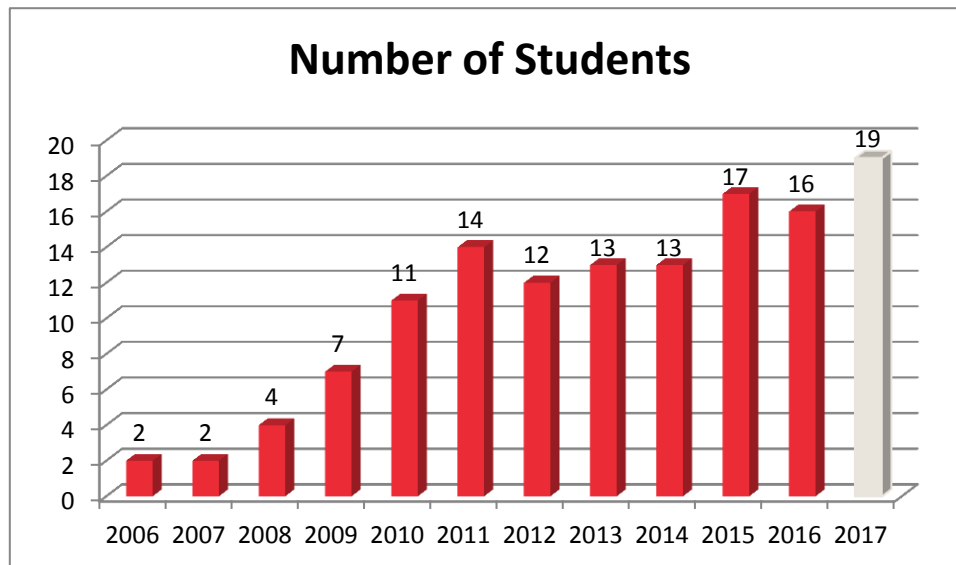


Figure 2: Number of Full Time Equivalent (FTE) graduate students in the HALO Research Group from 2006 to 2017. Between 2006 and 2017, there was a 850% increase, and between 2016 and 2017, there was a 19% increase in the number of students.

FELLOWS



DR. EUN-YOUNG LEE is a postdoctoral fellow with the HALO group. Her main research interests include studying the correlates and determinants of physical activity and sedentary behavior, and how these behaviors impact health and well-being among young people (0-17 years) within a culture and across cultures. To date, she has published 34 peer-reviewed articles and delivered 54 scholarly presentations. Dr. Lee's main research projects at HALO include 1) a pilot assessment of the impact of the Forest and Nature School early childhood education and program among children in the early years, and 2) the development of a self-report measure of active play for children aged 2-13 years. Outside of research Dr. Lee enjoys watching TV (in a reclined position), cuddling with her dogs, and tasting craft beer with friends. She is also a 3rd degree black belt in Taekwondo, avid skier, and amateur rock climber.



DR. JEREMY WALSH joined the HALO team in September of 2017 after completing his PhD in exercise physiology at Queen's University in Kingston, ON. Broadly speaking, Jeremy's research has focused on understanding how a single session of exercise (aerobic or resistance) impacts brain health. Specifically, this research has focused on investigating the mechanisms by which exercise transiently boosts cognitive function and brain physiology in order to strategically use exercise to enhance brain function prior to a mentally challenging activity (i.e., in the classroom). During his graduate studies, Jeremy explored these questions in healthy young and older adults. While at HALO, Jeremy's research will focus on extending these investigations in children, and to examine brain function in children within the broader context of 24-hour movement behaviours. Outside of research, Jeremy has a keen interest in outdoor activities including trekking, camping, and cycling.



DR. RICHARD LAROCHE was a postdoctoral fellow with the HALO group until June 2017. He held a postdoctoral fellowship from the Canadian Institutes of Health Research. His research focuses on many themes related to healthy active living among children and youth including active transportation, physical activity, outdoor play and health-related fitness. He completed his PhD in 2013 with Dr. Mark Tremblay and his dissertation examined the health-related outcomes and correlates of active transportation in children and youth. Dr. Larouche is the recipient of the CHEO Research Institute 2015 Outstanding Trainee award. He has published 43 peer-reviewed articles and 2 book chapters, delivered over 50 scholarly presentations, and received over \$1,100,000 in research funds. He is the editor of a book entitled *Children's Active Transportation* which will be published by Elsevier in 2018. Dr. Larouche enjoys several hobbies outside of HALO including cycling, running, hiking, snowshoeing, camping, and road hockey. In July 2017, Dr. Larouche was appointed to the rank of Assistant Professor in the Faculty of Health Sciences at the University of Lethbridge.

HALO CLINICAL ASSOCIATES



DR. ANNICK BUCHHOLZ is a clinical psychologist, and lead in outcomes management and research at the Centre for Healthy Active Living (CHAL). Dr. Buchholz was previously involved in the development of the eating disorder day treatment and inpatient programs at CHEO; and, along with her colleagues in eating disorders, implemented outcomes measurement for both these programs. Dr. Buchholz has also been involved in the development and evaluation of the prevention program 'BodySense'; a program aimed at promoting healthy body image in athletes. She is a co-investigator on the REAL study, 'Research on Eating and Adolescent Lifestyles, an Ottawa-based longitudinal study examining shared risk factors between eating disorders and obesity in youth. Her research interests include psychosocial risk factors related to body image, stigma, disordered eating, and weight regulation in children and youth, as well as treatment outcomes.



DR. STASIA HADJIYANNAKIS is a pediatric endocrinologist and the Medical Director of CHEO's Center for Healthy Active Living. She is an Associate Professor of Pediatrics at the University of Ottawa and has been an active member of the Department of Pediatrics at CHEO in the division of endocrinology since November 2001. Her clinical, advocacy and research interests are in the area of pediatric obesity and related co-morbidities. Her research interests are in examining the interplay between behavioural/psychosocial, genetic and intrauterine factors in predicting risk for obesity related co-morbidities.



JANE RUTHERFORD graduated from the University of Guelph with a Masters in Nutrition, Exercise & Metabolism, and then worked in cardiac rehabilitation and sports medicine at the Ontario Aerobics Centre and was a Fitness Consultant at Guelph's Health and Performance Centre. Since its inception in 2010, Jane has been the Exercise Specialist for CHEO's Centre for Healthy Active Living where she works with families to create a balance between physical activity, sleep and screen time, helping them to achieve their best possible health – both mental and physical.

AFFILIATE INVESTIGATORS



DR. KRISTI ADAMO

Associate Professor & CIHR New Investigator
Associate Professor with Faculty of Medicine, Pediatrics
School of Human Kinetics, Faculty of Health Sciences
University of Ottawa
Ottawa, ON



DR. VALERIE CARSON

Associate Professor
Faculty of Kinesiology, Sport, and Recreation
University of Alberta
Edmonton, AB



DR. RACHEL COLLEY

Researcher, Health Analysis Division
Statistics Canada, Government of Canada
Ottawa, ON



DR. KATIE GUNNELL

Assistant Professor
Department of Psychology, Faculty of Arts and Social Sciences
Carleton University
Ottawa ON



DR. AMY LATIMER-CHEUNG

Associate Professor
School of Kinesiology and Health Studies
Queen's University
Ottawa, ON



RICHARD LAROUCHE, PHD
Assistant Professor, Public Health
Faculty of Health Sciences
University of Lethbridge
Lethbridge, AB



DR. MARGARET SAMPSON
Librarian
Children's Hospital of Eastern Ontario
Ottawa ON



DR. BRIAN TIMMONS
Associate Professor of Pediatrics
Canada Research Chair in Child Health & Exercise Medicine
McMaster University
Hamilton, ON



WHERE ARE THEY NOW – UPDATES FROM FORMER HALO'ITES

STACEY ALPOUS is a Junior Policy Analyst in Policy and Government Relations at the Canadian Institutes of Health Research (CIHR). She is very thankful for the wonderful friendships and experiences that stemmed from her time at HALO.

PRISCILLA BELANGER is an Outreach Facilitator in the Department of Cardiac Prevention and Rehabilitation at the University of Ottawa Heart Institute. She helps facilitate the Ottawa Model for Smoking Cessation (OMSC) program in hospitals in Ontario. However, she is currently enjoying maternity leave with her 3 year old daughter and 6 month old son.

MICHAEL BORGHESE is completing his PhD in Physical Activity Epidemiology at Queen's University.

CHARLES BOYER is a Senior Researcher and Executive Network Manager at The Conference Board of Canada. He manages a professional network of employers from across Canada who lead health, wellness, and safety initiatives within their respective organizations. Charles still exercises with fellow HALOites at lunch time as his office is right beside CHEO.

PETER BREITHAUP is a Sessional Professor for the Fitness and Health Promotion program in Algonquin College's department of Wellness, Research, and Innovation. When not teaching, he runs Certified Personal Trainer workshops and certification courses for CSEP, does exercise stress testing for a local medical clinic, and spends any additional free time coaching competitive minor hockey or trying to keep up with his own fitness through a variety of sports.

KENDRA BRETT is a Clinical Research Associate with the Center for Transfusion Research at the Ottawa Hospital Research Institute. Her research focuses on establishing quality of care metrics for kidney transplant programs, and developing better criteria for determining who would be a good candidate for a kidney transplant.

MEGAN CARTER is a Research Associate at KFL&A Public Health and an Adjunct Assistant Professor in the Department of Public Health Sciences at Queen's University. She is involved in the research and evaluation of a wide variety of frontline public health programs, policies and services.

CYNTHIA K. COLAPINTO is an Epidemiologist with Health Canada's Office of Nutrition Policy and Promotion. Dr. Colapinto leads the evidence review for dietary guidance, which informs federal nutrition policies such as the revision of Canada's Food Guide. Dr. Colapinto's research interests include nutritional epidemiology, dietary patterns, and surveillance and evidence review methods.

RACHEL COLLEY is now working as a Researcher in the Health Analysis Division at Statistics Canada. Her work is still focused on health, physical activity and obesity research. While she is not at HALO anymore, Rachel continues to collaborate with HALO on a few projects.

AMÉLIE FOURNIER moved to Montréal, QC, in August 2015. She is now completing her third year of Dental School at McGill University.

KIMBERLY GRATTAN is an Outreach Facilitator in the Department of Cardiac Prevention and Rehabilitation at the University of Ottawa Heart Institute. She helps facilitate the Ottawa Model for Smoking Cessation (OMSC) program in Primary Care settings throughout Ontario. Kimberly continues to stay connected to HALO through her deep-seated friendships and is grateful for the time she spent at HALO.

NINA HEDAYATI is a PhD student in Psychology (Cognitive Neuroscience field) at Wilfrid Laurier University.

SONIA JEAN-PHILIPPE is a registered dietitian working for Ottawa Public Health. Her work includes content development for social media platforms, nutrition support to parents in the community through Parenting in Ottawa Facebook and website, addressing public health issues such as the unhealthy food environment, marketing of food and beverages to children, food literacy and more.

ALLANA LEBLANC is a Canadian Institutes for Health Research-Ottawa Model for Smoking Cessation Health Impact Fellow at the University of Ottawa Heart Institute, examining implications of cannabis legalization. Allana is enjoying being in Ottawa with her family and has taken advantage of being so close to Gatineau Park and the Rideau Canal.

DANIJELA MARAS is completing her PhD in Clinical Psychology at the University of Ottawa. Her doctoral research is supported by the Ontario Mental Health Foundation and examines group psychotherapy outcomes among adults living with chronic medical conditions at The Ottawa Hospital Rehabilitation Centre. Danijela and her husband are enjoying life as new parents to a baby girl.

STELLA K. MUTHURI now lives in Nairobi, Kenya, and works at the African Population and Health Research Center as an Associate Research Scientist. Stella continues to work towards driving a healthy active living agenda among school-aged children in the country and region. She is thrilled to be living close to her family and friends.

NELSON NARDO JUNIOR is back to his institution, the State University of Maringá, Paraná, Brazil where he is an Associate Professor in the Department of Physical Education and the Vice Director of the Health Science Center. His work as the NEMO Director is gaining momentum as it is getting closer to the Public Health System sector to work as a partner.

VERONICA POITRAS is a Clinical Research Officer at CADTH (the Canadian Agency for Drugs and Technologies in Health). She remains passionate about healthy active living in both her personal and professional life, and continues to collaborate with HALO!

STEPHANIE PRINCE WARE is a CIHR Health Systems Impact Fellow working at the Public Health Agency of Canada (PHAC) and the University of Ottawa Heart Institute. She is working on research to support PHAC's Physical Activity, Sedentary behaviour and Sleep Indicator Framework and continues her clinical research focusing on physical activity and sedentary behaviour interventions among at risk populations, as well as the primary and secondary prevention of heart disease among women.

TRAVIS SAUNDERS is an Assistant Professor and the Jeanne and J.-Louis Lévesque Research Professor in Nutrisciences and Health at the University of Prince Edward Island. His research focuses on the health impact of sedentary behaviour in children and adults.

DAVID THIVEL is Associate Professor in Exercise Physiology and Human Nutrition at Clermont Auvergne University in France. David continues working with HALO through the leadership of the French Report Card on Physical activity in children and youth and thanks to several collaborations with Dr. Jean-Philippe Chaput.



VISITORS

DR. DIEGO AUGUSTO SANTOS SILVA

Visiting Scholar from Brazil – August 2017 to July 2018



Dr. Silva is a Brazilian Scientist with a multidisciplinary background. He completed his undergraduate studies (in Kinesiology) in 2007 by the Federal University of Sergipe, Brazil. During the Master's course in Kinesiology at the Federal University of Santa Catarina (UFSC), Brazil, he investigated the effect of high intensity physical exercise on obese children. In PhD studies in Kinesiology (UFSC), Dr. Silva investigated the relationship between obesity and hypertension in adults. Dr. Silva is interested in epidemiological studies and is part of different projects with researchers from Brazil, Canada, the United States and Portugal. He is an Adjunct Professor at the Federal University of Santa Catarina, Brazil, and has research projects in the areas of Physical Activity and Health, Body Composition, Sedentary Behavior, and Health-Related Physical Fitness. He is the leader of the Research Center in Kinanthropometry and Human Performance, Editor-in-Chief of the Brazilian Journal of Kinanthropometry and Human Performance, and he is anthropometrist level 3 of International Society for the Advancement of Kinanthropometry (ISAK).

DR. BRIAN TIMMONS

Visiting Scholar from McMaster University – November 2017 to April 2018

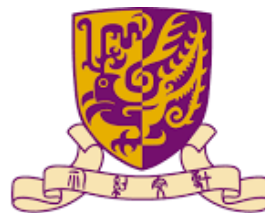


Dr. Brian Timmons is Canada Research Chair (Tier 2) in Child Health & Exercise Medicine, and Associate Professor of Pediatrics at McMaster University. He is Research Director and Clinical Development Lead of the Child Health & Exercise Medicine Program, Associate Member in the Department of Kinesiology, and Investigator with CANChild Centre for Childhood Disability Research. Brian's research program examines 3 inter-related themes: translational science, clinical innovation, and public health, using a lab bench to park bench approach.

John Scriven, visitor from Jersey, UK – here to learn about the CAPL and in HALO tradition – he joined us to play some HALO Hockey



Professor Stephen Wong and Dr. Wendy Huang visited HALO from Hong Kong



香港中文大學
The Chinese University of Hong Kong

STUDENTS AND VOLUNTEERS

NAME	ROLE	PROJECT(S)	SUPERVISOR
David Burbidge	Volunteer	Sleep extension and neurocognition in adolescents	Dr. Jean-Philippe Chaput
Ryan Featherstone	Volunteer	Validation of a short version of the three-factor eating questionnaire in children	Dr. Jean-Philippe Chaput
Megan Forse	Summer Research Student	Global Matrix 3.0	Dr. Mark Tremblay
Brandon Heidinger	Volunteer	Ramping up neurocognition (RUN): effects of physical activity on cognitive development in kindergarten children	Dr. Gary Goldfield
Brian Khoe	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Emily Lowry	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Jessica Oey	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Connor O'Reilly	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Yannick Plante	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Catherine Pouliot	Volunteer	Exercising with a screen or music and post-exercise energy compensation: a RCT in male adolescents	Dr. Jean-Philippe Chaput Holly Livock
Emil Prikryl	Summer Research Student	Access ON Childhood Physical Literacy	Dr. Pat Longmuir
Praneal Merchant	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Alysson Ripley	Volunteer	Motor development and physical activity in toddlers with congenital heart disease	Dr. Pat Longmuir
Reenal Shah	Clinical Intern	Physical activity counseling for children with medical conditions and disabilities	Dr. Pat Longmuir
Corrine Staff	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Alex Taranowski	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Dipika Wadhera	Volunteer	Effects of manipulating sleep on learning and memory consolidation in adolescents at risk of type II diabetes	Dr. Jean-Philippe Chaput
Veronica Zuccala	Summer Research Student	Active transportation and independent mobility in children	Dr. Mark Tremblay





HALO PHOTO GALLERY



EXERCISING WITH A SCREEN OR MUSIC AND POST-EXERCISE ENERGY COMPENSATION IN ADOLESCENTS

Principal Investigator: **Dr. Jean-Philippe Chaput**

Graduate student assigned to this project: **Holly Livock**

Background: Watching television or listening to music while exercising can serve as motivating factors, making it more pleasant and even easier to exercise for some people. However, it is unknown whether these stimuli influence food intake and/or physical activity energy expenditure (PAEE) for the remainder of the day, thereby potentially impacting benefits for body weight control.

Objective: To compare the effects of watching television, listening to music or no external stimulus while exercising on post-exercise energy intake and expenditure.

Methods: With the use of a randomized crossover design, 24 male adolescents aged 13-17 years completed three 30-min experimental conditions consisting of walking/jogging on a treadmill at 60% of heart rate reserve while (i) watching a screen (EXERCISE + SCREEN); (ii) listening to music (EXERCISE + MUSIC); or (iii) exercising with no other stimulus (CONTROL). An *ad libitum* lunch was offered to the participants immediately after the experimental conditions, and a dietary record was used to assess food intake for the remainder of the day. An Actical accelerometer was used to assess PAEE until bedtime. Appetite sensations were assessed by using visual analogue scales at different time points during the testing day, and ratings of perceived exertion were also obtained while exercising. The primary outcome measure was post-exercise energy intake and expenditure (kJ).

Results: The study was completed during winter of 2018 and the study findings will be available later in 2018. This study will help to determine if people should care about the use of screen devices and/or personal music players while exercising with regard to body weight control.



RAMPING UP NEUROCOGNITION (RUN): THE IMPACT OF A TEACHER-LED ACTIVE PLAY INTERVENTION ON KINDERGARTEN CHILDREN'S COGNITIVE, SOCIAL AND EMOTIONAL DEVELOPMENT

Principal Investigator: Dr. Gary Goldfield

Co-Investigators: A. D'Angiulli, K. Adamo, P. Longmuir, K. Gunnell, P.J. Naylor, V. Temple, V. Carson, T. Okely, P. Tucker, B. Timmons.

Funding Source: Social Sciences and Humanities Research Council (\$271,280)

Background: Only 15% of children aged 3-5 years meet the Canadian physical activity (PA) and sedentary behavior (SB) guidelines. This is alarming given PA and SB habits start young and track over time, and are associated with many health outcomes. Indeed, early childhood represents a critical period of brain development that lays the foundation for future cognitive growth and academic achievement. Our team has conducted several provider-teacher led interventions demonstrating increased PA and reduced SB in children aged 3-5 years, but very few intervention studies have examined neurocognitive outcomes in this population.

Primary Objective: To evaluate the feasibility and efficacy of a kindergarten-based and teacher-led PA (Ramping up neurocognition; RUN) intervention on children's neurocognitive development assessed by a composite score.

Secondary Objectives: To evaluate the efficacy of the RUN intervention on 1) Individual cognitive indicators such as cognitive flexibility, inhibitory control and attention, episodic memory, and receptive vocabulary; 2) social, emotional and academic development; and 3) To examine the association between changes in all neurocognitive and social-emotional functioning indicators, PA (duration and intensity), and SB to gain insight into which indicators best predict neurocognitive and social-emotional development in children. We predict that children in the RUN intervention will exhibit greater improvements in cognitive, social-emotional development, and PA, most notably time spent in moderate-to-vigorous PA will be the best predictor of all developmental indicators.

Design: This study uses a two-arm, cluster randomized controlled trial design. We plan to randomly assign 12 schools from the Ottawa Carleton District School Board of Eastern Ontario to either the RUN intervention delivered in Kindergarten classes (6 schools, n=120 children) or to the Control condition (6 schools, n=120 children) that will implement their standard Kindergarten curriculum. The 3-month intervention will include two, 3-hour training workshops to Kindergarten teachers along with bi-weekly booster sessions from a master trainer, and the RUN resource manual and training kit developed from our previous PA promotion trials in this population.

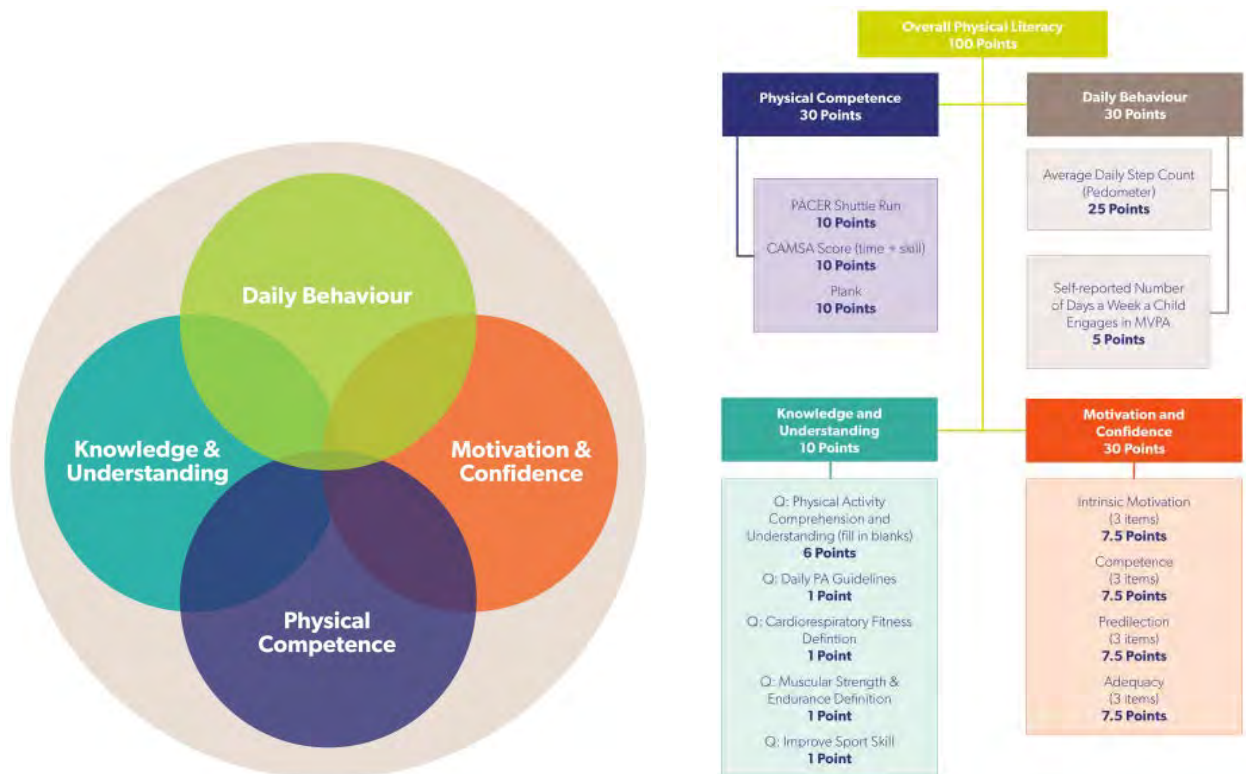
Measures/Data Analysis: Neurocognitive development will be assessed by the widely used National Institutes of Health (NIH) toolbox battery validated in children aged 3-6 years. This computer-administered battery consists of a composite score and individual scores measuring cognitive flexibility (Dimensional Change Card Sort Test), inhibitory control and attention (Flanker test), episodic memory (Picture Memory Sequence Tests), and receptive vocabulary (The Picture Vocabulary Test). PA (duration and intensity) and SB will be assessed over 1-week by accelerometry. Social-emotional development will be assessed by the teacher-rated Strengths and Difficulties Questionnaire (SDQ) and the Devereaux Students Strengths Assessment (DESSA). Adherence, fidelity, and attrition will be assessed using descriptive statistics, chi-square and t-tests. Changes between groups from baseline to 3-months in primary and secondary outcomes will be examined by linear mixed-effects model regression analyses.

Anticipated results and Impact on Child Health: This study will be among the first of RCTs to provide data on the feasibility and efficacy of a teacher-led intervention aimed at increasing PA and reducing SB to enhance neurocognitive and social-emotional development in early childhood. If efficacious, the data will inform a larger, clustered RCT designed to assess whether promoting PA is critical for establishing a trajectory for optimal cognitive, social and emotional health in young children. Such a trial would carry important public health implications for informing Kindergarten curricula during this critical period of brain development.

The Canadian Assessment of Physical Literacy (CAPL) evaluates the capacity for children to lead a physically active lifestyle. Aligned with the internationally accepted definition of physical literacy, the CAPL has been used nationally and internationally by numerous researchers and practitioners; most recently, the RBC Learn to Play – CAPL project assessed over 10,000 Canadian children between 2014 and 2017. Feedback obtained from internal (i.e., HALO staff) and external CAPL administrators participating in this project suggested that the tool could be more efficient. Throughout 2017, several HALO staff members comprising the CAPL Publication Committee (Dr. Mark Tremblay, Dr. Pat Longmuir, Dr. Katie Gunnell, Dr. Geneviève Leduc, Joel Barnes, Kevin Belanger) worked to revise this tool and launch a streamlined version: the Canadian Assessment of Physical Literacy – Second Edition.

Dr. Katie Gunnell examined the larger dataset created through the RBC Learn to Play – CAPL project; this provided her the opportunity to re-examine the CAPL model fit through factor analyses. This comprehensive database - specific to Canadian children 8 to 12 years of age from across Canada - also allowed Katie to examine the CAPL protocols for redundancy or variables that did not contribute significantly to the overall assessment. For each domain of the CAPL, recommended changes based on the factor analyses were considered in light of the qualitative feedback from administrators and theoretical considerations. Finally, the CAPL Publication Committee discussed the proposed changes and reconfigured the scoring system through the provision of age and sex-specific scoring percentiles based on Generalized Additive Models for Location, Scale and Shape (GAMLSS) conducted by Joel.

The CAPL – Second Edition continues to reflect the four domains of the international definition of physical literacy: motivation and confidence, physical competence, knowledge and understanding, and daily behaviour. It is comprised of three physical competence protocols (Plank, PACER, CAMSA), one daily behaviour protocol (pedometer steps) and a 18-item questionnaire requiring responses for 23 questions assessing the domains of motivation and confidence and knowledge and understanding. The CAPL – Second Edition was launched in October, 2017 at the Canadian Society for Exercise Physiology Annual General Meeting in Winnipeg, Manitoba. Detailed information about the CAPL-2 is available online (www.capl-eclp.ca).



CAPL – Second Edition: Revised Conceptual Model and Revised Scoring System

ACCESS ON CHILDHOOD PHYSICAL LITERACY

“Access ON Childhood Physical Literacy” will enhance physical literacy, sport and recreation for the > 130,000 Ontario children living with medical conditions and disabilities. We will identify their most important physical literacy deficits, support sport/recreation leaders to include children with medical conditions and disabilities, provide individual physical literacy plans to 150 very inactive children with medical conditions and disabilities & embed physical literacy in their care. These vulnerable children are inactive but want to play with their peers. Their skills are often limited because of extended hospital / therapy time and uncertainty about appropriate types of sport/recreation and the impact of their medical conditions and disabilities. Sport/recreation leaders say that they are often uncertain about how to include children with medical conditions and disabilities in their programs.



We will test physical literacy screening tasks among 600 Ontario children with medical conditions and disabilities (minimum 75 from each region of Ontario) so that sport/recreation leaders can easily identify the children with the greatest need for physical literacy support. We will assess the suitability, accuracy and reliability of the physical literacy screening tasks among children with mental illness, cancer or lifelong heart, lung, blood, immune or brain disorders. We will directly increase sport/recreation participation among 150 children with very low physical literacy (min. 25 per Ontario region) through personalized physical literacy and sport/recreation engagement plans. The engagement plans will enable children with medical conditions and disabilities to: a) develop age-appropriate movement skills that are often delayed by their condition or lengthy hospitalizations, and b) enhance and use their fundamental movement skills in a wide variety of sport/recreation settings. We will also build physical literacy and sport / recreation capacity for children with low physical literacy by providing physical literacy screening task and engagement plan training to 100 sport/recreation and healthcare leaders across Ontario. The on-going legacy of the Access ON project will be physical literacy screening embedded in the care of children with medical conditions and disabilities and a physical literacy engagement plan database that will enhance physical literacy, community sport/recreation & healthcare leader support to ensure that children with medical conditions and disabilities can be active for life.

RELEASE OF CANADIAN 24-HOUR MOVEMENT GUIDELINES FOR THE EARLY YEARS (0-4 YEARS)

In partnership with the Canadian Society for Exercise Physiology, ParticipACTION, the University of Alberta, and the Public Health Agency of Canada we released the Canadian 24-Hour Movement Guidelines for the Early Years (0-4 years) on November 20, 2017. Full details are available at www.csep.ca/guidelines. These “world first” guidelines were released concurrently with nine background papers published in the journal *BMC Public Health*. Working in close partnership with researchers and Government officials in Australia, Australian 24-Hour Movement Guidelines for the Early Years were released on November 21, 2017.



RELEASE OF SEDENTARY BEHAVIOUR RESEARCH NETWORK TERMINOLOGY CONSENSUS PROJECT FINDINGS

With leadership from HALO, the Sedentary Behaviour Research Network released the findings from the terminology consensus project – a project that sought to achieve global consensus on key terminology related to sedentary behaviour research. The key terms are illustrated in the figure below and in the manuscript highlighted below.



Tremblay et al. *International Journal of Behavioral Nutrition and Physical Activity*
(2017) 14:75
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International Journal of Behavioral
Nutrition and Physical Activity

RESEARCH

Open Access

Sedentary Behavior Research Network (SBRN) – Terminology Consensus Project process and outcome

Mark S. Tremblay^{1*}, Salomé Aubert¹, Joel D. Barnes¹, Travis J. Saunders², Valerie Carson³, Amy E. Latimer-Cheung⁴, Sebastien F.M. Chastin^{5,6}, Teatske M. Altenburg⁷, Mai J.M. Chinapaw⁷ and on behalf of SBRN Terminology Consensus Project Participants



Web Statistics

The current size of the HALO website (www.haloresearch.ca) is 1,394 web pages (10% above 2016). The statistics presented below are based on web activity across these web pages in the last year.

Overall Statistics

In 2017, there were approximately 10,600 unique visitors to www.haloresearch.ca every month (14% above 2016). These visitors viewed HALO web pages 242,500 times per month (25% above 2016). 298,400 items were sent from www.haloresearch.ca to web users (12% below 2016). Figure 3 shows overall statistics from 2011 to 2017.

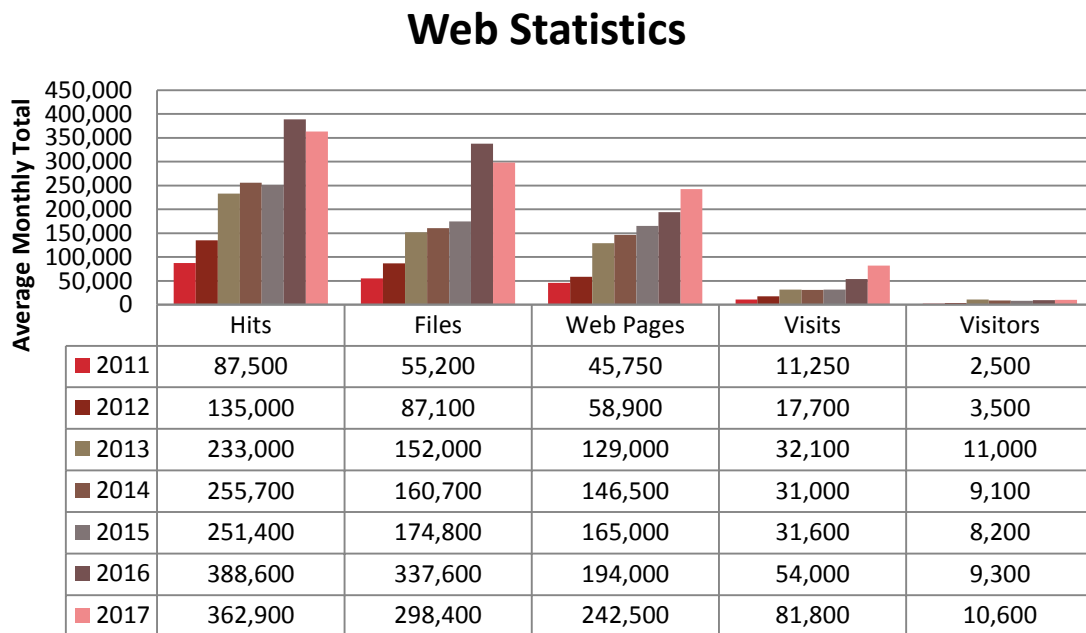


Figure 3: Average monthly totals for select web statistics for www.haloresearch.ca , 2011-17.

Dictionary for Figure 3

Hits: The total number of items on all web pages (e.g., images, audio clips) that are requested. For example, a web page with 3 graphics and some text will usually result in 4 hits when the web page is requested.

Files: The total number of hits (requests) that actually result in something being sent back to the user. This is useful since not all hits will send data.

Web Pages: The actual web pages requested and not all of the individual items that make up the web pages (e.g., images, audio clips).

Visits: The total number of websites making requests within a given timeout period (default is 30 minutes). Remote websites that link to images and other non-web page addresses are not counted.

Visitors: The total number of unique IP address that makes requests to www.haloresearch.ca.

Most Popular Web Pages

In 2017, the most popular web pages as measured by 2017 webpage views were:

1. [Position Statement on Active Outdoor Play](#) (813 views)
2. [HALO Publications](#) (584 views)
3. [The Development of the Canadian 24-Hour Movement Behaviour Guidelines for Children and Youth](#) (511 views)
4. [Director's Message](#) (408 views)
5. [HALO Grants](#) (382 views)
6. [Dr. Richard Larouche Accepts Position at the University of Lethbridge](#) (324 views)
7. [HALO's History](#) (321 views)
8. [Major Initiatives Related to Childhood Obesity and Physical Inactivity in Canada: 2014 Year in Review](#) (286 views)
9. [HALOize Your Workday](#) (231 views)
10. [24-Hour Movement Guidelines Repository](#) (213 views)

Active Healthy Kids Global Alliance Website



In 2015, HALO launched the Active Healthy Kids Global Alliance (AHKGA) website, which is available at www.activehealthykids.org. AHKGA is a network of researchers, health professionals and stakeholders who are working together to advance physical activity in children and youth from around the world. AHKGA was established in 2014, following the success of the world's first Global Summit on the Physical Activity of Children in Toronto.

On November 16, 2016, the AHKGA website was re-launched with the release of the Global Matrix 2.0 in Bangkok, Thailand and includes an interactive world map of physical activity grades (www.activehealthykids.org/the-global-matrix-2-0-on-physical-activity-for-children-and-youth) as well as a comprehensive archive of all physical activity report cards released around the world (www.activehealthykids.org/report-card-archive).

The Global Matrix 3.0 will be released in Adelaide, Australia on November 27, 2018 and will include physical activity grades from 50 countries around the world. For more information, visit www.movementtomove.com.au.

SBRN



Sedentary Behaviour Research Network

The Sedentary Behaviour Research Network (SBRN) is the only organization for researchers and health professionals that focuses specifically on the health impact of sedentary behaviour. SBRN's mission is to connect sedentary behaviour researchers and health professionals working in all fields of study, and to disseminate this research to the academic community and to the public at large.

The Network has grown to include over 1500 members (~20% above 2016), including prominent researchers in the areas of physiology, epidemiology, psychology, and ergonomics. On June 10, 2017 the results of the "terminology consensus project" – the world's most extensive agreement to date on consensus definitions for researchers examining sedentary behaviour led by SBRN – were published in the International Journal of Behavioral Nutrition and Physical Activity in a paper co-authored by 84 scientists from 20 countries. The paper, entitled "Sedentary Behaviour Research Network: Terminology Consensus Project Process and Outcome", provides refined definitions to suit all age groups, including babies, young children and people with chronic disease or mobility impairment. It also describes how bouts, breaks and interruptions should be defined and measured in the context of assessing sedentary behaviour and in relation to health outcomes. The conceptual framework described in the paper also illustrates how both energy expenditure and posture are important components and how the terms relate to movement behaviours throughout a 24-hour period, including physical activity and sleep. Examples provided distinguish between active and passive sitting, active and passive standing, sedentary and stationary behaviour, screen time and non-screen-based sedentary time. Sedentary behaviour for a baby, for example, includes sitting in a car seat with minimal movement and, for a toddler, watching TV while sitting, reclining or lying down. For more information, visit www.sedentarybehaviour.org/sbrn-terminology-consensus-project.

The Healthy Active Living and Obesity Research Group created SBRN and launched the SBRN website in 2011 and actively maintains the website, its content, a rapidly expanding list-serve for sedentary behaviour researchers, and the world's largest online database of sedentary behaviour research. Approximately 9,000 unique visitors reach the SBRN website every month.



STAFF AWARDS

NAME	ORGANIZATION/AGENCY	GRANT/AWARD
Pat Longmuir	Ontario	China Young Scientist Exchange Program
Mark Tremblay	OptiMYz Magazine	Named one of Canada's top 100 health influencers

STUDENT FUNDING, SCHOLARSHIPS AND AWARDS

STUDENT NAME	ORGANIZATION/AGENCY	GRANT/AWARD
Caroline Dutil	University of Ottawa	Ph.D. Admission Graduate Scholarship
Caroline Dutil	University of Ottawa	M.Sc. Admission Graduate Scholarship
Silvia Gonzales	Ministry of Training, Colleges and Universities & University of Ottawa	Ontario Trillium Scholarship
Kaamel Hafizi	University of Ottawa	Admission scholarship
Nina Hedayati	Ontario Graduate Scholarship	Ontario Graduate Scholarship
Tyler Kung	University of Ottawa	Admission scholarship
Jackie Lee	University of Ottawa	Admission scholarship
Taru Manyanga	CIHR	Fellowship
Taru Manyanga	University of Ottawa	FGPS Travel Award
Taru Manyanga	University of Ottawa	Excellence Scholarship
Kevin Moncion	Ontario Trillium Foundation	Seed Grant
Kevin Moncion	University of Ottawa	Admission Graduation Scholarship
Marisa Murray	University of Ottawa	Excellence Scholarship



The HALO Spirit Award is given to a HALO staff or student who best exemplifies our vision, mission, and lines of business. This person embodies HALO's core values and is essential to the success and spirit of HALO. Natasha Cinanni was the 2017 recipient.

SUMMARY OF RESEARCH FUNDING AND GRANTS

This table represents the grants for which HALO Investigators are assigned Principal Investigators or directly receive funding. This does not include all other projects that our investigators are involved with in the capacity of Co-Principal Investigators or Co-Investigators or participants.

NAME OF THE PI(S)	ORGANIZATION/AGENCY	TITLE OF PROJECT	AMOUNT (YEAR)
Chaput/King	Institute of Health and Biomedical Innovation	<i>Manipulating light wavelength to improve sleep</i>	\$10,000 (2017-2018)
Chaput/Katz	CIHR	<i>Mobilizing the healthcare community towards an integrated approach to improving outcomes of patients with sleep disorders – Canadian Sleep and Circadian Network (CSCN)</i>	\$200,000 (2015-2020)
Chaput	CHEO Research Institute (Research Growth Award)	<i>Effects of increasing sleep duration on insulin sensitivity in adolescents having risk factors for type 2 diabetes</i>	\$30,000 (2016-2017)
Chaput	Ministry of Research and Innovation (Early Researcher Awards program)	<i>A good night's sleep to prevent type 2 diabetes in adolescents</i>	\$150,000 (2016-2021)
Chaput	Canadian Obesity Network (CON Local Chapter Grant)	<i>Treating severe obesity in children with dignity</i>	\$1,500 (2016-2017)
Goldfield	Social Sciences & Humanities Research Council (SSHRC)	<i>Ramping Up Neurocognition (RUN): the impact of a teacher-led active play intervention on kindergarten children's cognitive, social and emotional development</i>	\$271,280 (2017-2022)
Goldfield	CHEO-RI Research Growth Award	<i>Ramping up Neurocognition (RUN): Effects of physical activity on cognitive development in Kindergarten children</i>	\$30,000 (2016-2017)
Goldfield	CHEO Research Institute and University of Ottawa	<i>Effects of methylphenidate on weight loss and energy balance in obese youth</i>	\$15,000 (2016-2018)
Longmuir/Sawdon	Ontario Trillium Foundation	<i>Physical activity in the lives of children with failing hearts</i>	\$71,700 (2017-2018)
Longmuir	Canadian Institutes of Health Research	<i>Impacting child physical and mental health outcomes in congenital heart disease: a randomized, controlled, multi-centre trial of enhanced physical activity support in clinical care to decrease the burden of disease and treatment-related morbidity</i>	\$424,575 (2017-2020)
Longmuir	Ontario Sport and Recreation Communities Fund	<i>Access ON childhood physical literacy: assessing and supporting the physical literacy of Ontario children</i>	\$253,205 (2017-2019)

NAME OF THE PI(S)	ORGANIZATION/AGENCY	TITLE OF PROJECT	AMOUNT (YEAR)
		<i>with medical conditions and disabilities</i>	
Longmuir	University of Ottawa Faculty of Medicine Summer Studentship	<i>Access ON childhood physical literacy</i>	\$6,500 (2017)
Longmuir	Ontario Ministry of Research and Innovation Early Researcher Award	<i>LIFFE for cardiac kids through physical activity</i>	\$150,000 2017-2022
Longmuir	Canadian Institutes for Health Research	<i>New Investigator Salary Award</i>	\$300,000 (2016-2021)
Longmuir/Graham	Ontario Sport and Recreation Communities Fund	<i>Fearless physical activity: building physical literacy among Ontarians with congenital heart disease</i>	\$186,934 (2016-2018)
Longmuir	Canadian Society for Exercise Physiology	<i>Research evaluation of the get active questionnaire for children (3 to 15 years of age)</i>	\$9,440 (2016-2017)
Longmuir/Tremblay	Ontario Trillium Foundation	<i>The Canadian Assessment of Physical Literacy: building the capacity of Ontario's sport and recreation sector to enable healthy, active lifestyles in children</i>	\$474,200 (2013-2017)
Tremblay	Mitacs Accelerate Grant	<i>From the ParticipACTION Physical Activity Report Card to the Global Matrix 3.0: Impact evaluation and strategy development</i>	\$15,000 (2017)
Tremblay	CHEO Research Institute	<i>Summer Studentship</i>	\$6,000 (2017)
Tremblay	Canada Summer Jobs Grant	<i>Summer Studentship (2)</i>	\$13,680 (2017)
Tremblay	CHEO Research Institute	<i>Summer Studentship Support</i>	\$5,000 (2017)
Tremblay	The Lawson Foundation	<i>60th Anniversary Award</i>	\$100,000 (2017)
Tremblay	Public Health Agency of Canada (Healthy Living Fund)	<i>Development of the Canadian 24-hour Movement Guidelines for the Early Years</i>	\$293,996 (2016-2017)
Tremblay	Public Health Agency of Canada (Healthy Living Fund)	<i>Canadian 24-Hour Movement Guidelines for Children and Youth: Phase2 – integration and activation</i>	\$1,165,000 (2016-2019)
Tremblay/Carson	CIHR Knowledge Synthesis Grant	<i>Update of the Canadian Sedentary Behaviour Guidelines for the Early Years</i>	\$100,000 (2016-2017)
Tremblay/Carson	CIHR Knowledge Synthesis Grant	<i>Update of the Canadian Physical Activity Guidelines for the Early Years</i>	\$100,000 (2016-2017)
Tremblay	The Lawson Foundation The CHEO Foundation (matching)	<i>HALO Junior Research Chair Program</i>	\$508,250 \$508,250 (2010-2017)

NAME OF THE PI(S)	ORGANIZATION/AGENCY	TITLE OF PROJECT	AMOUNT (YEAR)
Tremblay	ParticipACTION/PHAC	<i>Learn to Play CAPL monitoring</i>	\$300,000 (2014-2017)
Tremblay	Mitacs-Accelerate	<i>Canadian Assessment of Physical Literacy – Graduate Research Program</i>	\$466,667 (2014-2017)
Tremblay	ParticipACTION/RBC	<i>Learn to Play CAPL Monitoring</i>	\$300,000 (2014-2017)
Tremblay/Larouche	Heart and Stroke Foundation of Canada	<i>Active transportation, independent mobility, and physical activity among school children: a multi-site study</i>	\$216,692 (2015-2018)

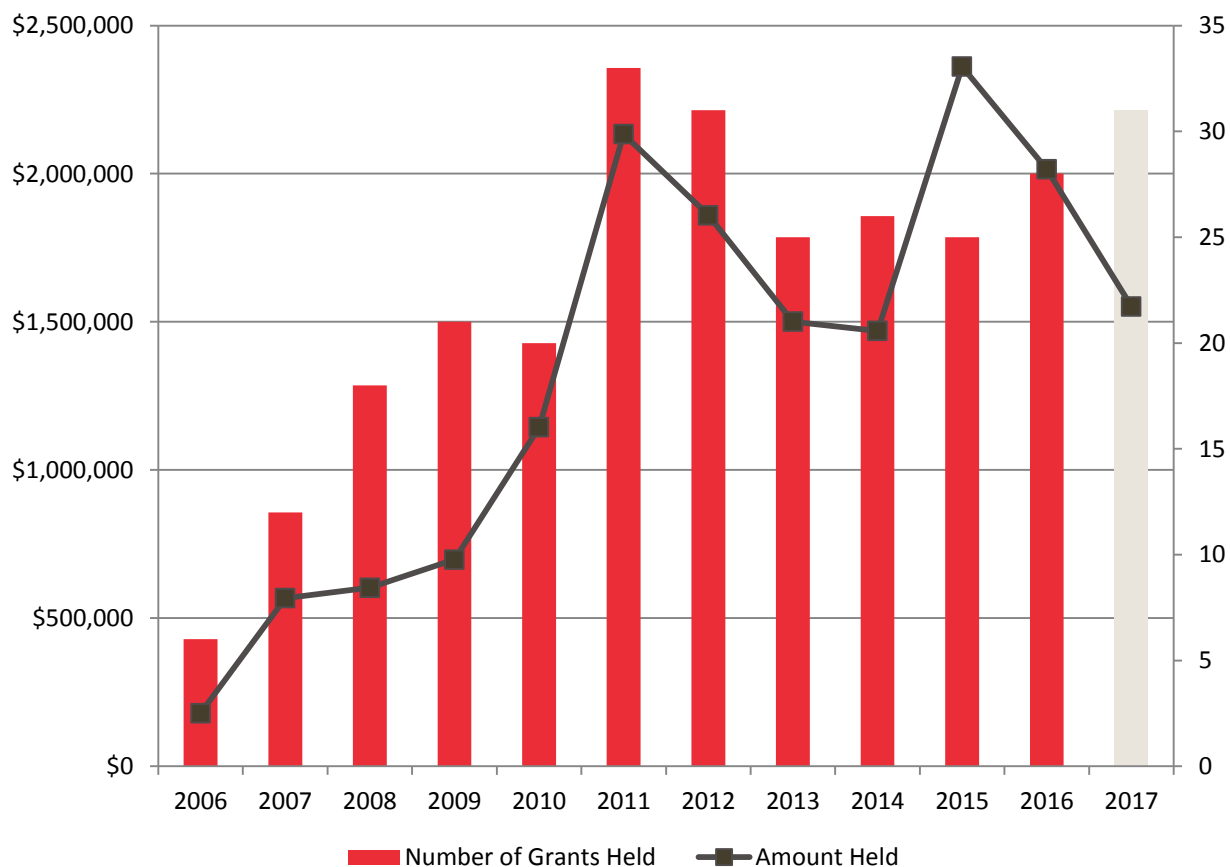


Figure 4: Number of grants held and amount of funds held as principal or co-principal investigator (attributed to 2017) by HALO Research Group from 2006 to 2017. Between 2006 and 2017, there was a 417% increase in the number of grants held and a 765% increase in the amount held. Between 2016 and 2017, there was an 11% increase in the number of grants held and a 23% decrease in the amount held.

In recognition of all the great work done by all HALO students and staff (some of which may have occurred outside of HALO) this report includes all publications from 2017.

1. **Adamo KB**, Wilson S, Harvey AL, Grattan KP, Naylor PJ, Temple VA, **Goldfield GS**. Response. *Medicine and Science in Sports & Exercise* 49(1):219-220, 2017.
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3. Alberga AS, Prud'homme D, Sigal RJ, **Goldfield GS**, **Hadjiyannakis S**, Gougeon R, Phillips P, Malcolm J, Wells GA, Doucette S, Ma J, Kenny GP. Does exercise training affect resting metabolic rate in adolescents with obesity. *Applied Physiology, Nutrition and Metabolism* 42(1):15-22, 2017.
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5. **Aubert S**. An overview of scientific-based knowledge on sedentary behaviour among the pediatric population – A conceptual model development. *Interdisciplinary Journal of Health Sciences* 7(1):1-13, 2017.
6. Aucoin J, Ganière C, **Aubert S**, Riviere F, Praznocy C, Vuillemin A, **Tremblay MS**, Duclos M, Thivel D. Results from the first French Report Card on Physical Activity for Children and Adolescents. *Journal of Physical Activity and Health* 14:660-663, 2017.
7. Banks L, Rosenthal S, Manliot C, Fan C-PS, McKillop A, **Longmuir PE**, McCrindle BW. Exercise capacity and self-efficacy are associated with moderate-to-vigorous intensity physical activity in children with congenital heart disease. *Pediatric Cardiology* 38:1206-1214, 2017.
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10. **Cameron JD**, **Chaput JP**, Sjödin AM, **Goldfield GS**. Brain on fire: Incentive salience, hedonic hot spots, dopamine, obesity, and other hunger games. *Annual Review of Nutrition* 37:183-205, 2017.
11. **Carson V**, **Lee E-Y**, Hewitt L, Jennings C, Hunter S, Kuzik N, Stearns JA, Powley Unrau S, **Poitras VJ**, **Gray C**, **Adamo KB**, Janssen I, Okely AD, Spence JC, **Timmons BW**, **Sampson M**, **Tremblay MS**. Systematic review of the relationships between physical activity and health indicators in the early years (aged 0 to 4 years). *BMC Public Health* 17(Suppl 5):854:33-63, 2017.
12. **Carson V**, **Chaput JP**, Janssen I, **Tremblay MS**. Health associations with meeting new 24-hour movement guidelines for Canadian children and youth. *Preventive Medicine* 95:7-13, 2017.
13. **Carson V**, **Tremblay MS**, Chastin SFM. Cross-sectional associations between sleep duration, sedentary time, physical activity and adiposity indicators among Canadian preschool children using compositional analyses. *BMC Public Health* 17(Suppl 5):848:123-131, 2017.
14. **Carson V**, **Barnes J**, LeBlanc CMA, Moreau E, **Tremblay MS**. Increasing Canadian Paediatricians' awareness and use of the new Canadian Physical Activity and Sedentary Behaviour Guidelines for ages 0-17 years. *Paediatrics and Child Health* 22:17-22, 2017.

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17. **Chaput JP, Katzmarzyk PT, Barnes JD, Fogelholm M, Hu G, Kuriyan R, Kurpad A, Lambert EV, Maher C, Maia J, Matsudo V, Olds T, Onywera V, Sarmiento OL, Standage M, Tudor-Locke C, Zhao P, Tremblay MS** for the ISCOLE Research Group. Mid-upper arm circumference as a screening tool for identifying children with obesity: a 12-country study. *Pediatric Obesity* 12:439-445, 2017.
18. **Chaput JP, Wong SL, Michaud I.** Duration and quality of sleep among Canadians aged 18 to 79. *Health Reports* 28:28-33, 2017.
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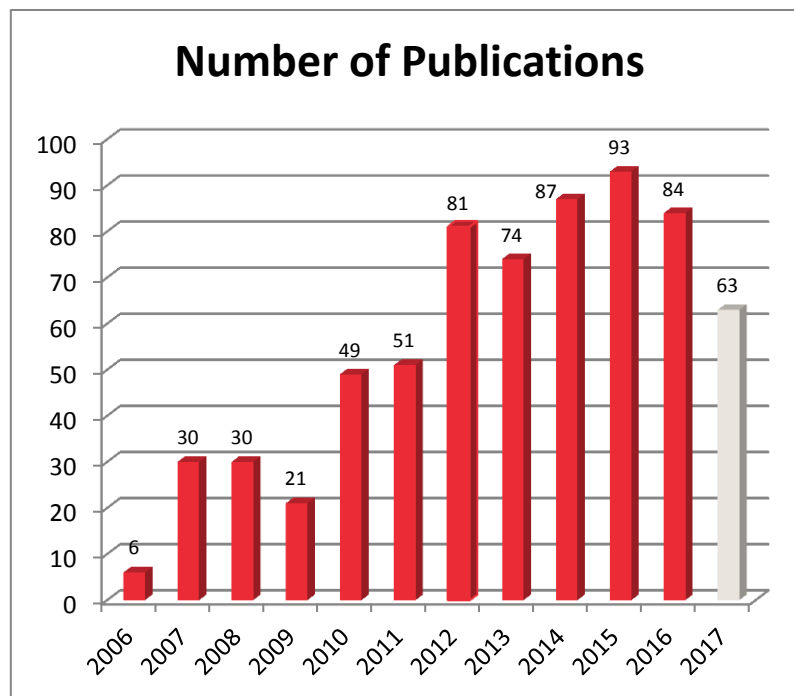


Figure 5: Number of peer-reviewed, refereed publications by HALO Research Group from 2006 to 2017 there was a 950% increase in the number of publications. Between 2016 and 2017, there was a 25% decrease.

NON-PEER REVIEWED PUBLICATIONS

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BOOK CHAPTERS

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65. **Longmuir PE.** Putting Physical Literacy within Recreation, Education, Allied Health, Coaching and Healthcare. *Xinhua Hospital* (Shanghai, China), 2017.
66. **Longmuir PE.** Promoting Physical Activity to Children with Congenital Heart Defects and Their Families. *Xinhua Hospital* (Shanghai, China), 2017.
67. **Longmuir PE.** The Importance of Childhood Physical Activity: Unexpected Reasons for Children's Physical Activity. *Xinhua Hospital* (Shanghai, China), 2017.
68. **Longmuir PE.** Physical Literacy: A Cornerstone for Healthy Living. *Xinhua Hospital* (Shanghai, China), 2017.
69. **Longmuir PE, Alpous A, Lougheed J.** Important Physical Literacy Deficits Among Active Children with Congenital heart Defects: Self-Perceived Sedentary Lifestyles, Limited Muscular Endurance and Slower Performance of Movement Skills. *American Heart Association Scientific Sessions* (Anaheim, USA), 2017.
70. **Longmuir PE.** Introducing the Canadian Assessment of Physical Literacy Second Edition. *Canadian Society for Exercise Physiology* (Winnipeg, Canada), 2017.
71. **Longmuir PE, Sampson M, Ham J, Weekes M, Patel B, Gow R.** The mental health of adolescents living with potentially fatal arrhythmia: A systematic review of the literature. *World Congress of Pediatric Cardiology and Cardiac Surgery* (Barcelona, Spain), 2017.
72. **Longmuir PE, Kung T, Tang K, Yusuf W, Lougheed J.** Weight trajectories are associated with exercise capacity among children with complex congenital heart defects: Does limited growth indicate limited energy for exercise? *World Congress of Pediatric Cardiology and Cardiac Surgery* (Barcelona, Spain), 2017.
73. **Longmuir PE, Lynch L, Yap L-A, Bodiam L, Allison A, McCrindle BW, Wong D.** Promoting physical activity to children with congenital heart defects: Identifying important knowledge translation gaps. *World Congress of Pediatric Cardiology and Cardiac Surgery* (Barcelona, Spain), 2017.
74. **Manyanga T, Chaput JP, Broyles ST, Katzmarzyk PT, Tremblay MS, for the ISCOLE Research Group.** Socioeconomic status and dietary patterns in children from around the world: Different associations by levels of country human development? *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.

75. O'Reilly N, Brunette MK, Deshpande S, Faulkner G, Latimer A, LeBlanc A, Rhodes R, **Tremblay M**, Werman M. Sharing the Culture of Good: Title Sponsorship of Sport Events. *North American Society for the Sociology of Sport Conference* (Windsor, Canada), 2017.
76. **Poitras VJ, Gray CE**, Janssen X, **Aubert S, Carson V**, Faulkner G, **Goldfield GS**, Reilly JJ, **Sampson M, Tremblay MS**. Systematic review of the relationships between sedentary behavior and health indicators in the early years (aged 0-4 years). *Canadian Society for Exercise Physiology Annual Scientific Conference* (Winnipeg, Canada), 2017.
77. Priebe C, **Latimer-Cheung A**, Berry T, O'Reilly N, Rhodes R, Spence J, **Tremblay MS**, and Faulkner G. An evaluation of the ParticipACTION "Make Room for Play" Campaign. *International Play Association Conference* (Calgary, Canada), 2017.
78. Priebe C, **Latimer-Cheung A**, Berry TR, O'Reilly N, Rhodes R, Spence JC, **Tremblay MS**, Faulkner G. An evaluation of the ParticipACTION "Make Room for Play" Campaign. *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.
79. Ramanathan S, Faulkner G, Berry T, Deshpande S, **Latimer-Cheung AE**, Rhodes RE, Spence J, **Tremblay MS**. Perceptions of organizational capacity to promote physical activity in Canada and ParticipACTION's impact five years after its re-launch: A qualitative study. *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.
80. Saunders TJ, MacDonald DJ, Copeland JL, **Longmuir PE, Barnes J, Belanger K**, Bruner B, Gregg MJ, Hall N, Kolen AM, Law B, Martin LJ, Sheehan D, Stone M, Woodruff SJ, **Tremblay MS**. The relationship between sedentary behaviour and physical literacy in Canadian children: an analysis from the RBC-CAPL Learn to Play study. *Canadian Society for Exercise Physiology Annual Scientific Conference* (Winnipeg, Canada), 2017.
81. Saunders T, Altenburg T, **Carson V**, Latimer A, **Aubert S**, Chastin S, Chinapaw, M, **Barnes J, Tremblay M**. SBRN Consensus definitions, caveats and examples. *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.
82. Sheehan DP, Hall N, Scriven J, **Longmuir PE**. Measuring physical literacy: Is it possible? *International Physical Literacy Conference* (Toronto, Canada), 2017.
83. Spence JC, Faulkner G, **Lee EY**, Berry T, Cameron C, Deshpande S, **Latimer-Cheung A**, Rhodes R, **Tremblay MS**. Awareness of ParticipACTION among Canadian adults: A 7-year cross-sectional follow-up. *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.
84. **Tremblay MS**. Canadian 24-Hour Movement Guidelines for the Early Years (0-4 years). *Public Health Ontario Grand Rounds* (Toronto, Canada), 2017.
85. **Tremblay MS**. Parks for Health: Nature and the outdoors as an antidote for modern living. Invited presentation at the *Ontario Parks Staff Conference* (Orillia, Canada), 2017.
86. **Tremblay MS**. The Whole Day Matters – an integrated approach to healthy movement behaviours and a good night's sleep. Invited presentation at the *Manitoba Nutrition Forum* (Winnipeg, Canada), 2017.
87. **Tremblay MS**. History of the Report Card Project and the Active Healthy Kids Global Alliance. Invited presentation to the *United States Report Card on Physical Activity for Children and Youth Research Advisory Committee* (Baton Rouge, USA), 2017.
88. **Tremblay MS**. Active Healthy Kids Global Alliance: Global Matrix Initiative. Invited presentation at the *10th Anniversary Pennington Biomedical Research Center Childhood Obesity and Public Health Conference: Making the Grade – impact of public health report cards on physical activity and obesity* (Baton Rouge, USA), 2017.
89. **Tremblay MS**. Life course approaches for healthy active living: making a case to start early. *Council for Healthy Active Living Symposium, Conference Board of Canada* (Ottawa, Canada), 2017.

90. **Tremblay MS.** Introduction to the Canadian Assessment of Physical Literacy. Symposium presentation at the *Canadian Society for Exercise Physiology Annual Scientific Conference* (Winnipeg, Canada), 2017.
91. **Tremblay MS.** Physical literacy levels of Canadian children aged 8-12 years. Symposium presentation at the *Canadian Society for Exercise Physiology Annual Scientific Conference* (Winnipeg, Canada), 2017.
92. **Tremblay MS, Lang JJ, Larouche R.** Associations between physical fitness and health among school-aged youth: an analysis using the Canadian Health Measures Survey. *Pediatric Work Physiology Meeting XXX* (Katerini, Greece), 2017.
93. **Tremblay MS.** Innovation, technology and childhood healthy active living: moving forward by looking back. Invited keynote address at the *German Association of Sports Science Conference: Innovation & Technology in Sport* (Munich, Germany), 2017.
94. **Tremblay MS.** Making movement a movement: where does physical literacy fit in? Invited keynote address at the *Active Body, Active Mind! Physical Literacy Summit* (North Bay, Canada), 2017.
95. **Tremblay MS.** Trails for Health: Nature and the outdoors as an antidote for modern living. Invited presentation to the *Trans Canada Trail Partner Network Meeting* (Ottawa, Canada), 2017.
96. **Tremblay MS.** The role of the Sedentary Behaviour Research Network (SBRN) in promoting consensus definitions of key terms. Symposium presentation at the *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.
97. **Tremblay MS.** Global Matrix 2.0: Report Card Grades on the Physical Activity of Children and Youth in 38 Countries: setting the scene. Symposium presentation at the *International Society for Behavioral Nutrition and Physical Activity Annual Conference* (Victoria, Canada), 2017.
98. **Tremblay MS.** Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Symposium presentation at *Public Health 2017* (Halifax, Canada), 2017.
99. **Tremblay MS.** Are accelerometers the answer for national surveillance of physical activity? YES! Colloquium debate at the *American College of Sports Medicine Annual Conference* (Denver, USA), 2017.
100. **Tremblay MS.** Global Matrix 2.0: International Results on Childhood Physical Activity from 38 Countries. Invited presentation at the *Universidade Pedagógica* (Maputo, Mozambique), 2017.
101. **Tremblay MS.** Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Invited presentation at the *Canadian Obesity Summit* (Banff, Canada), 2017.
102. **Tremblay MS.** Making Movement and Movement: A contemporary imperative. Invited keynote address at the *Jersey Sport Foundation Conference 2017* (Jersey, U.K.), 2017.
103. **Tremblay MS.** Global Matrix 2.0: International results from 38 countries. Invited presentation at the release of the *Mexican Report Card on the Physical Activity of Children and Youth* (Guadalajara, Mexico), 2017.
104. **Tremblay MS.** Global Matrix 2.0: International results on childhood active transportation from 38 countries. Invited presentation at *II Foro Universitario en Actividad Física y Salud: Movilidad urbana no motorizada / ciclovías* (Guadalajara, Mexico), 2017.
105. **Tremblay MS.** Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. *Pediatric Grand Rounds Children's Hospital of Eastern Ontario* (Ottawa, Canada), 2017.
106. **Tremblay MS.** Parks for Health: Nature and the outdoors as an antidote for modern living. Invited keynote address at the *Canadian Parks Conference* (Banff, Canada), 2017.

107. **Tremblay MS.** Canadian Health Measures Survey: A personal journey from conception to policy impact. Invited presentation at the *Canadian Research Data Centre Network: South Western Research Data Centre Seminar Series* (Waterloo, Canada), 2017.
108. **Valois, DD,** Davis, CG, **Goldfield, GS.** Weight teasing and body esteem in youth with overweight and obesity: An investigation of protective factors. *Psychology Graduate Student Conference (PGSC) at Carleton University* (Ottawa, Canada), 2017.
109. Wasenius N, Harvey AL, Grattan KP, Barrowman N, **Goldfield GS, Adamo KB.** Is there a relationship between maternal gestational weight gain and offspring fundamental motor skills? *DOHaD 2017 – Life Course Health & Disease: Observations, experiments and interventions* (Rotterdam, the Netherlands), 2017.

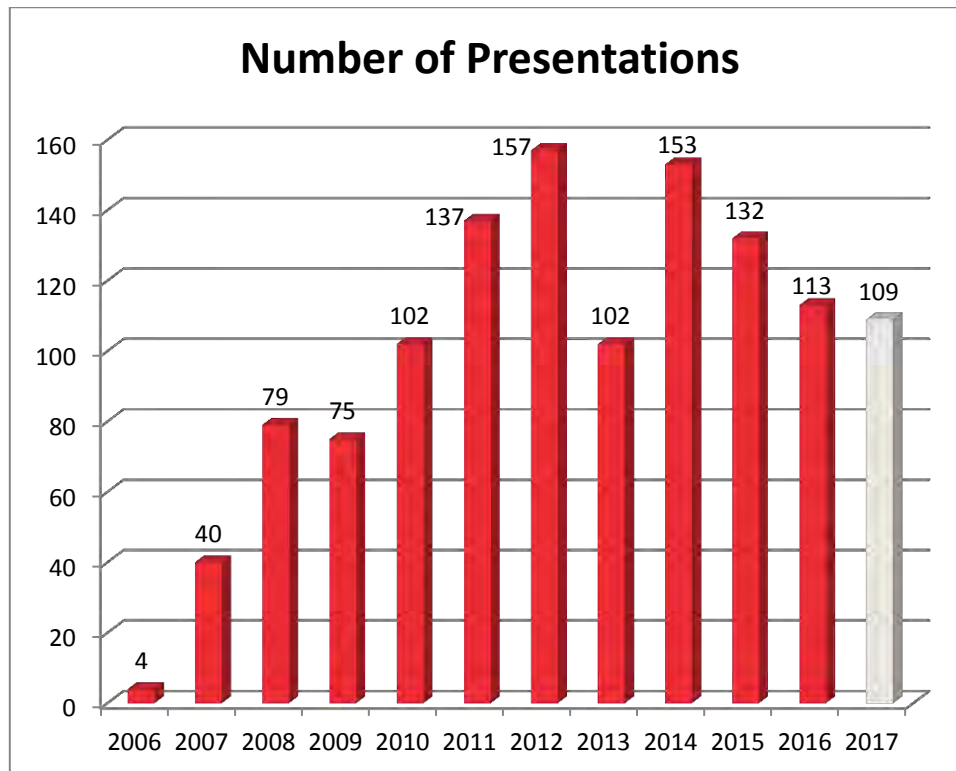


Figure 6: Number of scholarly presentations by HALO Research Group from 2006 to 2017. Between 2006 and 2017, there was a 2625% increase in the number of scholarly presentations; between 2016 and 2017, there was a 4% decrease.

MEMORANDA OF UNDERSTANDING

To facilitate research and collaboration, HALO has developed a memoranda of understanding with the following organizations/institutions:

- University of Ottawa and the State University of Maringá, Maringá, Brazil
- HALO-CHEO RI and Pennington Biomedical Research Centre, Baton Rouge, LA, USA
- HALO-CHEO RI and Kenyatta University, Nairobi, Kenya
- HALO-CHEO RI and University of Copenhagen, Copenhagen, Denmark
- HALO-CHEO RI and University of Wollongong
- HALO-CHEO RI and Research Center of Sports and Physical Activity - Pedagogic University Mozambique

STRATEGIC PARTNERSHIPS

The Healthy Active Living and Obesity Research Group is honoured to have the following organizations as strategic partners:

- Active Healthy Kids Global Alliance
- Alberta Centre for Active Living
- Canadian Fitness and Lifestyle Research Institute
- Canadian Obesity Network
- Canadian Society for Exercise Physiology
- Carleton University
- Champlain Cardiovascular Disease Prevention Network
- CHEO Foundation
- CHEO Research Institute
- Child and Nature Alliance of Canada
- Forest Schools Canada
- Health Analysis Division, Statistics Canada
- Health Nexus: Best Start Resource Centre
- Kenyatta University
- KidActive
- Kids Brain Health Network
- Nature Canada
- Ottawa Public Health
- ParticipACTION
- Pennington Biomedical Research Centre
- Sedentary Behaviour Research Network
- State University of Maringá
- The Lawson Foundation
- “The Moblees”
- The Ottawa Hospital
- University of Copenhagen
- University of Ottawa
- University of Ottawa Institute of Mental Health Research
- YMCA/YWCA of the National Capital Region





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