HEALTHY ACTIVE LIVING & OBESITY RESEARCH GROUP

2019 ANNUAL REPORT





TABLE OF CONTENTS

TABLE OF CONTENTS	1
WELCOME FROM THE DIRECTOR	1
ABOUT HALO	2
Our History and Impact	2
Our Vision	
Our Mission	3
Our Lines of Business	3
Research	
Leadership	
Training and Education	
Knowledge Translation	
Partnership	
Advocacy	
DR. JEAN-PHILIPPE CHAPUT	
DR. GARY GOLDFIELD	
DR. PAT LONGMUIR	6
DR. MARK TREMBLAY	7
HALO STAFF	8
GRADUATE STUDENTS	13
POST-DOCTORAL FELLOWS	18
HALO CLINICAL ASSOCIATES	19
AFFILIATE INVESTIGATORS	20
WHERE ARE THEY NOW – 2019 UPDATES FROM FORMER HALO'ITES	23
VISITORS AND INVITED SPEAKERS	26
STUDENTS AND VOLUNTEERS	27
HALO PHOTO GALLERY	29
2019 HALO HIGHLIGHTS	34
SCIENTIFIC SINKHOLE: THE PERNICIOUS PRICE OF FORMATTING	34
EFFECTS OF REDUCING SOCIAL MEDIA ON EMOTIONAL DISTRESS IN YOUTH	35
LAUNCH OF OUTDOOR PLAY CANADA!	36
PHYSICAL ACTIVITY AND MENTAL ILLNESS	37
ADOLESCENT BRAIN COGNITIVE DEVELOPMENT (ABCD) STUDY	
HALO'S WEB PRESENCE	
SEDENTARY BEHAVIOUR RESEARCH NETWORK	40
STAFF AWARDS	41
POST-DOCTORAL FELLOW, STUDENT FUNDING, SCHOLARSHIPS AND AWARDS	41
SUMMARY OF RESEARCH FUNDING AND GRANTS	42
DEER-REVIEWED REFEREED DURI ICATIONS	45

NON-PEER REVIEWED PUBLICATIONS	51
300K CHAPTERS	51
CONFERENCES AND INVITED PRESENTATIONS	52
MEMORANDA OF UNDERSTANDING	
STRATEGIC PARTNERSHIPS	
CONTACT US (STAFF LIST AS OF MARCH 31, 2020)	62

ACKNOWLEDGEMENT: Very special thanks to recent HALO PhD graduate Dr. Salomé Aubert who provided the original artwork for the front cover of the 2019 HALO Annual Report. You can find more of her work at www.salomeaubert.threadless.com.



WELCOME FROM THE DIRECTOR



The Healthy Active Living and Obesity Research Group (HALO) at the Children's Hospital of Eastern Ontario (CHEO) Research Institute is pleased to present its 13th Annual Report. HALO had another successful and productive year in 2019, continuing our commitment to improve the health and well-being of children and youth in Ottawa, Ontario, across Canada, and around the world.

HALO saw significant changes in staff in 2019; notably the loss of longtime HALOites Joel Barnes and Hélène Larocque who both moved on to other positions, and are missed. It was also a big year for students with four MSc (Ryan Featherstone, Kaamel Hafizi, Tyler Kung, Jackie

Lee) and two PhD students (Salomé Aubert, Taru Manyanga) graduating. We welcomed new staff and students to maintain our compliment as you will see in this report. The reach and impact of the HALO extended family continues to grow and our alumni continue to help change the world – please see their updates and achievements in the "where are they now" section. Several more HALOite babies were also welcomed into the world in 2019 (see Photo Gallery).

HALO researchers published many scientific papers, in many of the highest impact journals, and with significant global media attention – our work matters! HALO scientists, staff, students, and visitors made scholarly presentations around the world, around Canada, around Ontario, and around Ottawa. As summarized in the "Highlights" section of the Annual Report, HALO had several notable achievements in 2019. These included the official launch of Outdoor Play Canada, important studies on the impact of physical activity and screen time on mental and emotional health, high impact papers from the ABCD dataset, and an insightful project on the pernicious price of formatting in scientific publishing. Please also see the extensive list of awards HALOites received in 2019!

In 2019 HALO welcomed visitors and trainees from Brazil, Colombia, Finland, France, New Caledonia, the United States, Uruguay, and Zimbabwe – our international impact continues to grow. We welcomed Drs. Michael Borghese, Justin Lang, Allana LeBlanc, and Jeremy Walsh as Affiliate Investigators with HALO. We continue to benefit from our collaborations with alumni, visitors, and affiliates who all help to propel our mission forward.

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 of HALO in 2019 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 2020!

7

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

ABOUT HALO

Our History and Impact

The Healthy Active Living and Obesity (HALO) Research Group 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 15 staff (including 4 research scientists), a childhood obesity clinical team (Centre for Healthy Active Living), 15 graduate students, trainees, undergraduate students, and many community volunteers.

Some of our practice-changing contributions include:

•	Development of the Kenyan International Development Study – Canadian Activity Needs Research Alliance (KIDS-CAN)	Creation of the Centre for Healthy Active Living (CHAL)
•	Development of the Canadian Assessment of Physical Literacy (CAPL) and CAPL-2	 Development of the Canadian Physical Activity Guidelines and Canadian Sedentary Behaviour Guidelines
ŀ	Development of the Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep - a world first	 Development of Canadian 24-Hour Movement Guidelines for the Early Years: An Integration of Physical Activity, Sedentary Behaviour, and Sleep - a world first
•	Creation of the Sedentary Behaviour Research Network (SBRN)	 Development of the Active Healthy Kids Canada Position Stand on Active Video Games for Children and Youth
•	Contribution to the development of the Canadian Obesity Network's (CON) 5 As of Healthy Pregnancy Weight Gain	 Development of an "Obesity in Preconception and Pregnancy" resource for maternity care providers
•	Creation of the Active Healthy Kids Global Alliance (AHKGA)	 Leadership/contribution to Ottawa Public Health's Childcare Healthy Eating and Active Living Guidelines
•	Position Statement on Active Outdoor Play	Co-creation of the Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth which is now the ParticipACTION Report Card
•	Development of the Edmonton Obesity Staging System for Pediatrics	Co-founders of Outdoor Play Canada
Ŀ	Co-developers of Expert Statement on Physical Activity and Brain Health in Children and Youth	 Development and publication of SBRN Terminology Consensus Project

Since its inception in 2007, HALO has received over \$18 million in research funding; produced more than 850 peer-reviewed publications; has given more than 1400 scholarly presentations locally, nationally and internationally; and secured more than 2 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
- Cross-Appointment, Ph.D. Program in Population Health, University of Ottawa
- Adjunct Research Professor, Department of Health Sciences, Carleton University

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 320 peer-reviewed scientific articles, has an h-index of 50 and >8,000 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 (>180 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

- Academic Editor, PLOS ONE
- Editorial Board Member, IJBNPA
- Editorial Board Member, Nutrition and Diabetes
- Editorial Board Member, Obesity Science and Practice
- Obesity Canada Science Committee Member Population, Public Policy and Health Systems Committee
- Faculty Representative Obesity Canada Students and New Professionals University of Ottawa Chapter
- Member of the WHO's Guideline Development Group for guidelines on physical activity and sedentary behaviour in youth, adults and older adults
- Leadership Committee Member for the development of the Canadian 24-Hour Movement Guidelines for Adults and Older Adults: An Integration of Physical Activity, Sedentary Behaviour, and Sleep
- 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
- Co-Chair of the Pediatric Committee, Canadian Sleep and Circadian Network
- Reviewer for many scholarly journals and granting agencies
- Senior Management Committee Member, CHEO Research Institute

Graduate Students, Supervision and Training

- Irina Podinic (University of Ottawa) M.Sc. Supervisor (2019-)
- Bruno da Costa (Federal University of Santa Catarina) PhD Co-supervisor (2019)
- Hugues Sampasa-Kanyinga (University of Ottawa) Ph.D. Supervisor (2017-)
- Caroline Dutil (University of Ottawa) Ph.D. Supervisor (2017-)
- Megan Crowe (University of Ottawa) M.Sc. Supervisor (2018-2019)
- Ryan Featherstone (University of Ottawa) M.Sc. Supervisor (2017-2019)
- Claire Johnson (University of Ottawa) Ph.D. Co-supervisor (2015-2019)
- Silvia González (University of Ottawa) Ph.D. Committee (2018-)
- Salomé Aubert (University of Ottawa) Ph.D. Committee (2017-2019)
- Taru Manyanga (University of Ottawa) Ph.D. Committee (2016-2019)
- Olivia Lena Pastore (University of Ottawa) M.Sc. Committee (2019-)
- Rachel Kays (University of PEI) M.Sc. Committee (2018-2019)

- Obesity Canada
- 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

DR. GARY GOLDFIELD



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
- Full Professor, Department of Pediatrics, Faculty of Medicine, University of Ottawa
- · Cross-Appointment, School of Psychology, University of Ottawa
- Cross-Appointment, School of Human Kinetics, University of Ottawa
- · Cross-Appointment, 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 a Full 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 evaluating interests involve pharmacological behavioural and interventions for the treatment and prevention of childhood obesity and related complications. He has published over 122 peer reviewed papers, has an h-index of 32 and >3,691 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
- Member, editorial board of Mental Health of Physical Activity

Graduate Students, Supervision and Training

- Angela Wilson (University of Ottawa) Ph.D. Supervisor (2010-)
- Fatima Mougharbel (University of Ottawa)-Ph.D. Supervisor (2017-)
- Fatme El Amine (University of Ottawa)-Ph.D. Co-Supervisor (2017-2019)
- Salma Mahmoodianfard (University of Ottawa)-Ph.D. Committee (2017-)
 Hugues Sampasa-Kanyinga (University of Ottawa)-Ph.D. Committee (2017-)
- Ryan Featherstone (University of Ottawa) M.Sc. Committee (2017-2019)
- Jane Booth (University of Calgary) M.Sc. Committee (2017-)

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

DR. PAT LONGMUIR



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
- Senior Scientist, Children's Hospital of Eastern Ontario Research Institute
- Associate Professor, Dept. of Pediatrics, Faculty of Medicine, University of Ottawa
- Cross-appointed, Dept of Human Kinetics, University of Ottawa
- Cross-appointed, 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 Senior 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 70 papers and 6 book chapters in the peer-reviewed literature. She has delivered over 180 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, Paediatrics and Child Health, BMC Public Health, American Journal of Cardiology, and PLOS ONE
- Faculty and course development for undergraduate, graduate and postgraduate education courses related to recreation and fitness access, inclusion of people with disabilities, accessibility of natural environments, and accessibility of public rights of way

Trainee Research Supervision and Training

- Angelica Blais (University of Ottawa) Ph.D. candidate (2018-2022)
 Active lifestyles via community sport for children with medical conditions
- Joel Blanchard (University of Ottawa) Ph.D. candidate (2018-2022)
 Motor skill assessment of children/adolescents with(out) medical conditions
- Tyler Kung (University of Ottawa) M.Sc. candidate (2016-2019)
 Exercise capacity and physical activity in cyanotic congenital heart disease
- Jacqueline Lee (University of Ottawa) M.Sc candidate (2017-2019)
 Exercise and executive function in adolescents with mental health problems
- Shikha Saxena (University of Ottawa) Post. Doc Fellow (2018-2019)
- Olivia Lemire, Adam Chubbs-Payne, Julie Leblanc (University of Ottawa) – Faculty of Medicine (2019)
- Elizabeth Thibault (University of Ottawa) Bachelor of Human Kinetics (2019)
- Neya Ramanan (University of Ottawa) Bachelor of Biodmedical Science (2019)

Graduate and Undergraduate Trainee Clinical Supervision and Training

- Alexandre Dam, Sarah DeMarinis, Miranda DiGasparo, Kristen Robertson, Jennifer Vo, Dania Terry, Kaitlin Timmons, Catherine Bourdeau (University of Ottawa) – Bachelor of Human Kinetics (2019)
- Hailey Talbot, Shawn Filion, Theodora Tayi, Carly Bradley (University of Ottawa) – M.HK. Intervention & Counselling (2019)

- North American Society for Paediatric Exercise Medicine
- Canadian Society for Exercise Physiology
- American Heart Association
- American College of Sports Medicine
- North American Federation of Adapted Physical Activity
- Active Living Alliance for Canadians with Disabilities



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 Public Health, University of Toronto
- Adjunct Research Professor in the Department of Health Sciences, Carleton University
- Visiting Professor, Kenyatta University, Nairobi, Kenya
- Visiting Professor, University of Strathclyde, Glasgow, Scotland
- Visiting Professor, Southwest University, Chong Qing, China
- Chief Scientific Officer, ParticipACTION Report Card
- Fellow of the American College of Sports Medicine
- Fellow of the Canadian Society for Exercise Physiology
- Fellow of the Canadian Academy of Health Sciences

Biography

Professor Tremblay is the Director of Healthy Active Living and Obesity Research (HALO) at the CHEO Research Institute and Professor of Pediatrics in the Faculty of Medicine, University of Ottawa. He is a Fellow of the Canadian Society for Exercise Physiology, Fellow of the American College of Sports Medicine, Fellow of the Canadian Academy of Health Sciences and Adjunct/Visiting Professor at five other universities on four continents. Tremblay has published more than 500 scientific papers and book chapters and his published research has been cited >21,000 times according to Scopus. Dr. Tremblay received an honorary doctorate from Nipissing University, the Queen Elizabeth II Diamond Jubilee Medal, the Lawson Foundation 60th Anniversary Award, the Canadian Society for Exercise Physiology Honour Award, the Victor Marchessault Advocacy Award (Canadian Pediatric Society), and the Vic Neufeld Mentorship Award in Global Health Research (Canadian Coalition for Global Health Research for his leadership contributions to healthy active living in Canada and around the world.

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.

- President of the Active Healthy Kids Global Alliance
- Founder of the Sedentary Behaviour Research Network (SBRN)
- Chair and Cofounder of Outdoor Play Canada
- Chief Scientific Officer and spokesperson for the ParticipACTION Report Card on Physical Activity for Children and Youth
- 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
- Invited member of the Australian 24-Hour Movement Guidelines for Children and Young People and the Early Years Guideline Development Groups
- Member of the CIHR College of Reviewers
- Reviewer for many scholarly journals, granting agencies, government documents, 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)
- Dr. Michelle Guerrero (University of Ottawa) PDF Supervisor (2018-2020)
- Dr. Scott Rollo (University of Ottawa) PDF Supervisor (2019-2021)
- Evan Turner (Carleton University) MSC Supervisor (2018-2020)
- Dr. Javier Sayavera (Universidad de la República, Uruguay) Visiting Scholar
- Dr. Laura Pulkki-Råback (University of Helsinki, Finland) Visiting Scholar

- NASPEM
- CSEP
- ACSM
- Obesity Canada
- CPHA
- PHE Canada
- ISPAH
- ISBNPA
- SBRN (Founder)
- African Physical Activity Network
- Int. Physical Literacy Association
- Outdoor Play Canada (Cofounder)



KHEANA BARBEAU completed her Honours Bachelor with a specialization in Psychology at the University of Ottawa in 2016. She is currently a second year Ph. D student in Experimental Psychology at the University of Ottawa, where she conducts research on body image, stress, and eating behaviors at the Human Motivation Laboratory. In 2016, she joined HALO as a Research Assistant where she worked on systematic reviews examining the influence of physical activity and sedentary behavior on child and youth brain health indicators. In 2018, she returned as a Research Assistant to help conduct a scoping review on family indicators and movement behaviors (e.g., physical activity, sedentary behavior, sleep) among children and youth. During her spare time, Kheana facilitates group therapy at the Hopewell Eating Disorder Center in Ottawa and plays an active role in updating and adjusting their group therapy curriculum manuals. Outside of work, she enjoys traveling, hiking, kayaking, and spending time with friends and family.



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.activehealthykids.org, www.active



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 "Ramping up Neurocognition (RUN): A Randomized Controlled Pilot Trial Examining the Effects of Physical Activity Promotion on Neurocognitive Development in Young Children". Dr. Cameron has also coordinated a now completed regulated 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 weight loss and body weight regulation. New topics of interest include genetic association studies examining the role of dopamine and BDNF in responses to various exercise and clinical interventions.



STEPHANIE CARSON developed a true interest in preventative health after learning about the science of human health and the role lifestyle plays on health outcomes while completing her Bachelor of Health Science at the University of Ottawa. She began to look at physical activity, nutrition and healthy living as an investment, a proactive solution that can help reduce the burden of chronic lifestyle-related diseases and ultimately help improve quality of life. She moved on to pursue a Master of Science in Human Health and Nutritional Science at the University of Guelph. After completing her graduate degree she began working as a Clinical Researcher with the Ottawa Hospital Research Institute where she gained experience over the years as a Research Assistant, a Research Coordinator and a Research Manager. Stephanie was working under Mark Tremblay as a Research Coordinator working on various projects including the SUNRISE Pilot Study and the Forest and Nature School Study. She was also working with the Outdoor Play Canada Leadership Group, the Child and Nature Alliance of Canada, and ParticipACTION. Stephanie loves to be active, warm weather, farmers markets and a fresh day planner. She is a very passionate health and wellness advocate who aims to inspire others in the community to live a healthy lifestyle. Stephanie left HALO in 2019 to join the Canadian Institutes of Health Research as an initiative officer.



NATASHA CINANNI graduated from the 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 being involved in helping children with varying medical conditions and diseases safely increase their levels of physical activity. With her love for children, motor development and physical activity, Natasha passionately works on the LIFE study here at CHEO. Working under the supervision of Pat Longmuir, she helps coordinate an array of projects and assists with grant applications. Through the British Association of Teachers of Dancing, Natasha is a certified dance instructor. Natasha continues to be an active member of BATD by teaching at The Cumbrae School of Dancing. 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. Outside of work Natasha enjoys being Amara's mom!



LINDSAY CROMPTON is a research coordinator with the HALO group, working with Dr. Mark Tremblay's team. Lindsay has a BSc from the University of Manitoba, an MPA from Queen's University and a MSc from the London School of Hygiene and Tropical Medicine. At HALO, Lindsay is involved with Outdoor Play Canada; the Play, Learn and Teach Outdoors Network; and conducting scoping reviews on outdoor play terminology and the impact of family dynamics on the 24-hour movement behaviours of children and youth. Prior to joining HALO, Lindsay helped lead a cross-sectional study on non-communicable diseases and mental health in rural Haiti and managed several large-scale international development projects in Africa and Asia. Outside of work, Lindsay enjoys running, boxing, yoga and traveling. She is also a food enthusiast and loves trying new recipes and restaurants.



IRYNA DEMCHENKO joined HALO in June 2019 as a Research Coordinator for Dr. Mark Tremblay's team. She has been primarily involved in projects aimed at enhancing physical activity in children and youth in Canada and around the globe with the Active Healthy Kids Global Alliance. She has also contributed to the Sedentary Behaviour Research Network's initiatives by helping to disseminate research on the health impact of sedentary behaviour to the academic community, health professionals and the public at large. Prior to beginning her work at HALO, Iryna graduated from Carleton University with an MSc after completing the "Health: Science, Technology and Policy" program in 2019. Before starting her career in Canada, Iryna obtained a Medical Doctor Degree in Ukraine and carried out 10+ years of clinical work as an otolaryngologist. Outside of work, Iryna enjoys being active outdoors, travelling around the world and spending time with her husband and two kids.



MEGAN FORSE completed her Bachelor in Science with a specialization in Life Sciences at Queen's University in 2018. In 2016 she joined the HALO team as a summer student and returned in 2018 as a Research Assistant where worked on projects including the SUNRISE Study and the Forest and Nature School Study. Megan is returned to school in 2019 to complete her MBA at Dalhousie University with a specific interest in consulting and finance. Outside of work, Megan enjoys hiking, yoga, going to the gym and traveling with friends and family.



KAAMEL HAFIZI completed his Honours BSc. In Human Kinetics in 2015 at the University of Ottawa. He then moved on to complete his MSc in Human Kinetics in 2019 focusing on the impact of Methylphenidate (Ritalin) on Energy Expenditure in youth and adults with obesity. Kaamel has been with HALO since September of 2016 and recently re-joined the team as a Research Coordinator, working on the Ramping Up Neurocognition (RUN) project among others. Kaamel's experience working on a Health Canada regulated clinical drug trial, alongside his work on intervention based studies have created a strong desire to further intervention based research. Outside of his work at HALO, Kaamel enjoys being active playing basketball, resistance training and participating in recreation sports.



HÉLÈNE LAROCQUE obtained her Certification as an Administrative Professional — with additional certifications in Organizational Management (November 2009), Microsoft Office Specialist (May 2013) and Technology Applications (September 2014) through the International Association of Administrative Professionals. She provided administrative, human resource and financial services assistance to the Director and the HALO team (since November 2010). She is a volunteer board member with the Ottawa branch of the Association of Administrative Professionals and is an active volunteer within CHEO as the Staff Forum Co-Chair. Beyond her role with HALO, Hélène's passion and interest for walking the HALO talk is evident as she launched the Staff Forum Fit & Well Group (formerly Fit Club) organizing weekly walking group meetings and monthly Lunch and Learn sessions focused on healthy living. In 2019, she obtained her Certification as a Wellness Coach with the International Association of Wellness Professionals. Hélène left HALO in October 2019 to secure a permanent full time position at CHEO with the Division of Child and Youth Protection.



SOPHIA ROUBOS completed her BSc. in Kinesiology in 2016 at Queen's University. She then moved to Ottawa and completed her MSc. in Human Kinetics in 2018, where her thesis focused on the influence of exercise during weight loss on muscle remodeling. In June of 2018, Sophia joined the HALO team as a research assistant, coordinating the Access ON project. Outside of her work at HALO Sophia enjoys being active through Olympic weightlifting and CrossFit.



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 Physical Activity ToolKit study which examines the impact of enhanced physical activity support in clinical care for youth 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.

Number of FTE

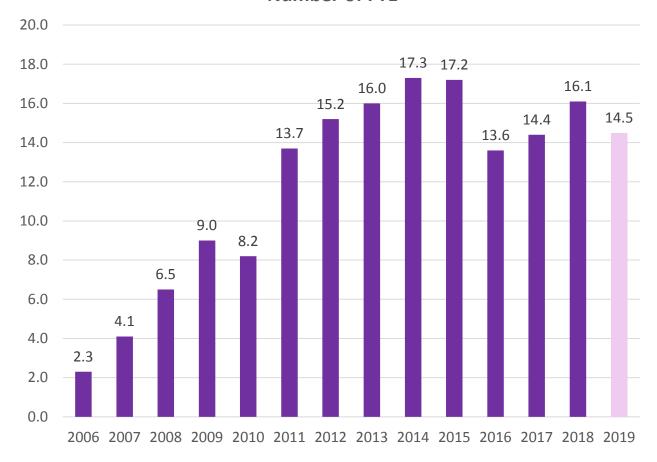


Figure 1: Trends in number of Full Time Equivalent (FTE) positions with the HALO Research Group.



GRADUATE STUDENTS

HALO proudly displays the names of students who have completed their degree on a plaque in the main office. In 2019, the following 6 students were added to the plaque (for a total of 34 to date):

- Tyler Kung M.Sc.
- Jaqueline Lee M.Sc.
- Kaamel Hafizi M.Sc.
- Taru Manyanga Ph.D.
- Ryan Featherstone M.Sc.
- Salomé Aubert Ph.D.





SALOMÉ AUBERT Ph.D. Candidate

Supervisor: Dr. Mark Tremblay

Research Program: Ph.D. Population Health, University of Ottawa

Dissertation Topic: Active Healthy Kids Global Alliance "Global Matrix" Initiative: Process, Results, Impact and Evaluation



ANGELICA BLAIS

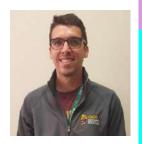
Supervisor: Dr. Pat Longmuir

Research Program: Ph.D. Human Kinetics, University of Ottawa

Ph.D. Student

Thesis Topic:Developing Physical Literacy while Living with a Chronic Medical Condition: The Pediatric Perspective.

HALO ANNUAL REPORT 2019 13 CHEO – RESEARCH INSTITUTE



JOËL BLANCHARD

Supervisor:

Research Program:

Thesis Topic:

Ph.D. Student

Dr. Pat Longmuir

Ph.D. Human Kinetics, University of Ottawa

Moderate to Severe Congenital Heart Disease and the Canadian Agility and Movement Skill Assessment (CAMSA): the impact of physical activity and deep hypothermic circulatory arrest on motor skills development



CAROLINE DUTIL

Supervisor:

Research Program:

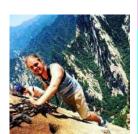
Thesis Topic:

Ph.D. Candidate

Dr. Jean-Philippe Chaput and Dr. Anthony Carlsen

Ph.D. Human Kinetics, University of Ottawa

Sleep Manipulation in Adolescents at Risk of Type 2 Diabetes (SMART2D) study



RYAN FEATHERSTONE

Supervisor:

Research Program:

Thesis Topic:

M.Sc. Candidate

Dr. Jean-Philippe Chaput

M.Sc. Human Kinetics, University of Ottawa

Effect of a sleep intervention on mental health problems of adolescents who are at risk for type 2 diabetes mellitus.



SILVIA GONZÁLEZ

Supervisor:

Research Program:

Dissertation Topic:

Ph.D. Candidate

Dr. Mark Tremblay

Ph.D. Epidemiology, University of Ottawa

Physical activity and sedentary behaviours among Colombian children and youth: Patterns, correlates and international comparisons.



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.



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.



TARU MANYANGA

Ph.D. Candidate

Supervisor:

Dr. Mark Tremblay

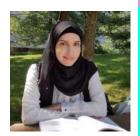
Research Program:

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.



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.



IRINA PODINIC

M.Sc. Candidate

Supervisor:

Dr. Jean-Philippe Chaput

Research Program:

M.Sc. in Epidemiology and Public Health

Dissertation Topic:

Sleep duration and cognitive performance in adolescents with type

2 diabetes and those without.



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.



EVAN TURNER

M.Sc. Candidate

Supervisor:

Dr. Mark Tremblay

Research Program:

M.Sc. Health Sciences, Carleton University

Dissertation Topic:

SUNRISE Pilot Study: Canadian Surveillance Study of Movement

Behaviours in the Early Years



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.

Number of Students

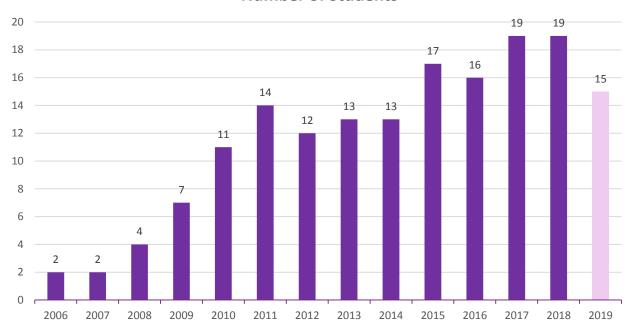


Figure 2: Trend in number of graduate students in the HALO Research Group.





DR. MICHELLE GUERRERO is a postdoctoral fellow with the HALO group. Her main research interests include: (a) children's outdoor play and learning, (b) disability sport and exercise, and (c) the promotion of healthy living via psychological techniques. To date, she has published 25 peer-reviewed journal articles and book chapters and delivered 38 scholarly presentations. Dr. Guerrero was one of two winners of the 2017-18 Governor General's Gold Medals at the University of Windsor in recognition of her academic excellence at the graduate level. Dr. Guerrero's primary research project at HALO focuses on the examination of the Forest and Nature School early childhood education program and its effect on physical, psychosocial, and cognitive outcomes. Outside of work, Michelle enjoys standup paddle boarding, yoga, boating, hiking, and travelling. She is an enthusiast of podcasts, music, coffee, and Netflix documentaries. She thinks she can sing and dance, and aspires to be Beyoncé.



DR. SCOTT ROLLO joined the HALO Research Group as a postdoctoral fellow in October 2019 after completing his PhD in Kinesiology at The University of Western Ontario in London, ON. His main research interests include: (a) correlates and determinants of sedentary behaviour, (b) theory-driven behaviour change interventions targeting sedentary behaviour and physical activity, and (c) 24-hour movement behaviours and their associations with health and well-being across the lifespan. To date, he has published 11 peer-reviewed journal articles and book chapters and delivered 16 scholarly presentations. Dr. Rollo's main research projects at HALO will focus on the examination of relationships between 24-hour movement behaviours and health indicators, as well as temporal trends in compliance with the 24-hour movement guidelines among Canadians. Outside of work, Scott can be found spending time with his wife, son, and cat, engaging in physical activity, exercising at the gym, playing hockey, and hiking. He also enjoys travelling, camping, snowboarding, good food & drink, and time spent with friends and family.



DR. SHIKHA SAXENA is a postdoctoral fellow with the HALO group. She is a physiotherapist by training and completed her PhD in Rehabilitation Science at McGill University, Montreal, QC. Her main research interests are to improve physical functioning in children with disabilities by using a combination of clinical and knowledge translation approaches. Her current project aims at exploring the perspectives of health and community professionals towards using physical literacy programs for children with disabilities across Canada. While at HALO, she also worked on another project that measured the physical literacy levels of children with medical conditions using the Canadian Assessment of Physical Literacy. Outside of research, she enjoys listening music, hiking, playing with her dog and spending time with family and friends.

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 Investigator
School of Human Kinetics
Faculty of Health Sciences, University of Ottawa
Ottawa, ON



DR . MICHAEL BORGHESE
Epidemiologist
Environmental Health, Science and Research Bureau
Health Canada
Ottawa, ON



DR. VALERIE CARSON
Associate Professor
Faculty of Kinesiology, Sport, and Recreation
University of Alberta
Edmonton, AB



DR. RACHEL COLLEY
Senior Research Analyst, 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



DR. JUSTIN LANG
 Epidemiologist/Biostatistician
 Applied Research Division, Health Promotion and Chronic Disease Prevention Branch
 Public Health Agency of Canada
 Ottawa, ON



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



DR. ALLANA LEBLANC

Epidemiologist/Biostatistician

Global Health and Guidelines Division, Health Promotion and Chronic Disease Prevention

Branch

Public Health Agency of Canada

Ottawa, ON



*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



DR. JEREMY WALSH
Michael Smith Foundation for Health Research Post-Doctoral Fellow
Exercise Metabolism and Inflammation Laboratory (EMIL)
School of Health and Exercise Sciences
The University of British Columbia
Okanagan, AB



WHERE ARE THEY NOW - 2019 UPDATES FROM FORMER HALO'ITES

STACEY ALPOUS (2012-2016) has worked at the Canadian Institutes of Health Research (CIHR) since 2016, first as a Policy Analyst and now as a Performance Analyst. She is the proud Mom of her son, Isaac and black lab, Tof. She is very thankful for the wonderful friendships that stemmed from her time at HALO, which continue to this day!

KEVIN BELANGER (2011-2018) joined the Natural Sciences and Engineering Research Council of Canada (NSERC) as a Program Officer in May 2018. Kevin, along with four other Program Officers, oversees the Research Tools and Instruments Grant program which fosters the discovery, innovation and training capability of university researchers in the natural sciences and engineering by supporting the purchase of research equipment.

PRISCILLA BELANGER (2012-2014) is an Implementation Specialist for the Ottawa Model for Smoking Cessation (OMSC) program at the University of Ottawa Heart Institute, Department of Prevention and Rehabilitation. She facilitates the implementation, evaluation and quality improvement of the OMSC in hospitals and clinics across Ontario and Quebec. She's also a mom to 2 wonderful kiddos!

MICHAEL BORGHESE (2010-2015) completed a PhD in Physical Activity Epidemiology at Queen's University. He now works at Health Canada as an Epidemiologist and studies the effects of prenatal exposure to environmental chemicals on the health of pregnant women and children.

CHARLES BOYER (2011-2014) 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.

PETER BREITHAUPT (2009-2011) 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.

STEPHANIE CARSON JOYCE (2018-2019) is an Initiative Officer at the Canadian Institutes of Health Research in Ottawa.

CYNTHIA K. COLAPINTO (2008-2013) is currently on assignment as a Senior Advisor to the Assistant Deputy Minister of the Healthy Environments and Consumer Safety Branch with Health Canada. Dr. Colapinto was recently selected into the prestigious Health Canada Science Management Development Programme, an accelerated program designed to assist high-performing scientists with senior leadership potential gain the experience and skills required for executive positions. Previously, she was the Senior Advisor to the Director General to the Policy, Planning and Integration Directorate at HECSB and a Senior Scientific Advisor in the Health Products Food Branch, where she led the team responsible for reviewing the evidence that was the foundation for the revision of Canada's Food Guide.

RACHEL COLLEY (2008-2014) is now working as a Senior Research Analyst 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.

ZACH FERRARO (2008-2012) is a resident obstetrical & gynecological surgeon (Ob/Gyn) at the University of Toronto. After completing his PhD with HALO, he completed his postdoctoral fellowship at the Ottawa Hospital Research Institute and his MD at the University of Ottawa. He continues to work as a clinician-investigator in reproductive sciences with a focus on nutrition, physical activity, and weight management in pregnancy. In his spare time he loves cycling, working out, and socializing with friends and family.

AMÉLIE FOURNIER (2013-2015) is currently working full time as a general dentist at Greenstone Dental, in Hearst ON. She has also recently been certified by the University of Toronto to administer moderate oral sedation to patients suffering from anxiety. In September 2019, Amelie received the CDA Student Clinician Research Program Award and was named member of the SCADA for her research entitled Dentist's role when treating people with eating disorders: patients' perspectives. She looks forward to continue finding ways to bring awareness to mental health and help patients in this area.

HALO ANNUAL REPORT 2019 23 CHEO – RESEARCH INSTITUTE

KIMBERLY GRATTAN (2011-2016) 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. At the end of 2018 Kimberly and her husband welcomed their daughter Alice into the world and are loving being active with her as she learns to walk and run. Kimberly continues to stay connected to HALO through her deep-seated friendships and is grateful for the time she spent at HALO.

CASEY GRAY (2013-2018) is a Clinical Research Officer at CADTH (the Canadian Agency for Drugs and Technologies in Health). Casey continues to promote outdoor play at every opportunity and is taking time off this year to get to know baby Harrison.

NINA HEDAYATI (2017) is a PhD student in Psychology (Cognitive Neuroscience field) at Wilfrid Laurier University.

Justin Lang (2013-2018) is an Epidemiologist at the Public Health Agency of Canada in the Applied Research Division. He helps conduct applied research to help inform policy decision making in the areas of mental health, built environment, and healthy living.

HÉLÈNE LAROCQUE (2010-2019) joined the Division of Child and Youth Protection at CHEO in October 2019 in a permanent full time position. Hélène continues to HALO'ize the workplace through her role with the Staff Forum Fit & Well Group and as an independent wellness coach.

ALLANA LEBLANC (2010-2015) is an Epidemiologist with the Global Health and Guidelines Division at the Public Health Agency of Canada. Allana is enjoying being in Ottawa with her family and has taken advantage of being so close to Gatineau Park and the Rideau Canal.

GENEVIÈVE LEDUC (2012-2018) is Programs Senior Advisor for the FitSpirit Foundation whose mission is to help teenage girls be physically active throughout their lives. She is enjoying living in Québec City and taking advantage with her family of the extraordinary amount of snow that covers the city every winter!

EUN-YOUNG LEE (2017-2018) is a tenure-track Assistant Professor in Kinesiology and Health, and Gender Studies (cross-appointed) at Queen's University. As the lead of the In Situ Physical Activity Research Lab (<u>www.insituPA.ca</u>) and a proud ex-HALOite, Young applies social theories into quantitative research methods to better understand how the natural and social environments interact with human behaviour and health. Young is passionate about dogs and being outdoors

HOLLY LIVOCK can still be seen around the halls of the CHEO Research Institute. She has joined the Division of Orthopedic Surgery research team at CHEO. She enjoys her continuing friendships with the HALO group through lunches and the occasional road hockey game!

DANIJELA MARAS (2010-2013) is completing her PhD in Clinical Psychology at the University of Ottawa. Her doctoral research is supported by Mental Health Research Canada and examines group psychotherapy outcomes among adults living with chronic medical conditions at The Ottawa Hospital Rehabilitation Centre. Danijela and her husband, Alex, are keeping busy with their two kiddos: Eliana and Luka.

KEVIN MONCION (2015-2018) is a Dual Degree Physiotherapy and PhD Student in Rehabilitation Sciences at McMaster University. Kevin enjoyed his time at HALO and remains in touch with many HALO'ites.

CLARA MOORE (2017-2018) is a medical student at the University of Toronto. In the future she hopes to continue to promote the importance of healthy, active living across the lifespan.

STELLA K. MUTHURI (2010-2014) now lives in Nairobi, Kenya, and works as a Research Specialist at the East Africa Research Hub of the Research and Evidence Division in the Department of International Development, UK. Stella continues to contribute towards improved options for healthy active living among school-aged children in the country and region. She is thrilled to be living close to her family and friends.

VERONICA POITRAS (2014-2017) Clinical Research Manager at CADTH (the Canadian Agency for Drugs and Technologies in Health). She also serves as a Methodology Consultant in the ongoing development of evidence-based movement behaviour guidelines in partnership with the Canadian Society for Exercise Physiology. Her professional interests range from health promotion and disease prevention through healthy active living, to ensuring that credible, objective evidence informs health care decisions to improve the health of Canadians.

STEPHANIE PRINCE WARE (2008-2011) is a Research Scientist with the Centre for Surveillance and Applied Research at the Public Health Agency of Canada. Her research focuses on the measurement of physical activity and sedentary behaviour, determinants of these health behaviours including factors in the built environment, and health behaviour interventions (including the evaluation of natural experiments). When not at work she is busy playing and coaching hockey and ringette, skiing, leading a local beaver scout group, and spending time with her two sons.

Travis Saunders (2009-2013) is an Associate 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.

KYLIE SCHIBLI (2017-2018) is completing a Master in Social Work and will be graduating in the fall of 2020.

DIEGO SILVA (2017-2018) is an Associate Professor at Federal University of Santa Catarina, Brazil. His research focuses on epidemiology of physical activity, health related physical fitness and body composition in global contexts. He loves beer and soccer!



VISITORS AND INVITED SPEAKERS



DR. JAVIER BRAZO SAYAVERA
Visiting Scholar from Uruguay – July 2019

Dr. Brazo Sayavera is an Associate Professor at the Universidad de la República (UDELAR) in Uruguay. In 2017 he started a new project to promote research in physical activity and health because of the lack of information on this field in Uruguay. Since then he has lead a new research group with the aim of increasing the knowledge related to physical activity and to provide solutions, principally for the Uruguayan population. He is also part of different movements with the same aim but for Latin-American countries. Dr. Brazo Sayavera also led the development of the first AHKGA Report Card in Uruguay in 2018. It was an opportunity to increase his background in research skills and to provide valuable insights to the Uruguayan scientific community.



Dr. LAURA PULKKI-RÅBACK
Visiting Scholar from Finland – May to August 2019

Dr. Pulkki-Råback is a Doctor in Psychology and Senior University Lecturer at the University of Helsinki in Finland. She is working in multi-disciplinary research projects, focusing on the early-life determinants of health outcomes over the lifespan. Her passion is to uncover the mechanisms whereby psychosocial stress affects physical and mental health. Her publications span several psychological, epidemiological and medical journals including Circulation, Health Psychology, American Journal of Preventive Medicine, JAMA Pediatrics and Heart. "I have had the pleasure to spend a research period at the CHEO with wonderful people. During my time at CHEO, I worked together with Dr. Michelle Guerrero, Professor Mark Tremblay and Data Analyst Joel Barnes on the Adolescent Brain and Cognitive Development Data, and collaboration is still ongoing". Currently, she is on 2-year research leave working in a research project on child and youth interventions.





Blacas	Doug	Do o usardo)	Cupen use =
NAME	ROLE	PROJECT(S)	SUPERVISOR
Mohcene Abdessemed	Student	Ramping up neurocognition (RUN): effects of physical activity on cognitive	Dr. Gary Goldfield
		development in kindergarten children	
Emma Avon	Undergraduate Thesis	Physical activity and the brain	Dr. Mark Tremblay Dr. Jeremy Walsh
Catherine Bourdeau	Student	Physical Acitvity 6E	Dr. Pat Longmuir
Alexander Dam	Student	Physical Acitvity 6E	Dr. Pat Longmuir
Sarah DeMarinis	Student	Physical Acitvity 6E	Dr. Pat Longmuir
Miranda DiGasparro	Student	Physical Activity 6N	Dr. Pat Longmuir
Amelia Eaton	Student	SMART2D study	Dr. Jean-Philippe Chaput and Caroline Dutil
Amanda Gagnon	Student	SMART2D study	Dr. Jean-Philippe Chaput and Caroline Dutil
Brandon Heidinger	Volunteer	Ramping up neurocognition (RUN): effects of physical activity on cognitive development in kindergarten children	Dr. Gary Goldfield
Amanda Lien	Student	24-hour guidelines and	Dr. Jean-Philippe
		academic achievement	Chaput
Katie MacAskill	Summer Student	SUNRISE and SBRN	Dr. Michelle Guerrer Dr. Mark Tremblay
Chinyere Okonkwo	Student	SMART2D study	Dr. Jean-Philippe Chaput and Caroline Dutil
Connor O'Reilly	Volunteer	Effects of prenatal smoking on adiposity and metabolism in young children	Dr. Gary Goldfield
Robert Pap	Student	SMART2D	Dr. Jean-Philippe Chaput
Neya Ramanan	Volunteer	LIFE and Health for Children with Congenital Heart Defects	Dr. Pat Longmuir
Kristen Robertson	Student	Physical Activity 6N	Dr. Pat Longmuir
Sophie Rodenburg	Summer Student	SUNRISE and Outdoor Play	Dr. Michelle Guerrer
		Canada	Dr. Mark Tremblay
Christin Sadler	Student	SMART2D study	Dr. Jean-Philippe Chaput and Caroline Dutil
Sean Selbie	Undergraduate Thesis	Ramping Up Neurocognition (RUN): Effects of physical activity on cognitive development in Kindergarten children	Dr. Gary Goldfield
Michelle Sim	Student	SMART2D study	Dr. Jean-Philippe Chaput and Caroline Dutil
Dania Terry	Student	Steps to Success	Dr. Pat Longmuir
Elizabeth Thibault	Student	I Can Play	Dr. Pat Longmuir
Kaitlin Timmons	Student	Physical Activity 6E	Dr. Pat Longmuir
Evan Turner	Summer Student	SUNRISE	Dr. Mark Tremblay

HALO ANNUAL REPORT 2019 27 CHEO – RESEARCH INSTITUTE

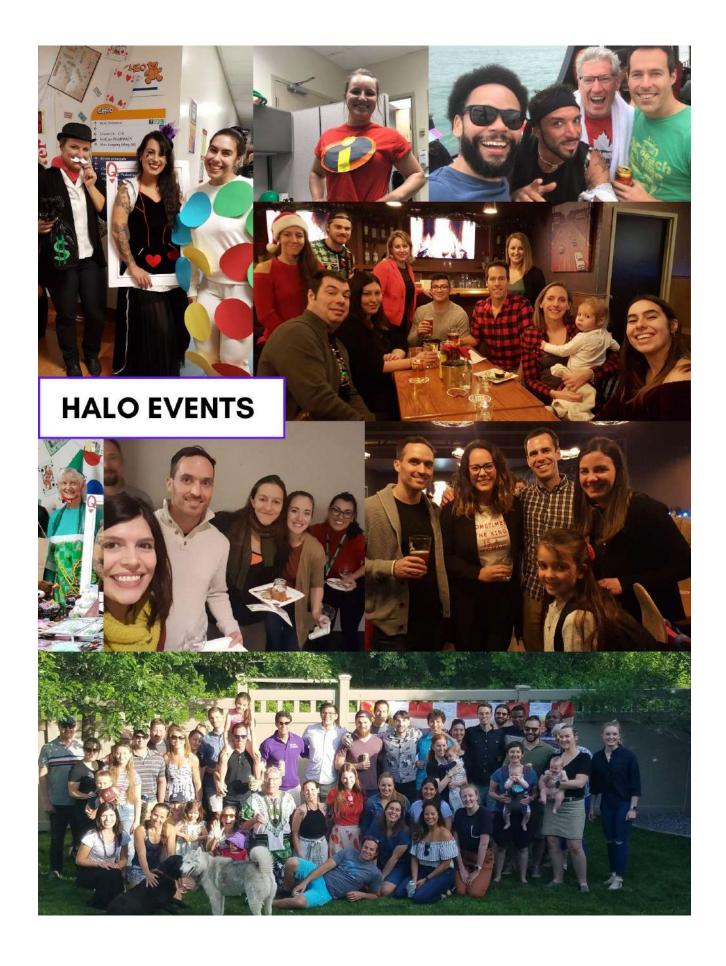
Emi Vargatoth	Summer Student	SBRN and PLaTO-Net	Dr. Michelle Guerrero
			Dr. Mark Tremblay
Jennifer Vo	Student	Steps to Success	Dr. Pat Longmuir
Sarah Zankar	Student	SMART2D study	Dr. Jean-Philippe
			Chaput and Caroline
			Dutil

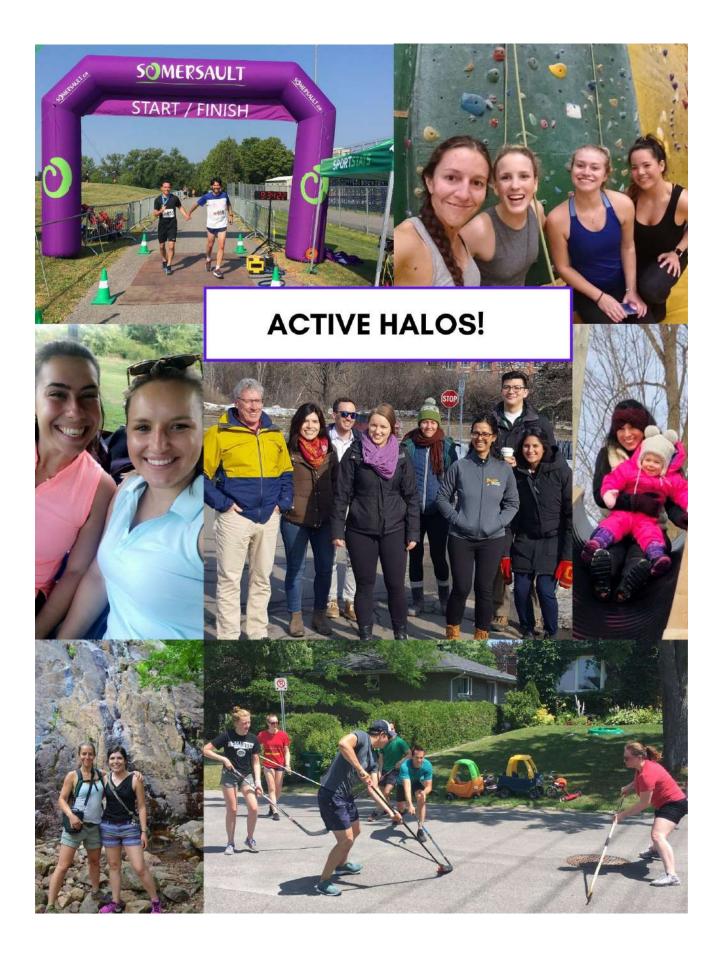












2019 HALO HIGHLIGHTS

SCIENTIFIC SINKHOLE: THE PERNICIOUS PRICE OF FORMATTING

Principal Investigator: Dr. Jean-Philippe Chaput

Objective: To conduct a time-cost analysis of formatting in scientific publishing.

Design: International, cross-sectional study (one-time survey).

Setting: Internet-based self-report survey, live between September 2018 and January 2019.

Participants: Anyone working in research, science, or academia and who submitted at least one peer-reviewed manuscript for consideration for publication in 2017. Completed surveys were available for 372 participants from 41 countries.

Main outcome measure: Time (hours) and cost (wage per hour x time) associated with formatting a research paper for publication in a peer-reviewed academic journal.

Results: The median annual income category was US\$61,000-80,999, and the median number of publications formatted per year was four. Manuscripts required a median of two attempts before they were accepted for publication. The median formatting time was 14 hours per manuscript, or 52 hours per person, per year. This resulted in a median calculated cost of US\$477 per manuscript or US\$1,908 per person, per year.

Conclusions: To our knowledge, this is the first study to analyze the cost of manuscript formatting in scientific publishing. Our results suggest that scientific formatting represents a loss of 52 hours, costing the equivalent of US\$1,908 per researcher per year. These results identify the hidden and pernicious price associated with scientific publishing and provide evidence to advocate for the elimination of strict formatting guidelines, at least prior to acceptance.

Reference: LeBlanc AG, Barnes JD, Saunders TJ, Tremblay MS, Chaput JP. Scientific sinkhole: The pernicious price of formatting. *PLoS ONE* 2019; 14(9): e0223116.

Impact: This paper has an Altmetric score of 1307, putting it in the top 5% of all research outputs scored by Altmetric and in the 99th percentile for Attention Score (over 2300 mentions on Twitter, and covered in 5 news articles in 2019).



EFFECTS OF REDUCING SOCIAL MEDIA ON EMOTIONAL DISTRESS IN YOUTH

Principal Investigator: Dr. Gary Goldfield

Co-Investigators: Davis, C., Chaput, J.P., Barrowman, N., Naul-Briere, F., Cloutier, P., Gray, C., Saunders, T., Cheng, M., Robb, M.

Funding Source: CHEO Research Institute – Research Growth Award

Background: Social media use (SMU) is highly prevalent in youth, with approximately 86% reporting moderate-to-heavy daily use. SMU in youth is associated with poor mental health characterized by depression, suicidality, anxiety and loneliness, with a possible mechanism of upward social comparison. However, virtually all studies have used cross-sectional designs, which limit causal inferences. The lone intervention study, conducted in university undergraduate students, found that reducing SMU to 30 minutes per day for 3-weeks led to significant reductions in depressive symptoms and loneliness, and effects were most pronounced in those with higher distress at baseline. No SMU intervention studies to date have been conducted in youth.

Objectives/Hypotheses: The primary objective examines the effects of reducing SMU on depressive symptoms in youth presenting for mental health treatment. Secondary objectives include examining intervention effects on anxiety and loneliness, as well as assessing feasibility (i.e. recruitment rate, compliance to the intervention, attrition). We predict that participants receiving the SMU reduction intervention will exhibit greater improvements in mental health compared to control participants who have no constraints on SMU, and the study will demonstrate feasibility. Exploratory aims involve examining whether gender, sleep and/or social comparison moderates the relationship between SMU and changes in mental health.

Design: We will utilize a randomized controlled trial (RCT) design, whereby participants will be randomized to either the intervention group consisting of technology-based SMU reduction to a maximum of 30 minutes per day combined with a brief psychoeducation intervention delivered in-person to youth and parents, or to a SMU self-monitoring control group with no limits on SMU. Although all SMU sites will be targeted for reduction, Instagram, Snapchat and Facebook are most prevalent. This 8-week study will consist of one week of baseline monitoring, weeks 2-4 of intervention/control, and weeks 5-8 as a follow-up phase with no constraints on SMU to assess short-term maintenance of treatment effects.

Participants: A convenience sample of 40 patients (20 Intervention, 20 controls) aged 12-15 years who are waitlisted will be recruited from the CHEO Outpatient Mental Health Clinic.

Procedures: Participants with smartphones, and exhibiting symptoms of depression or anxiety and who meet other eligibility criteria will complete questionnaires assessing their depressive symptoms (Child Depression Inventory), anxiety symptoms (Multidimensional Anxiety Scale for Children-2, Fear of Missing Out Scale), loneliness/social isolation (UCLA Loneliness scale), sleep (Children's Sleep Habits Questionnaire), and social comparison (Social Comparison Scale) at baseline, post intervention (week 4), and follow-up (week 8) in the laboratory at CHEO. Participants will be instructed how to use OurPact, a smartphone app that automatically collects SMU and other screen time data, providing objective measures of SMU and compliance.

Significance: This pilot proof of concept study may be the first to demonstrate that reducing SMU can be a feasible, scalable and effective way to improve mental health in a population of youth waitlisted for mental health treatment. As such, it will provide data that are critical to informing a larger RCT that has the potential to informing the treatment and prevention of mental illness in youth.

HALO ANNUAL REPORT 2019 35 CHEO – RESEARCH INSTITUTE





On September 27, 2019, Outdoor Play Canada was launched at the Breath of Fresh Air Outdoor Play Summit hosted at Wesley Clover Parks, in Ottawa. Outdoor Play Canada is a network of advocates, practitioners, researchers and organizations working together to promote, protect, and preserve access to play in nature and the outdoors for all people living in Canada. Outdoor Play Canada provides leadership to galvanize the outdoor play movement across Canada to promote the health and wellness of Canadians and the environments in which we live. Outdoor Play Canada is housed within the HALO group, with Dr. Mark Tremblay as its Chair. The relationship between outdoor play and time in nature, and human, animal and environmental health is an important theme of research in the HALO group.

The goals of Outdoor Play Canada are to:

- To be the unified voice of leadership on outdoor play in Canada.
- To create and maintain an inclusive collaborative network of partners for outdoor play.
- To build knowledge and understanding of the benefits and barriers of outdoor play.
- To develop and share practical tools and resources to promote, provide and facilitate outdoor play.
- To advance policy/system-level change to strengthen support for outdoor play.
- To re-establish habitual outdoor play as a cultural trademark for Canada.
- Please visit the Outdoor Play Canada website to learn more (https://www.outdoorplaycanada.ca).
- The Breath of Fresh Air Outdoor Play Summit (https://outdoorplaysummit.ca) also served as the venue for the first Annual General Meeting of Outdoor Play Canada (see picture beside).



PHYSICAL ACTIVITY AND MENTAL ILLNESS

As many as **1** in **5** children and youth in Ontario will experience some form of mental illness. With these skyrocketing rates, resources to help youth with mental health disorders are extremely limited. Youth hospitalization for mental illness has dramatically increased, with Ottawa wait times being double other provincial regions. 5 out of 6 kids will not receive the treatment they need due to long wait times for counselling. Youth mental distress has also increased in intensity, with rates of suicidal ideation and self-harm emergencies among Ottawa youth doubling since 2015. Therefore, improving the effectiveness and implementation of mental health treatment for youth is a priority in Canadian health care.

The following are **3 projects** in which we aim to help children and youth living with mental illness through physical activity and exercise.



Physical Activity Sessions with Mental Health Patients

Exercise can improve clinical outcomes in people with severe mental illness, yet this population often engages in low levels of physical activity. Dr. Longmuir supervises clinical students who provide physical activity sessions to the children and youth receiving inpatient mental health treatment at CHEO. These activity sessions motivate children and youth to be active and socialize with peers. The sessions also educate participants about the benefits of physical activity for mental health and enhanced well-being. These sessions have been very well received by patients, families and clinicians.



Therapeutic Lifestyle Change

There is compelling evidence that Therapeutic Lifestyle Changes (TLCs) such as good sleep habits, increased physical activity and healthy use of screens, have positive effects on mental health. However, the need for TLC counselling among children and youth experiencing mental distress was unknown. Our retrospective cohort review of the health records of 100 youth (50°) receiving mental health specialist support in Ottawa found that over 90% were counselled about the importance of changing their sleep, physical activity and/or screen time during the 1st or 2nd visit. The development of modules that educate and counsel patients on TLCs could make TLC counselling more readily available, both as an integral part of mental health treatment and to those waiting for specialist support.



Executive Function

Executive function (EF) is a multifaceted construct involving highly interdependent cognitive processes responsible for motivating actions of self-regulation (e.g., inhibitory control) and goal directed action. Since impairments in executive function are more common among those with poor mental health, we studied the impact of a short. intense exercise bout on the executive function of adolescents hospitalized for mental illness. The Colour-Word Stroop Task assessed inhibitory control at 0, 15, and 30-minutes on two days, one day that included exercise and the other that included only rest. The exercise was a 12-minute high intensity interval circuit of body weight exercises. Inhibitory control was significantly better after exercise compared to the resting condition, suggesting that acute exercise may enhance treatment efficacy for adolescents with mental illness.

Cotrena C, Damiani L, Milman F, Paz R. Executive function impairments in depression and bipolar disorder: association with functional impairment and quality of life. *J Affect Disord*. 2016;190:744-753. doi:10.1016/j.jad.2015.11.007.

Firth, J., Rosenbaum, S., Stubbs, B., Gorczynski, P., Yung, A. R., & Vancampfort, D. (2016). Motivating factors and barriers towards exercise in severe mental illness: a systematic review and meta-analysis. *Psychological medicine*, 46(14), 2869–2881. https://doi.org/10.1017/S0033291716001732

Jacqueline S. Lee, Addo Boafo, Stephanie Greenham, Patricia E. Longmuir, The effect of high-intensity interval training on inhibitory control in adolescents hospitalized for a mental illness, Mental Health and Physical Activity, Volume 17, 2019, 100298, ISSN 1755-2966. https://doi.org/10.1016/j.mhpa.2019.100298.

McTeague LM, Goodkind MS, Etkin A. Transdiagnostic impairment of cognitive control in mental illness. *J Psychiatr Res.* 2016;83:37-46. doi:10.1016/j.jpsychires.2016.08.001.

Scott D, Hons BHM, Happell B. The High Prevalence of Poor Physical Health and Unhealthy Lifestyle Behaviours in Individuals with Severe Mental Illness. 2011:589-597. doi:10.3109/01612840.2011.569846

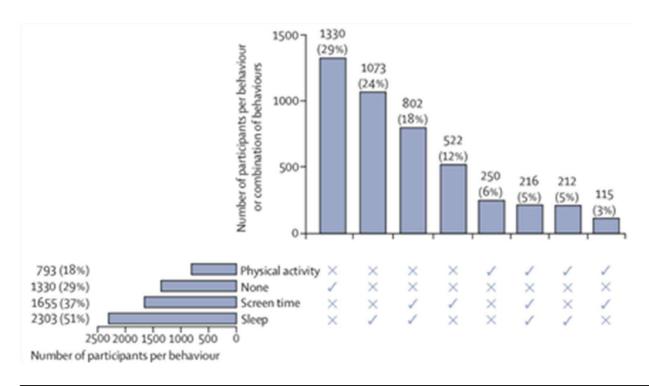
Snyder HR, Miyake A, Hankin BL. Advancing understanding of executive function impairments and psychopathology: bridging the gap between clinical and cognitive approaches. Front Psychol. 2015;6:328. doi:10.3389/fpsyg.2015.00328

Walsh R. (2011). Lifestyle and mental health. American Psychologist, 66(7): 579 -592

ADOLESCENT BRAIN COGNITIVE DEVELOPMENT (ABCD) STUDY

The ABCD study is a 10-year prospective trial examining brain development in nearly 12,000 children aged 9-10 years old across 20 different research sites in the United States. This study is the largest long-term study of its kind and provides an unprecedented opportunity to investigate relationships between healthy active living behaviours and brain development in children as they transition into adolescence. To date, researchers from HALO have conducted 4 studies using the ABCD dataset:

- The first paper was published in *Lancet Child & Adolescent Health* and led by Dr. Jeremy Walsh. Results showed that only 5% of children met all three movement behaviours (see Figure 1), and that meeting all three movement behaviour recommendations was linked with higher global cognition scores.
- In the second paper (published in *Pediatrics*), Dr. Michelle Guerrero and team found that children who met all three movement behaviour recommendations had lower scores on 5 of the 8 dimensions of impulsivity, while children who met the screen time and sleep recommendations had lower scores on all 8 dimensions. Findings of this study were also highlighted in a video abstract, which placed third in the Institute of Human Development and Child and Youth Health Talks Competition.
- The third paper was also led by Dr. Michelle Guerrero and published in the *International Journal of Behavioral Nutrition* and *Physical Activity*. Analyses showed that greater screen time behaviour was associated with greater problem behaviours (e.g., rule-breaking behaviour, thought problems), and that longer sleep duration was associated with reduced problem behaviours.
- The fourth paper was published in *Computers in Human Behavior* and was led by Dr. Jeremy Walsh. The main findings were that higher levels of TV watching, video streaming, and social media time were negatively associated with cognition in these children.



Walsh JJ, Barnes JD, Cameron JD, Goldfield GS, Chaput JP, Gunnell KE, Ledoux AA, Zemek RL, Tremblay MS. Associations between 24 hour movement behaviours and global cognition in US children: a cross-sectional observational study. Lancet Child Adolesc Health. 2018;2:783-791.

Guerrero MD, Barnes JD, Walsh JJ, Chaput JP, Tremblay MS, Goldfield G. 24-hour movement behaviours and impulsivity. Pediatr. 2019;144:e20190187. Guerrero MD, Barnes JD, Chaput JP, Tremblay MS. Screen time and problem behaviours in children: Exploring the mediating role of sleep duration. Int J Behav Nutr Phys Act. 2019;16:105.

Walsh JJ, Barnes JD, Tremblay MS, and Chaput JP. Associations between duration and type of electronic screen use and cognition in US children. Comp Hum Behav. 2020;108:106312.

HALO ANNUAL REPORT 2019 38 CHEO – RESEARCH INSTITUTE

Web Statistics

The current size of the HALO website (<u>www.haloresearch.ca</u>) is 1,692 web pages (10% above 2018). The statistics presented below are based on web activity across these web pages in the last year.

Overall Statistics

In 2019, there were approximately 14,500 users who visited <u>www.haloresearch.ca</u>. There were 19,700 sessions, 37,900 pageviews and the average session duration was one minute and 34 seconds. Figure 3 shows Google Analytics statistics from 2018 to 2019.

Web Statistics 50,000 45,000 Average Auunal Total 25,000 25,000 25,000 15,000 10,000 40,000 5,000 0 Users Sessions **Pageviews** 2018 15,891 21,871 44,205 **2019** 14,559 19,689 37,888

Figure 3: Annual Google analytics statistics for www.haloresearch.ca, 2018-19.

Dictionary for Figure 3

Users: the number of new and returning people who visit a website within a date range.

Sessions: the total number of sessions within a date range. A session is the period time a user is actively engaged with your website, app, etc.

Pageviews: the total number of pages viewed. Repeated views of a single page are counted.

Average session duration: the average length of a session.

Most Popular Web Pages

In 2019, the most popular web pages as measured by Google Analytics pageviews were:

- 1. <u>HALO publications</u> (554 views)
- 2. HALO history (453 views)
- 3. HALO grants (450 views)
- 4. Director's message (410 views)
- New WHO guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age (258 views)
- 6. Unicef Canada releases the first baseline report of the Canadian Index of Child and Youth Well-Being (179 views)
- 7. The development of the Canadian 24 Hour Movement Behaviour Guidelines for Children and Youth (167 views)
- 8. Physical activity boosts kids' brain health new report finds but Canadian kids are still not moving enough (157 views)
- 9. HALOize your workday (148 views)
- 10. Save the date: Breath of Fresh Air Outdoor Play Summit, September 27-29, 2019 (146 views)



Sedentary Behaviour Research Network

The Sedentary Behaviour Research Network (SBRN, www.sedentarybehaviour.org) was established in 2012 with a mission 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 SBRN is housed in the Healthy Active Living and Obesity Research Group (HALO) at the Children's Hospital of Eastern Ontario Research Institute and is chaired by the HALO Director, Dr. Mark Tremblay.

The SBRN has grown to >1,800 members from >60 countries and is now the largest network of researchers interested in sedentary behaviour in the world. The SBRN is engaging its membership in projects related to its mission and vision and is regularly approached by the media for expert opinion. The HALO team actively maintains the SBRN website, which attracts >3,000 visitors per month. To update members on news in the field and opportunities to collaborate, the SBRN publishes weekly web posts (e.g., blog posts by SBRN members, study summaries) and also issues monthly SBRN Newsletters to the membership. Moreover, since July 2019, the SBRN is present on Twitter – the account is growing and currently has >400 followers.

In 2019, the SBRN established three annual Awards:

The SBRN Practice Leadership Award — an award designed to recognize and celebrate an individual, group or organization who has demonstrated exceptional and sustained leadership for raising attention towards increasing trends in sedentary lifestyles and associated adverse effects of prolonged sedentary time while offering support/solutions to reduce/manage excessive sedentary time;

The SBRN Research Leadership Award — an award designed to honor excellence in research and/or innovative/creative scholarly activity in the field of sedentary behaviour; and

The SBRN Student/Trainee Award — an award intended to recognize promising students and/or young advocates/researchers/practitioners in the training phase of their career for their exemplary dedication, commitment, and contributions to the field of sedentary behaviour.

First recipients will be announced through the SBRN newsletter to the membership in 2020. Award winners will be recognized on the SBRN website and presented with an award and a certificate.



STAFF AWARDS		
Name	ORGANIZATION/AGENCY	GRANT/AWARD
Hélène Larocque	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
Mark Tremblay	Clarivate	Recognized by Clarivate on the list of Highly Cited Researchers 2019 (This list recognizes world-class researchers selected for their exceptional research performance, demonstrated by production of multiple highly cited papers that rank in the top 1% by citations for field and year in Web of Science)
Mark Tremblay	Canadian Academy of Health Sciences (FCAHS)	Inducted as Fellow of the Canadian Academy of Health Sciences (FCAHS)
Mark Tremblay	Faculty of Education, Chinese University of Hong Kong	Distinguished Lecturer

POST-DOCTORAL FELLOW,	STUDENT FUNDING, SCHOLARSHIPS	AND AWARDS	
STUDENT NAME	ORGANIZATION/AGENCY	GRANT/AWARD	
Salomé Aubert	University of Ottawa	Stephen D. Latté Award for Research Excellence	
Angelica Blais	University of Ottawa	Queen Elizabeth II Scholarship in Science & Tech	
Angelica Blais	University of Ottawa	UO Excellence Scholarship	
Caroline Dutil	Ministry of Research and Innovation	Graduate Scholarship	
Caroline Dutil	University of Ottawa	PhD Admission Scholarship	
Ryan Featherstone	Ministry of Research and Innovation	Graduate Scholarship	
Ryan Featherstone	Government of Ontario	Ontario Graduate Scholarship	
Ryan Featherstone	University of Ottawa	Excellence Scholarship	
Silvia González	Mitacs	GlobaLink Research Award	
Silvia González	University of Ottawa	School of Epidemiology Travel Award	
Michelle Guerrero	CIHR	Institute of Human Development and Child and Youth Health Talks Competition - CIHR Institute Community Support Prize	
Michelle Guerrero	Adapted Physical Activity Quarterly	Reviewer of the Year	
Taru Manyanga	CIHR	Doctoral Clinical Fellowship	
Taru Manyanga	University of Ottawa	Excellence Scholarship	
Irina Podinic	University of Ottawa	MSc Admission Graduate Scholarship	
Irina Podinic	Ministry of Research and Innovation	Graduate Scholarship	
Scott Rollo	Social Sciences and Humanities Research Council of Canada	SSHRC Doctoral Fellowship	
Hugues Sampasa-Kanyinga	Ministry of Research and Innovation	Graduate Scholarship	
Evan Turner	Carleton University and Government of Ontario	Ontario Graduate Scholarship (declined)	
Evan Turner	CIHR	Canada Graduate Scholarship - Masters	
Evan Turner	Carleton University	Graduate Student Travel Bursary	
Evan Turner	Carleton University	David and Rachel Epstein Foundation Scholarship	

HALO ANNUAL REPORT 2019 41 CHEO – RESEARCH INSTITUTE

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	University of Ottawa Faculty of Health Sciences	uOttawa/CHEO RI collaborative initiative around physical activity and health	\$20,000 (2019-2020)
Chaput	PHAC	Canadian 24-Hour Movement Guidelines for Adults (ages 18-64 years) and Older Adults (age ≥65 years)	\$60,000 (2019-2021)
Chaput/Katz	CIHR	Mobilizing the healthcare community towards an integrated approach to improving outcomes of patients with sleep disorders — Canadian Sleep and Circadian Network (CSCN)	\$200,000 (2015-2020)
Chaput	CHEO Research Institute (Research Growth Award)	Effect of increasing sleep duration on insulin sensitivity in adolescents having risk factors for type 2 diabetes	\$30,000 (2016-2019)
Chaput	Ministry of Research and Innovation (Early Researcher Awards program)	A good night's sleep to prevent type 2 diabetes in adolescents	\$150,000 (2016-2021)
Guerrero/Tremblay	Dominos donation Matched by CHEO Research Institute	Post-doctoral Fellowship support	\$150,000 (2019)
Goldfield	CHEO Research Institute Research Growth Award	Effects of Social Media Reduction on Mental Health in Youth: A Randomized Controlled Pilot Trial	\$29,974 (2019-2021)
Goldfield	Public Health Agency of Canada	Ramping Up Neurcognition (RUN): the impact of a teacher-led active play intervention on kindergarten children's cognitive, social and emotional development	\$36,000 (2018-2020)
Goldfield	Social Sciences and Humanities Research Council of Canada	Ramping Up Neurcognition (RUN): the impact of a teacher-led active play intervention on kindergarten children's cognitive, social and emotional development	\$271,280 (2017-2021)

HALO ANNUAL REPORT 2019 42 CHEO – RESEARCH INSTITUTE

NAME OF THE PI(s)	ORGANIZATION/AGENCY	TITLE OF PROJECT	AMOUNT (YEAR)
Longmuir	Canadian Institutes of Health Research	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	\$424,575 (2017-2020)
Longmuir	Ontario Sport and Recreation Communities Fund	Access ON childhood physical literacy: assessing and supporting the physical literacy of Ontario children with medical conditions and disabilities	\$253,205 (2017-2019)
Longmuir	Ontario Ministry of Research and Innovation Early Researcher Award	LIFFE for cardiac kids through physical activity	\$150,000 (2017-2022)
Longmuir	PSI Foundation	Impacting Children's Physical and Mental Health through Kinesiology Support in Clinical Care	\$199,988 (2019-2021)
Longmuir	Canadian Institutes of Health Research	New Investigator Salary Award. LIFFE for Cardiac Kids through Physical Activity	\$300,000 (2016-2021)
Longmuir	ESDC Canada Summer Jobs Grant	An Exploratory Qualitative Study on Treating Compulsive Exercise and Measuring Physical Activity in Adolescents Hospitalized for Eating Disorders	\$4,430 (2019)
Longmuir	Xinhua-uOttawa Joint Clinical Research Project Grant	The benefits of physical activity training for young children with cerebral palsy	\$149,750 (2019)
Tremblay	ParticipACTION	Report Card	\$400,000 (2016-2020)
Tremblay	ParticipACTION	Report Card knowledge product	\$55,000 (2019-2020)
Tremblay	The Lawson Foundation	Outdoor Play Canada Breath of Fresh Air Summit	\$5,000 (2019)
Tremblay	Mitacs Globalink Research Award	Challenges and opportunities for conducting physical activity research in the Latin American context	\$6,000 (2019)
Tremblay/ Guerrero	CHEO Research Institute Summer Studentship	Forest and Nature School Research	\$5,600 (2019)

HALO ANNUAL REPORT 2019 43 CHEO – RESEARCH INSTITUTE

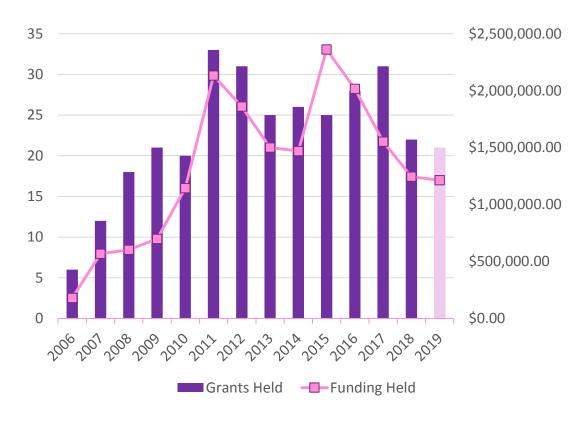


Figure 4: Number of grants held and amount of funds held as principal investigator by HALO Research Group.



PEER-REVIEWED, REFEREED PUBLICATIONS

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 2019.

- Alberga AS, Sigal RJ, Sweet SN, Doucette S, Russell-Mayhew S, Tulloch H, Kenny GP, Prud'homme D, Hadjiyannakis S, Goldfield GS. Understanding low adherence to an exercise program for adolescents with obesity: the HEARTY trial. Obesity Science and Practice 5(5):437-448, 2019.
- 2. **Aubert S, Barnes JD, Forse ML, Turner E, González SA**, Kalinowski J, Katzmarzyk PT, Lee EY, Ocansey R, Reilly JJ, Schranz N, Vanderloo LM, **Tremblay MS**. The international impact of the active healthy kids global alliance physical activity report cards for children and youth. *Journal of Physical Activity and Health* 16(9):679–697, 2019.
- 3. Bagramian R, Madill J, O'Reilly N, Deshpande S, Rhodes RE, **Tremblay M**, Berry T, Faulkner G. Evaluation of sport participation objectives within a health-focused social marketing sponsorship. *International Journal of Sports Marketing and Sponsorship* 20(2):206-223, 2019.
- 4. Barreira TV, Broyles ST, Tudor-Locke C, **Chaput J-P**, Fogelholm M, Hu G, Kuriyan R, Lambert EV, Maher CA, Maia JA, Olds T, Onywera V, Sarmiento OL, Standage M, **Tremblay MS**, Katzmarzyk PT, for the ISCOLE Research Group. Epidemiological transition in physical activity and sedentary time in children. *Journal of Physical Activity and Health* 16:518-524, 2019.
- 5. Beliveau PJH, **Sampasa-Kanyinga H**, Colman I, Zamorski MA. Are personnel with a past history of mental disorders disproportionately vulnerable to the effects of deployment-related trauma? A cross-sectional study of Canadian military personnel. *BMC Psychiatry* 19: 156, 2019.
- 6. Birken CS, Omand JA, Nurse KM, Borkhoff CM, Koroshegyi C, Lebovic G, Maguire JL, Mamdani M, Parkin PC, Randall Simpson J, **Tremblay MS**, Duku E, Reid-Westoby C, Janus M, on behalf of the TARGet Kids! Collaboration. Fit for School Study protocol: Early child growth, health behaviours, nutrition, cardiometabolic risk, and developmental determinants of a child's school readiness. *BMJ Open* 9(11):e030709, 2019.
- 7. **Blanchard J**, Van Wyk N, Alpous A, Ertel E, **Longmuir PE**. (2019). Physical literacy levels of Canadian children in grades 7 to 9 (12-16 years): Descriptive results. *Medicine and Science in Sports and Exercise*, *51*(6), 623-624.
- 8. Brazendale K, Beets MW, Weaver RG, Perry MW, Tyler EB, Hunt ET, Decker L, **Chaput JP**. Comparing measures of free-living sleep in school-aged children. *Sleep Medicine* 60: 197-201, 2019.
- 9. Breger ML, Holman M, **Guerrero MD**. Re-norming sport for inclusivity: How the sport community has the potential to change a toxic culture of harassment and abuse. *Journal of Clinical Sport Psychology*. 2019;13:247-289.
- 10. **Cameron JD**, Tasca GA, Little J, Chyurlia L, Ritchie K, Yeh E, Doucette S, Obregon AM, Bulman DE, Doucet É, **Goldfield GS**. Effects of fat mass and obesity-associated (FTO) gene polymorphisms on binge eating in women with binge-eating disorder: The moderating influence of attachment style. *Nutrition* 61:208-212, 2019.
- 11. Carsley S, Pope EI, Anderson LN, **Tremblay MS**, Tu K, Birken CS; for the Team to Address Bariatric Care in Canadian Children. Temporal trends in severe obesity prevalence in children and youth from primary care electronic medical records in Ontario: a repeated cross-sectional study. *CMAJ Open* 7(2):E351-E359, 2019.
- 12. **Carson V, Tremblay MS, Chaput J-P**, McGregor D, Chastin S. Compositional analyses of the associations between sedentary time, different intensities of physical activity, and cardiometabolic biomarkers among children and youth from the United States. *PLOS ONE* 14(7):e0220009, 2019.
- 13. Chaput JP. Accuracy and inequalities in physical activity research. Lancet Global Health 7: e185, 2019.
- 14. Chaput JP. The integration of pediatric sleep into public health in Canada. Sleep Medicine 56: 4-8, 2019.

HALO ANNUAL REPORT 2019 45 CHEO – RESEARCH INSTITUTE

- 15. **Chaput JP**, Shiau J. Routinely assessing patients' sleep health is time well spent. *Preventive Medicine Reports* 14: 100851, 2019.
- 16. Clarke J, **Colley R,** Janssen I, **Tremblay MS**. Accelerometer-measured moderate-to-vigorous physical activity of Canadian adults, 2007 to 2015. *Health Reports* 30(8):3-10, 2019.
- 17. Colley RC, Clarke J, Doyon CY, Janssen I, Lang JJ, Timmons BW, Tremblay MS. Trends in physical fitness among Canadian children and youth. *Health Reports* 30(10):3-13, 2019.
- 18. Delisle Nyström C, **Barnes JD**, Blanchette S, Faulkner G, Leduc G, Riazi NA, **Tremblay MS**, Trudeau F, **Larouche R.** Relationships between area-level socioeconomic status and urbanization with active transportation, independent mobility, outdoor time, and physical activity among Canadian children. *BMC Public Health* 19:1082, 2019.
- 19. Eny KM, Maguire JL, Dai DWH, Lebovic G, Adeli K, Hamilton JK, Hanley AJ, Mamdani M, McCrindle BW, **Tremblay MS**, Parkin PC, Birken CS, for the TARGet Kids! Collaboration. Association of accelerated body mass index gain with repeated measures of blood pressure in early childhood. *International Journal of Obesity* 43:1354-1362, 2019.
- 20. Gucciardi D, Hong Law K, **Guerrero MD**, Quested E, Thøgersen-Ntoumani C, Ntoumanis N, et al. Longitudinal relations between psychological distress and moderate-to-vigorous physical activity: A latent change score approach. *Psychology of Sport and Exercise*. 2019;47:101490.
- 21. Guérin E, Biagé A, **Goldfield GS**, Prud'homme D. Physical activity and perceptions of stress during the menopause transition: A longitudinal study. *Journal of Health Psychology* 24(6):799-811, 2019.
- 22. **Guerrero MD, Barnes JD, Tremblay MS**. Caution with conclusions required: A response to the paper "Objectively measured aerobic fitness is not related to vascular health outcomes and cardiovascular disease risk in 9-10 year old children". *Journal of Sports Science and Medicine* 18(4):830-833, 2019.
- Guerrero MD, Barnes JD, Chaput JP, Tremblay MS. Screen time and problem behaviors in children: Exploring the mediating role of sleep duration. *International Journal of Behavioral Nutrition and Physical Activity* 16:105, 2019.
- 24. **Guerrero MD, Barnes JD, Walsh JJ, Chaput J-P, Tremblay MS, Goldfield GS.** 24-hour movement behaviors and impulsivity. *Pediatrics* 144(3):e20190187, 2019.
- 25. **Gunnell KE,** Poitras VJ, **LeBlanc A,** Schibli K, Barbeau K, Hedayati N, Pontifex MB, **Goldfield GS**, Dunlap C, Lehan E, **Tremblay MS**. Physical activity and brain structure, brain function, and cognition in children and youth: A systematic review of randomized controlled trials. *Mental Health and Physical Activity* 16:105–127, 2019.
- 26. Hadjiyannakis S, Ibrahim Q, Li J, Ball GDC, Buchholz A, Hamilton JK, Zenlea I, Ho J, Legault L, Laberge A-M, Thabane L, **Tremblay M**, Morrison KM. Obesity class versus the Edmonton Obesity Staging System for Pediatrics to define health risk in childhood obesity: Results from the CANPWR cross-sectional study. *The Lancet Child and Adolescent Health* 3(6):398-407, 2019.
- 27. Hintze LJ, **Goldfield G**, Seguin R, Damphousse A, Riopel A, Doucet É. The rate of weight loss does not affect resting energy expenditure and appetite sensations differently in women living with overweight and obesity. *Physiology & Behaviour* 199:314-321, 2019.
- 28. Jin Y, Carson V, Pabayo R, Spence JC, Tremblay MS, Lee E-Y. Associations between utilitarian walking, meeting global physical activity guidelines, and psychological well-being among South Korean adolescents. *Journal of Transport and Health* 14:100588, 2019.
- 29. Johnson C, **Chaput JP**, Diasparra M, Richard C, Dubois L. How did the tobacco ban increase inmates' body weight during incarceration in Canadian federal penitentiaries? A cohort study. *BMJ Open* 9: e024552, 2019.

HALO ANNUAL REPORT 2019 46 CHEO – RESEARCH INSTITUTE

- 30. Johnson C, **Chaput JP**, Diasparra M, Richard C, Dubois L. Influence of physical activity, screen time and sleep on inmates' body weight during incarceration in Canadian federal penitentiaries: a retrospective cohort study. *Canadian Journal of Public Health* 110: 198-209, 2019.
- 31. Jalo E, Konttinen H, Vepsäläinen H, **Chaput JP**, Hu G, Maher C, Maia J, Sarmiento OL, Standage M, Tudor-Locke C, Katzmarzyk PT, Fogelholm M. Emotional eating, health behaviours, and obesity in children: a 12-country cross-sectional study. *Nutrients* 11: 351, 2019.
- 32. Kakon GA, Hadjiyannakis S, Sigal RJ, Doucette S, **Goldfield GS**, Kenny GP,Prud'homme D, Buchholz A, Lamb M, Alberga AS. Edmonton Obesity Staging System for Pediatrics, quality of life and fitness in adolescents with obesity. *Obesity Science and Practice* 5(5):449-458, 2019.
- 33. Katzmarzyk PT., **Chaput J-P**, Fogelholm M, Hu G, Maher C, Maia J, Olds T, Sarmiento OL, Standage M, **Tremblay MS**, Tudor-Locke C. International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE): Contributions to understanding the global obesity epidemic. *Nutrients* 11:848, 2019.
- 34. Khan A, Uddin R, Lee E-Y, **Tremblay MS**. Sitting time among adolescents across 26 Asia-Pacific countries: A population-based study. *International Journal of Public Health* 64(8):1129-1138, 2019.
- 35. Kingsbury M, Sucha E, Horton NJ, **Sampasa-Kanyinga H**, Murphy JM, Gilman SE, Colman I. Lifetime experience of multiple common mental disorders and 19-year mortality: results from a Canadian population-based cohort. *Epidemiology and Psychiatric Sciences* 4: 17, 2019.
- 36. Kracht CL, **Chaput JP**, Martin CK, Champagne CM, Katzmarzyk PT, Staiano AE. Associations of sleep with food cravings, diet, and obesity in adolescence. *Nutrients* 11: 2899, 2019.
- 37. **Kung T**, Tang K, Yusuf W, Lougheed J, **Longmuir**, **PE**. (2019). Weight Trajectories Are Associated With Exercise Capacity Among Children With Complex Congenital Heart Defects: 378 Board# 216 May 29 9: 30 AM-11: 00 AM. *Medicine and Science in Sports and Exercise*, 51(6): 98.
- 38. Lamoureux NR, Fitzgerald JS, Norton KI, Sabato T, **Tremblay MS**, Tomkinson GR. Temporal trends in the cardiorespiratory fitness of 2,525,827 adults between 1967 and 2016: a systematic review. *Sports Medicine* 49:41-55, 2019.
- 39. Lang JJ, Larouche R, Tremblay MS. The association between physical fitness and health in a nationally representative sample of Canadian children and youth aged 6 to 17 years. *Health Promotion and Chronic Disease Prevention in Canada* 39(3):104-111, 2019.
- 40. Lang JJ, Tremblay MS, Ortega FB, Ruiz JR, Tomkinson GR. Review of criterion-referenced standards for cardiorespiratory fitness: What percentage of 1 142 026 international children and youth are apparently healthy? *British Journal of Sports Medicine* 53:953-958, 2019.
- 41. **Larouche R,** Blanchette S, Faulkner G, Riazi N, Trudeau F, **Tremblay MS.** Correlates of children's physical activity: a Canadian multi-site study. *Medicine and Science in Sports and Exercise* 51:2482-2490, 2019.
- 42. Larouche R, Mire EF, Belanger K, Barreira TV, Chaput JP, Fogelholm M, Hu G, Lambert EV, Maher C, Maia J, Olds T, Onywera V, Sarmiento OL, Standage M, Tudor-Locke C, Katzmarzyk PT, Tremblay MS for the ISCOLE Research Group. Relationships between outdoor time, physical activity, sedentary time, and body mass index in children: a 12-country study. *Pediatric Exercise Science* 31:118-129, 2019.
- 43. **LeBlanc AG**, **Barnes**, **JD**, Saunders TJ, **Tremblay MS**, **Chaput JP**. Scientific sinkhole: the pernicious price of formatting. *PLOS ONE* 14(9):e0223116, 2019.
- 44. **LeBlanc AG**, **Chaput JP**. Urbanisation and fitness: worrying trends from China. *Lancet Child & Adolescent Health* 3: 837-839, 2019.

HALO ANNUAL REPORT 2019 47 CHEO – RESEARCH INSTITUTE

- 45. Ledoux A-A, Barrowman NJ, Boutis K, Davis A, Reid S, Sangha G, Farion KJ, Belanger K, **Tremblay MS**, Yeates KO, DeMatteo C, Reed N, Zemek R. Multicentre, randomised clinical trial of paediatric concussion assessment of rest and exertion (PedCARE): a study to determine when to resume physical activities following concussion in children. *British Journal of Sports Medicine* 53(3):195, 2019.
- 46. Lee EY, **Carson V**, Jeon JY, Spence JC, **Tremblay MS**. Levels and correlates of 24-hour movement behaviours among South Koreans: Results from the Korea National Health and Nutrition Examination Surveys, 2014 and 2015. *Journal of Sport and Health Science* 8:376-385, 2019.
- 47. **Lee JS**, Boafo A, Greenham S, **Longmuir PE**. The Effect of High-Intensity Interval Training on Inhibitory Control in Adolescents Hospitalized for a Mental Illness. *Mental Health and Physical Activity* 16:152-168, 2019.
- 48. Li N, Zhao P, Diao C, Qiao Y, Katzmarzyk PT, **Chaput JP**, Fogelholm M, Kuriyan R, Kurpad A, Lambert EV, Maher C, Maia J, Matsudo V, Olds T, Onywera V, Sarmiento OL, Standage M, **Tremblay MS**, Tudor-Locke C, Hu G, for the ISCOLE Research Group. Joint associations between weekday and weekend physical activity or sedentary time and childhood obesity. *International Journal of Obesity* 43:691-700, 2019.
- 49. **Longmuir PE**, Jackson J, Ertel E, Bhatt M, Doja A, Duffy C, Gardin L, Jurencak R, Katz SL, Lai L, Lamontagne C, Lee S, Lougheed J, McCormick A, McMillan H, Pohl D, Roth J, Theoret-Douglas C, Watanabe Duffy K, Wong D, Zemek R. Sensitivity, specificity and reliability of the Get Active Questionnaire for identifying children with medically necessary special considerations for physical activity. *Applied Physiology, Nutrition and Metabolism*, 44:736-743, 2019.
- 50. **Manyanga T, Barnes JD, Chaput JP, Guerrero M,** Katzmarzyk PT, Mire EF, Prista A, **Tremblay MS**, for the ISCOLE Research Group. Body mass index and movement behaviors among schoolchildren from 13 countries across a continuum of human development indices: A multinational cross-sectional study. *American Journal of Human Biology*. 2019 Oct 24:e23341.
- 51. **Manyanga T, Barnes JD, Chaput JP**, Katzmarzyk PT, Prista A, **Tremblay MS**. Prevalence and correlates of adherence to movement guidelines among urban and rural children in Mozambique: a cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*. 2019 Dec 1;16(1):94.
- 52. Martinez-Ospina A, Sudfeld CR, **González SA**, Sarmiento OL. School Food Environment, Food Consumption, and Indicators of Adiposity among Students 7-14 Years in Bogotá, Colombia. *Journal of School Health* 89(3):200–209, 2019.
- 53. Miguet M, Masurier J, **Chaput JP**, Pereira B, Lambert C, Dâmasa AR, Courteix D, Duclos M, Boirie Y, Thivel D. Cognitive restriction accentuates the increased energy intake response to a 10-month multidisciplinary weight loss program in adolescents with obesity. *Appetite* 134: 125-134, 2019.
- 54. McMullen JA, McCrindle BW, Dell SD, Feldman BM, **Longmuir PE**. Understanding parent perceptions of healthy physical activity for their child with a chronic medical condition. *Paediatrics and Child Health* 24(3): e135-e141, 2019.
- 55. Obeid N, Norris ML, Buchholz A, Hadjiyannakis S, Spettigue W, Flament MF, Henderson KA, **Goldfield GS**. Development of the Ottawa Disordered Eating Screen for Youth: The ODES-Y. *Journal of Pediatrics*. 2019;215:209-215.
- 56. Obeid N, Norris ML, Valois DD, Buchholz A, **Goldfield GS**, Hadjiyannakis S, Henderson KA, Flament M, Hammond NG, Dunn J, Spettigue W. Bingeing, Purging, and Suicidal Ideation in Clinical and Non-Clinical Samples of Youth. *Eating Disorders* 27(1) 1-19, 2019.
- 57. Okely AD, **Tremblay MS**, Reilly JJ, Draper C, Robinson TN. Advocating for a cautious, conservative approach to screen time guidelines in young children. *The Journal of Pediatrics* 207:261-262, 2019.
- 58. O'Reilly N, Deshpande S, Faulkner G, Latimer A, Leblanc A, Rhodes RE, Tremblay M, Werman M. Title sponsorship of cause-related sport events. *Sport, Business and Management* 9(2):185-200, 2019.
- 59. Pohl D, Alpous A, Hamer S, **Longmuir PE**. Higher screen time, lower muscular endurance and decreased agility limit the physical literacy of children with epilepsy. *Epilepsy & Behavior* 90: 260-265, 2019.

HALO ANNUAL REPORT 2019 48 CHEO – RESEARCH INSTITUTE

- 60. Patte KA, Qian W, Cole AG, Faulkner G, **Chaput JP**, **Carson V**, Leatherdale ST. School start time changes in the COMPASS study: associations with youth sleep duration, physical activity, and screen time. *Sleep Medicine* 56: 16-22, 2019.
- 61. Priebe CS, **Latimer-Cheung AE**, Berry T, O'Reilly N, Rhodes RE, Spence JC, **Tremblay MS**, Faulkner G. Make Room for Play: An evaluation of a campaign promoting active play. *Journal of Health Communication* 24(1):38-46, 2019.
- 62. Roche J, **Chaput JP**, Thivel D. Should metabolically healthy obesity be defined as the total absence of metabolic risk factors? *Obesity Reviews* 20: 364-365, 2019.
- 63. Rhodes RE, Berry T, Faulkner G, Latimer-Cheung AE, O'Reilly N, Tremblay MS, Vanderloo L, Spence JC. Application of the Multi-Process Action Control Framework to understand parental support of child and youth physical activity, sleep, and screen time behaviors. *Applied Psychology: Health and Well-Being* 11(2):223–239, 2019.
- 64. Rhodes RE, Spence JC, Berry T, Faulkner G, Latimer-Cheung AE, O'Reilly N, Tremblay MS, Vanderloo L. Parental support of the Canadian 24-Hour Movement Guidelines for Children and Youth: prevalence and correlates. *BMC Public Health* 19:1385, 2019.
- 65. Rhodes RE, Stearns J, Berry T, Faulkner G, Latimer-Cheung AE, O'Reilly N, Tremblay MS, Vanderloo L, Spence JC. Predicting parental support and parental perceptions of child and youth movement behaviors. *Psychology of Sport and Exercise* 41:80-90, 2019.
- 66. Riazi NA, Blanchette S, Trudeau F, Larouche R, Tremblay MS, Faulkner G. Correlates of children's independent mobility in Canada: A multi-site study. *International Journal of Environmental Research and Public Health* 16:2862, 2019.
- 67. Sa J, Russell M, Weintraub MR, Seo DC, **Chaput JP**, Habib M. Gender and racial/ethnic differences in the association between alcohol drinking patterns and body mass index: The National Health and Nutrition Examination Survey, 1999-2010. *Journal of Racial and Ethnic Health Disparities* 6: 301-311, 2019.
- 68. **Sampasa-Kanyinga H, Chaput JP**, Hamilton HA. Social media use, school connectedness, and academic performance among adolescents. *Journal of Primary Prevention* 40: 189-211, 2019.
- 69. Silva DAS, **Chaput JP, Tremblay MS.** Participation frequency in physical education classes and physical activity and sitting time in Brazilian adolescents. *PLOS ONE* 14(3):e0213785, 2019.
- 70. Steff M, Verney J, Marinau M, Perte S, Pereira B, Bryant E, Drapeau V, **Chaput JP**, Courteix D, Thivel D. Toward a Romanian version of the Three-Factor Eating Questionnaire—R21 for children and adolescents (CTFEQr21): Preliminary psychometric analysis and relation with body composition. *Developmental Period Medicine* 23: 45-53, 2019.
- 71. Sui W, Smith S, Fagan M, **Rollo S**, Prapavessis H. The effects of sedentary behavior interventions on work-related productivity and performance outcomes in real and simulated office work: A systematic review. *Applied Ergonomics* 75:27-73, 2019.
- 72. Sukys S, Emeljanovas A, Gruodyte-Raciene R, Mieziene B, Trinkuniene L, Rutkauskaite R, **Tremblay M**. Results from Lithuania's 2018 Report Card on Physical Activity for Children and Youth. *International Journal of Environmental Research and Public Health* 16:4710, 2019.
- 73. Tennant EM, **Tremblay MS**, Faulkner G, Gainforth HL, **Latimer-Cheung AE**. Exploring parents' message receipt and message enactment of the world's first integrated movement behaviour guidelines for children and youth. *Journal of Health Communication* 24:643-653, 2019.
- 74. Thivel D, **Tremblay MS**, Katzmarzyk PT, Fogelholm M, Hu G, Maher C, Maia J, Olds T, Sarmiento OL, Standage M, Tudor-Locke C, **Chaput JP**, on behalf of the ISCOLE Research Group. Associations between meeting combinations of 24-hour movement recommendations and dietary patterns of children: A 12-country study. *Preventive Medicine* 118:159-165, 2019.

HALO ANNUAL REPORT 2019 49 CHEO – RESEARCH INSTITUTE

- 75. Tomkinson GR, Lang JJ, Blanchard J, Léger LA, Tremblay MS. The 20-m shuttle run: assessment and interpretation of data in relation to youth aerobic fitness and health. *Pediatric Exercise Science* 31(2):152-163, 2019.
- 76. Tomkinson GR, Lang JJ, Léger LA, Olds TS, Ortega FB, Ruiz JR, **Tremblay MS.** Response to criticisms of the 20-m shuttle run test: deflections, distortions, and distractions. *British Journal of Sports Medicine* 53:1200-1201, 2019.
- 77. Tomkinson GR, Lang JJ, Tremblay MS. Temporal trends in the cardiorespiratory fitness of children and adolescents representing 19 high-income and upper-middle-income countries between 1981 and 2014. *British Journal of Sports Medicine* 53:478-486, 2019.
- 78. Triana CA, Sarmiento OL, Bravo-Balado A, **González SA**, Bolívar MA, Lemoine P, Meisel JD, Grijalba C, Katzmarzyk PT. Active streets for children: The case of the Bogotá Ciclovía. *Plos One* 14(5):e0207791, 2019.
- 79. Valois DD, Davis CG, Buchholz A, Obeid N, Henderson K, Flament M, **Goldfield GS.** Effects of weight teasing and gender on body esteem in youth: A longitudinal analysis from the REAL study. *Body Image* 29:65-73, 2019.
- 80. Van Slingerland KJ, Durand-Bush N, Bradley L, **Goldfield GS**, Archambault R, Smith D, Edwards C, Delenardo S, Taylor S, Werthner P, Kenttä G. Canadian Centre for Mental Health and Sport (CCMHS) Position Statement: Principles of Mental Health in Competitive and High-Performance Sport. *Clinical Journal of Sports Medicine* 29(3):173-180, 2019.
- 81. **Walsh JJ**, Bonafiglia JT, **Goldfield GS**, Sigal RJ, Kenny GP, Doucette S, Hadjiyannakis S, Alberga AS, Prud'homme D, Gurd BJ. Interindividual variability and individual responses to exercise training in adolescents with obesity. *Applied Physiology, Nurtition and Metabolism* 45(1):45-54, 2019.
- 82. Yabsley J, Gunnell KE, Bryant EJ, Drapeau V, Thivel D, Adamo KB, Chaput JP. Validation of a child version of the Three-Factor Eating Questionnaire in a Canadian sample: a psychometric tool for the evaluation of eating behaviour. *Public Health Nutrition* 22: 431-443, 2019.
- 83. Yun L, Vanderloo LM, Berry TR, **Latimer-Cheung AE**, O'Reilly N, Rhodes RE, Spence JC, **Tremblay MS**, Faulkner G. Political orientation and public attributions for the causes and solutions of physical inactivity in Canada: Implications for policy support. *Frontiers in Public Health* 7:153, 2019.
- 84. Zakrzewski-Fruer JK, Gillison FB, Katzmarzyk PT, Mire EF, Broyles ST, Champagne CM, **Chaput JP**, Denstel KD, Fogelholm M, Hu G, Lambert EV, Maher C, Maia J, Olds T, Onywera V, Sarmiento OL, **Tremblay MS**, Tudor-Locke C, Standage M, for the ISCOLE Research Group. Association between breakfast frequency and physical activity and sedentary time: a cross-sectional study in children from 12 countries. *BMC Public Health* 19:222, 2019.
- 85. Zhang Z, Sousa-Sa E, Pereira J, **Chaput JP**, Okely A, Feng X, Santos R. Correlates of nocturnal sleep duration, nocturnal sleep variability, and nocturnal sleep problems in toddlers: results from the GET UP! Study. *Sleep Medicine* 2019; 124-132, 2019.

Number of Publications

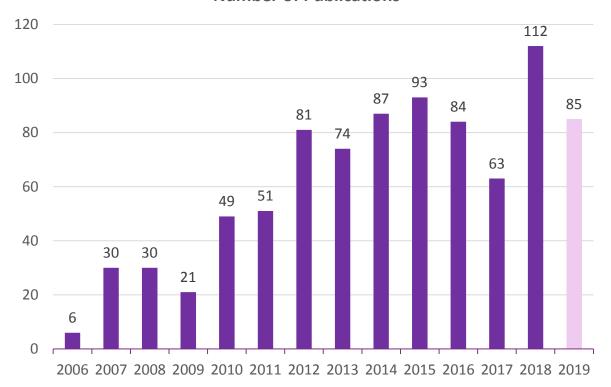


Figure 5: Number of peer-reviewed, refereed publications by HALO Research Group – total of 866 to date.

NON-PEER REVIEWED PUBLICATIONS

1. Reilly JJ, Okely A, Draper C, **Tremblay MS**. Why screen time for babies, children and adolescents needs to be limited. *The Conversation*. January 31, 2019

BOOK CHAPTERS

- 1. LeBlanc CMA, **Goldfield GS, Tremblay MS.** Healthy active living. In Foy JM (Ed.) *Promoting Mental Health in Children and Adolescents*. American Academy of Pediatrics, Itasca, IL. p. 149-168, 2019.
- 2. Martin J, **Guerrero MD**. Social cognitive theory. In Haegele JA, Hodge SR, Shapiro D, editors. *Handbook of adapted physical education*. New York, NY: Routledge; p. 280-295, 2019.
- 3. **Rollo S**, Sui Y, Prapavessis H. Exercise as a smoking cessation aid. In: V. R. Preedy (Ed), *The Neuroscience of Nicotine Mechanisms and Treatment*. Elsevier, Cambridge, UK, p. 459-465, 2019.
- 4. Sui W, **Rollo S**, Prapavessis H. The acute effects of exercise on cravings and withdrawal symptoms. In V. R. Preedy (Ed), *The Neuroscience of Nicotine Mechanisms and Treatment*. Elsevier, Cambridge, UK, p. 205-211, 2019.

CONFERENCES AND INVITED PRESENTATIONS

- 1. **Aubert S, Gonzalez SA, Lee EY, Manyanga T,** Reilly, JJ, **Tremblay MS**. Highlights of Report Card grades from 20 European countries that participated in the Global Matrix 3.0. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 2. **Aubert S, Gonzalez SA, Lee EY, Manyanga T,** Reilly, JJ, **Tremblay MS**. Global Matrix 3.0 on Physical Activity for Children and Youth: Insights from Report Card Grades from European, African, Latin-American, and Asian Countries. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 3. **Aubert S, Barnes JD**, Forse M, Katzmarzyk PT, **Tremblay MS** on behalf of the Global Matrix 3.0 Group. Prevalence of children and youth meeting sedentary behaviour guidelines: a 49-country comparison. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 4. **Aubert S, Barnes JD, Tremblay MS**. Highlights of Report Card grades from European countries that participated in the Global Matrix 3.0. *Annual Students Research Day, School of Epidemiology and Public Health, Faculty of Medicine, University of Ottawa* (Ottawa, Canada), 2019.
- 5. BaniFatemi S, **Heidinger B, Hafizi K, Cameron JD,** Doucet, E., Robaey, P; El-Amine, F; Vaillancourt, R, Barrowman, N, and **Goldfield GS.** Energy Intake Intake, and Body Composition in Individuals Living with Obesity: A Randomized, Double Blind, Placebo-Controlled Pilot Study. *6th Canadian Obesity Summit* (Ottawa, Canada), 2019
- 6. **Barnes JD, Aubert S, Turner E, Tremblay MS.** Sociodemographic correlates of physical activity grades in the Global Matrix 3.0. *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 7. **Barnes JD, Aubert S**, Vanderloo L, **Tremblay MS**. Canada's 2018 Report Card on Physical Activity of Children and Youth: Leading or Lagging in Comparison to the Global Matrix 3.0 Findings? *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 8. **Barnes JD,** Saunders TJ, **Tremblay MS**. Sedentary Behaviour Research Network (SBRN): Achievements and membership satisfaction, 2012-2018. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 9. **Blais A**. Active Lifestyles for People Living with Sickle Cell Disease. *Learning for Life Workshop, Sickle Cell Awareness Group of Ontario* (Ottawa, Canada), 2019.
- 10. **Blais A, Longmuir PE**. Developing physical literacy while living with a chronic medical condition: The pediatric perspective. *Eastern Canada Sport and Exercise Psychology Symposium* (Toronto, Canada), 2019.
- 11. **Blanchard J**. The whole day matters for health and wellness! *Glashan Student Wellbeing and Mental Health Symposium*, (Ottawa, Canada), 2019.
- 12. **Blanchard J,** Van Wyk N, **Alpous A**, **Ertel E**, **Longmuir PE**. Physical literacy levels of Canadian children in grades 7 to 9 (12-16 years): Descriptive results. *American College of Sports Medicine 2019 Annual Meeting* (Orlando, USA), 2019.
- 13. **Blanchard J**, Van Wyk N, **Alpous A**, **Ertel E**, **Longmuir PE**. Évaluation Canadienne de la Littératie Physique en 7e et 9e Année. *L'Association Québécoise des Sciences de l'Activité Physique* (Trois Rivières, Canada), 2019.
- 14. Blanchette S, Trudeau F, Faulkner G, Leduc G, Riazi NA, **Tremblay MS, Larouche R.** Are school environments, policies and practices associated with children's physical activity and active transport *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 15. **Carson SJ, Forse ML, Barbeau KC, Tremblay MS.** Family factors and 24-hour movement behaviours: A scoping review of the evidence. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.

HALO ANNUAL REPORT 2019 52 CHEO — RESEARCH INSTITUTE

- 16. Carson, V, Adamo, K, Ogden, N, Goldfield, GS, Okely, A, Kuzik, N, Crozier, M, Hunter, S, Predy, M. (2019, June). Are toddlers and preschoolers less sedentary and more active in childcare when their early child educators are less sedentary and more active? *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 17. **Chaput JP.** Importance of a good night's sleep for health and wellness. *Postgraduate Program in Physical Education, Federal University of Santa Catarina* (Florianopolis, Brazil), 2019.
- 18. **Chaput JP.** The ubiquity of the screen in our modern world. *Postgraduate Program in Physical Education, Federal University of Santa Catarina* (Florianopolis, Brazil), 2019.
- 19. **Chaput JP.** Widespread misconceptions about obesity. *Postgraduate Program in Physical Education, Federal University of Santa Catarina* (Florianopolis, Brazil), 2019.
- 20. **Chaput JP.** Interactions among sleep, sedentary behaviour, physical activity and overall health. *Postgraduate Program in Physical Education, Federal University of Santa Catarina* (Florianopolis, Brazil), 2019.
- 21. **Chaput JP.** Importance of a good night's sleep for health and wellness. *CHEO's Staff Forum Fit & Well Group, Children's Hospital of Eastern Ontario* (Ottawa, Canada), 2019.
- 22. **Chaput JP.** Interactions among sleep, sedentary behaviour, physical activity and overall health. *Summer Epidemiology Program, University of Ottawa* (Ottawa, Canada), 2019.
- 23. **Chaput JP.** The whole day matters for health and wellness. *Department of Applied Human Sciences, University of Prince Edward Island* (Charlottetown, Canada), 2019.
- 24. Chaput JP. Sleep health and obesity in children. ECHO clinic, SickKids (Toronto, Canada), 2019.
- 25. **Chaput JP.** Assessing sleep health in clinic is time well spent. *Pediatric Grand Rounds, Children's Hospital of Eastern Ontario* (Ottawa, Canada), 2019.
- 26. **Chaput JP.** Interactions among sleep, sedentary behaviour, physical activity and overall health. *Royal Canadian Mounted Police National Headquarters* (Ottawa, Canada), 2019.
- 27. Chaput JP. How to write a good scientific paper. CHEO Research Institute (Ottawa, Canada), 2019.
- 28. **Chaput JP.** Role of sleep in weight management. Weight Management Interest Group, University of Ottawa Faculty of Medicine (Ottawa, Canada), 2019.
- 29. **Chaput JP.** Le continuum du mouvement sur 24 heures: les kinésiologues appelés à discuter du sommeil et du comportement sédentaire aussi! *31e* congrès de la Fédération des kinésiologues du Québec (Orford, Canada), 2019.
- 30. **Chaput JP.** Écrans: de l'emprise à la maîtrise. *Public lecture presented to the Cœur des sciences, Université de Montréal* (Montreal, Canada), 2019.
- 31. Chaput JP. Addressing poor sleep health is time well spent. Canadian Obesity Summit (Ottawa, Canada), 2019.
- 32. **Chubbs-Payne A, Lee JS, Longmuir PE**, Isserlin L, Norris M, Spense K, Spettigue W. An exploratory qualitative study examining markers of physical activity and attitudes towards exercise in adolescents with anorexia nervosa. *University of Ottawa Faculty of Medicine Research Day* (Ottawa, Canada), 2019.
- 33. Delisle Nyström C, **Barnes JD**, Blanchette S, Faulkner G, Leduc G, Riazi NA, **Tremblay MS**, Trudeau F, **Larouche R.** Relationships between area-level socioeconomic status and urbanization with active transportation, independent

HALO ANNUAL REPORT 2019 53 CHEO – RESEARCH INSTITUTE

- mobility, outdoor time, and physical activity among Canadian children *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 34. De Pieri J, **Dutil C**, Maslovat D, Carlsen AN. Sleep characteristic scores can predict response latency on a simple reaction time task. *SCAPPS* (Vancouver, Canada), 2019.
- 35. **Dutil C**, De Pieri J, Maslovat D, Carlsen AN. Chronic short sleepers display slower reaction time, compared to adequate sleepers, but maintain an intact StartReact Effect. *SCAPPS* (Vancouver, Canada), 2019.
- 36. Do J, Webster RJ, **Longmuir PE**, leradi S, Reddy D, Whiting S, Pohl D. Impact of physical activity on sleep in children with epilepsy. *University of Ottawa Faculty of Medicine Research Day* (Ottawa, Canada), 2019.
- 37. Eckermann S, Willan A, Okely A, **Tremblay MS**, Coelli T. Robust cross-country comparison of children meeting or not meeting 24-hour movement guidelines: an odds solution. *International Society for Quality of Life Studies Conference* (Granada, Spain), 2019.
- 38. Eckermann S, Willan A, Okely A, **Tremblay MS**, Coelli T. Robustly evaluating meeting integrated movement guidelines in practice: odds solution for population level efficiency measures with binary effects. *International Health Economics Association Conference* (Basel, Switzerland), 2019.
- 39. El-Amine, F, Goldfield, GS, Cameron, JD, Robaey, P, Heidinger, BA, Hafizi, K, Bani-Fatemi, S, Foudil-Bey, I, Vaillancourt, R, Barrowman, N, Doucet, E. Methylphenidate (MPH) Affects Executive Functioning with Associated Improvements in Appetite Control: A Pilot Study. 6th Canadian Obesity Summit (Ottawa, Canada), 2019
- 40. **Goldfield GS**. Mental Health Correlates of Childhood Obesity. 1st Annual International Network on Eating Behaviour Conference (Concepcion, Chile), 2019.
- 41. **Goldfield, GS.** Understanding the Relationship between Childhood Obesity, Food Reinforcement and Impulsivity. 1st Annual International Network on Eating Behaviour Conference (Concepcion, Chile), 2019.
- 42. **Gonzalez SA, Aubert S, Lee EY, Manyanga T,** Reilly, JJ, **Tremblay MS**. Highlights of Report Card grades from Latin-American countries that participated in the Global Matrix 3.0. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 43. **Gonzalez SA, Aubert S, Barnes JD, Forse M, Larouche R, Tremblay MS**. Active transportation among children and youth: a 49-country comparison. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 44. **Gonzalez SA, Barnes JD, Tremblay MS**. Highlights of Report Card grades from Latin-American countries that participated in the Global Matrix 3.0. *Annual Students Research Day, School of Epidemiology and Public Health, Faculty of Medicine, University of Ottawa* (Ottawa, Canada), 2019.
- 45. **Guerrero MD**. Active play: Great for kids, tough (to measure) for researchers. *Breathe of Fresh Air Summit* (Ottawa, Canada), 2019.
- 46. **Guerrero MD**. Exercise and motivation. *University of Ottawa Faculty of Medicine Mini Medical School* (Ottawa, Canada), 2019
- 47. **Guerrero MD, Barnes JD, Chaput JP, Tremblay MS.** Does sleep duration mediate the relationships between screen time and problem behaviours among children? *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 48. **Guerrero MD, Carson S, Forse M, Turner E, Tremblay MS.** A comparison between preschoolers attending Forest and Nature School and traditional centre-based childcare.. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.

- 49. **Guerrero MD**, Gucciardi D, Law KH, Quested E, Thøgersen-Ntoumani C, Ntoumanis N, Jackson B. Using a latent change score approach to understand longitudinal relations between psychological distress and moderate-to-vigorous physical activity. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 50. **Hafizi, K, Heidinger, B**, Bani-Fatemi, S, **Cameron, JD**, Doucet, E, Robaey, P, El-Amine, F, Vaillancourt, R, Barrowman, N, Foudil-Bey, I, **Goldfield, GS**. The Effect of Methylphenidate on Resting Energy Expenditure, Thermic Effect of Food and Physical Activity Energy Expenditure in Individuals Living with Obesity: A Pilot Study. *6th Canadian Obesity Summit* (Ottawa, Canada), 2019.
- 51. Hajj J, Carlsen AN, **Dutil C**, Tremblay L. Voluntary action decreases spatial perception in central and peripheral vision. *SCAPPS* (Vancouver, Canada), 2019.
- 52. **Heidinger, BA, Hafizi, K,** Bani-Fatemi, S, **Cameron, JD**, Doucet, E, Robaey, P, El-Amine, F, Vaillancourt, R, Barrowman, N, Foudil-Bey, I, **Goldfield, GS**. Methylphenidate (MPH) Increases Odour Threshold with Associated Decreases in Appetite and Food Palatability. *6th Canadian Obesity Summit* (Ottawa, Canada), 2019.
- 53. **Kung T**, Tang K, **Yusuf W**, Lougheed J, **Longmuir PE**. Weight trajectories are associated with exercise capacity among children with complex congenital heart defects. *American College of Sports Medicine 2019 Annual Meeting* (Orlando, USA), 2019.
- 54. Lang JJ, Wolfe Phillips E, Orpana HM, Tremblay MS, Ross R, Ortega FB, Silva DAS, Tomkinson GR. Field-based measurement of cardiorespiratory fitness to evaluate physical activity interventions. *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 55. **Larouche R,** Blanchette S, Faulkner G, Riazi N, Trudeau F, **Tremblay MS.** Correlates of children's physical activity: a Canadian multi-site study. *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 56. LeBlanc JMZ, Lee J, **Longmuir PE**, Norris M, Cloutier P, Robb M, Gray C. Prevalence of healthy lifestyle counselling among patients referred for mental health treatment. *Atlantic Pediatric Society Conference* (St. John's, Canada), 2019.
- 57. Lee EY, Aubert S, Gonzalez SA, Manyanga T, Reilly JJ, Tremblay MS, Highlights of Report Card Grades from 12 Asian Countries that participated in the Global Matrix 3.0. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 58. **Lee JS**, Boafo A, Greenham SL, **Longmuir PE**. Harnessing the cognitive benefits of exercise to improve mental health treatment in adolescents with psychiatric disorders. *CHEO Mental Health Research Rounds* (Ottawa, Canada), 2019.
- 59. **Lee JS**, Boafo A, Greenham S, **Longmuir PE**. The effect of high-intensity interval training on executive function in adolescents hospitalized for a mental health crisis. *15th European Congress of Sport and Exercise Psychology* (Muenster, Germany), 2019.
- 60. **Lee JS**, Boafo A, Greenham S, **Longmuir PE**. The effect of high-intensity interval training on executive function in adolescents hospitalized for a mental illness. *Eastern Canada Sport and Exercise Psychology Symposium* (Toronto, Canada), 2019.
- 61. Lemire O, Roubos S, Moore C, Hennessy K, Brandao L, Feldman B, Wright V, Lougheed J, Pohl D, Johnston D, Klaassen R, Roth J, Katz S, De Laat D, McCormick A, Macartney G, McMillan H, Doja A, Venkateswaran S, Boafo A, Sell E, Matheson K, Longmuir PE. Effective physical literacy screening among children with medical conditions /disabilities. *University of Ottawa Faculty of Medicine Research Day* (Ottawa, Canada), 2019.
- 62. **Longmuir PE**. Physical Activity Recommendations: North America vs European. *American Heart Association Scientific Sessions* (Philadelphia, USA), 2019.

HALO ANNUAL REPORT 2019 55 CHEO — RESEARCH INSTITUTE

- 63. **Longmuir PE**. Sport and recreation inclusion: Panel discussion. *Parks and Recreation Ontario Forum* (Collingwood, Canada), 2019.
- 64. **Longmuir PE, Roubos S, Moore C**, Hennessy K, Chow C-J, Lougheed J, McMillan H, Doja A, Roth J, Venkateswaran S, Johnston D, Klaassen R, McCormick A, Macartney G, Katz SL, Boafo A, Sell E, Pohl D, Brandao L, Feldman B, Wright V. Quick and easy screening tasks effectively identify the physical literacy support needed to include children with medical conditions and disabilities. *Parks and Recreation Ontario Forum* (Collingwood, Canada), 2019.
- 65. **Manyanga T, Aubert S, Gonzalez SA, Lee EY,** Reilly JJ, **Tremblay MS.** Highlights of Report Card Grades from six African Countries that participated in the Global Matrix 3.0. *International Society of Behavioural Nutrition and Physical Activity Annual Conference* (Prague, Czech Republic), 2019.
- 66. **Manyanga T, Barnes JD, Chaput JP**, Dubois L, Katzmarzyk PT, Mire EF, Prista A, **Tremblay MS**. Correlates of thinness and obesity among urban and rural Mozambican schoolchildren. *Canadian Society of Exercise Physiology* (Kelowna, Canada), 2019.
- 67. **Manyanga T, Barnes JD, Chaput JP**, Katzmarzyk PT, Prista A, **Tremblay MS**. Correlates of movement behaviours among urban and rural schoolchildren in Mozambique. *Canadian Society of Exercise Physiology* (Kelowna, Canada), 2019.
- 68. **Manyanga T, Barnes JD,** Katzmarzyk PT, Prista A, **Tremblay MS.** Weight status and self-reported physical activity for primary school children differs among cities and rural versus urban areas. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 69. **Manyanga T, Barnes JD, Tremblay MS**. Highlights of Report Card Grades from six African Countries that participated in the Global Matrix 3.0. *Annual Students Research Day, School of Epidemiology and Public Health, Faculty of Medicine, University of Ottawa* (Ottawa, Canada), 2019.
- 70. **Manyanga T, Barnes JD, Tremblay MS**. Obesity and objectively measured physical activity differ between rural and urban Mozambican primary schoolchildren. *Canadian Student Health Research Forum* (Winnipeg, Canada), 2019.
- 71. **Rollo S,** Prapavessis H. Sedentary behaviour and diabetes information as a source of motivation to reduce occupational sitting time in office workers: An experimental study using the health action process approach. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 72. Rhodes RE, Spence JC, Berry T, Faulkner G, Latimer-Cheung AE, O'Reilly N, Tremblay MS, Vanderloo L. Parental Support of the Canadian 24-Hour Movement Guidelines for Children and Youth: Prevalence and Correlates. 33rd Annual Conference of the European Health Psychology Society (Dubrovnik, Croatia), 2019.
- 73. Riazi NA, Blanchette S, Leduc G, Trudeau F, **Tremblay MS, Larouche R,** Faulkner G. Correlates of children's independent mobility: A multi-site study. *3rd British Columbia Sport, Health, and Exercise Psychology Symposium* (Vancouver, Canada), 2019.
- 74. Riazi NA, Yun L, Blanchette S, Trudeau F, **Larouche R, Tremblay MS,** Faulkner G. Correlates of outdoor time in Canadian children: Findings from a multi-site study. *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 75. Riazi NA, Yun L, Blanchette S, Trudeau F, **Larouche R, Tremblay MS,** Faulkner G. Walking the dog: Independent mobility's best friend? *Canadian Society for Psychomotor Learning and Sport Psychology Conference* (Vancouver, Canada), 2019.
- 76. Sick K, **Rollo S,** Prapavessis H. The relationship between perceived sedentary behaviour and psychological health. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 77. Tallon CM, Rieger MG, Koziol AV, Green DJ, **Tremblay M**, McManus AM. The relationship between habitual sedentary behaviour and cerebral blood flow in children and adolescents. *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.

HALO ANNUAL REPORT 2019 56 CHEO – RESEARCH INSTITUTE

- 78. Tanaka C, **Tremblay MS**, Okuda M, Tanaka M, Inoue S, Tanaka S. Proportion of Japanese primary school children meeting recommendations for 24-hour movement guidelines and associations with weight status. *European Congress on Obesity* (Glasgow, Scotland), 2019.
- 79. **Tremblay MS, Aubert S, Barnes JD, Forse M, Gonzalez SA, Manyanga T**. on behalf of the Global Matrix 3.0 group. Prevalence of children and youth meeting physical activity guidelines: a 49-country comparison. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 80. **Tremblay MS**, Brussoni M. A look back and a way forward: From the Position Statement on Active Outdoor Play to the launch of Outdoor Play Canada and beyond. *Breath of Fresh Air Outdoor Play Summit* (Ottawa, Canada), 2019.
- 81. **Tremblay MS,** Sturdy J. Screen Time vs Green Time: The Health Impacts of Too Much Screen Time. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 82. **Tremblay MS.** Active Health Kids Global Alliance Global Matrix 3.0. *Invited lecture at the University of Florianopolis Santa Catarina* (Florianopolis, Brazil), 2019.
- 83. **Tremblay MS.** Active Healthy Kids Global Alliance comparisons insights to steer Australia. *Invited keynote address at the Australian National Sports Convention* (Melbourne, Australia), 2019.
- 84. **Tremblay MS**. Active Healthy Kids Global Alliance: Global Matrix 3.0 findings. *Invited presentation at the 2018 Active Healthy Kids Hong Kong Report Card on Physical Activity for Children and Youth release press conference* (Sha Tin, Hong Kong), 2019.
- 85. **Tremblay MS.** Active Healthy Kids global Alliance: Global Matrix 3.0. *Invited keynote presentation at the 19th Annual School of Kinesiology and Health Studies Research Colloquium, Queen's University* (Kingston, Canada), 2019.
- 86. **Tremblay MS.** Active Healthy Kids Global Alliance: Global Matrix 3.0. *Invited presentation at the Lithuania Sports University* (Kaunas, Lithuania), 2019.
- 87. **Tremblay MS.** Active Healthy Kids Global Alliance: Powering the movement to get kids moving. *School of Epidemiology and Public Health, University of Ottawa, Graduate Seminar* (Ottawa, Canada), 2019.
- 88. **Tremblay MS.** Benefits of Exercise. Invited presentation at the 68th Annual Refresher Course for Family Physicians (Ottawa, Canada), 2019.
- 89. **Tremblay MS.** Canadian 24-Hour Movement Guidelines. *University of Helsinki Visiting Lectureship* (Helsinki, Finland), 2019.
- 90. **Tremblay MS.** Canadian Assessment of Physical Literacy: Summary and status update. *Steno Diabetes Center Research Seminar* (Copenhagen, Denmark), 2019.
- 91. **Tremblay MS.** Connecting research with action to get more children active. *Invited presentation at the MOVE Congress* (Budapest, Hungary), 2019.
- 92. **Tremblay MS.** Global Physical Activity Report Card Grades for Children and Youth. *Invited presentation at the Conference on Physical Activity and Health in China 2019* (Beijing, China), 2019.
- 93. **Tremblay MS.** Healthy Active Living and Obesity Research Group. *Invited Graduate seminar, Department of Sports Science and Physical Education, Chinese University of Hong Kong* (Sha Tin, Hong Kong), 2019.
- 94. **Tremblay MS.** Healthy Active Living and Obesity Research Group. **Karolinska Institute Research Seminar** (Stockholm, Sweden), 2019.
- 95. **Tremblay MS.** Healthy Active Living and Obesity Research Group. *Novo Nordisk Foundation* (Copenhagen, Denmark), 2019.

- 96. **Tremblay MS.** Introduction to symposium and brief history of fitness trends in Canada. *Symposium presentation at the Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 97. **Tremblay MS**. Introduction to symposium and brief history of physical activity guidelines in Canada. *Symposium presentation at the Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 98. **Tremblay MS.** Key activities to capture for physical activity and measurement challenges in children 0-5 years-old. *Invited presentation at the National Collaborative on Childhood Obesity Research (NCCOR) Advancing Measurement of Individual Behaviors Related to Childhood Obesity Workshop (Washington, USA), 2019.*
- 99. **Tremblay MS.** Nature and the outdoors as an antidote for modern living. *Invited keynote speaker at the Andrew Fleck Children's Services Annual Community Meeting* (Ottawa, Canada), 2019.
- 100. Tremblay MS. Outdoor Play Canada inaugural awards. Breath of Fresh Air Outdoor Play Summit (Ottawa, Canada), 2019.
- 101. **Tremblay MS.** Parks for Health: Nature and the Outdoors as an Antidote to Modern Living. *Invited lecture at the University of Florianopolis Santa Catarina* (Florianopolis, Brazil), 2019.
- 102.**Tremblay MS**. Parks for Health: Nature and the outdoors as an antidote to modern living. *Keynote presentation at the Nature Play in Alberta Parks Innovation Project Workshop* (Red Deer, Canada), 2019.
- 103.**Tremblay MS.** Physical literacy and the movement to get kids moving. *Invited lecture in the Distinguished Lecture Series, Faculty of Education, Chinese University of Hong Kong* (Sha Tin, Hong Kong), 2019.
- 104.**Tremblay MS.** Powering the Global Movement to Get Kids Moving. *Invited "Grand Lecture" at the University of Florianopolis Santa Catarina* (Florianopolis, Brazil), 2019.
- 105.**Tremblay MS.** Reimaging sport with a collective systems approach to achieving Sport 2030. *Invited panelist at the Australian National Sports Convention* (Melbourne, Australia), 2019.
- 106.**Tremblay MS.** Reimagining Participation: How to activate the community to move more often. *Invited panelist at the Australian National Sports Convention* (Melbourne, Australia), 2019.
- 107.**Tremblay MS.** The Movement to 24-hour Movement Guidelines. *Invited lecture at the University of Florianopolis Santa Catarina* (Florianopolis, Brazil), 2019.
- 108. **Tremblay MS.** The whole day matters for brain health an integration of physical activity, sedentary behaviour and sleep. *Symposium presentation at the Canadian Society for Exercise Physiology Scientific Conference* (Kelowna), Symposium, November, 2019.
- 109.**Tremblay MS.** The whole day matters: a new paradigm for movement guidelines. *Invited presentation at the 6th Canadian Obesity Summit* (Ottawa, Canada), 2019.
- 110.**Tremblay MS.** The whole day matters: a new paradigm in movement. *Invited presentation at the University of Ottawa Exercise is Medicine Canada Seminar* (Ottawa, Canada), 2019.
- 111. **Tremblay MS.** Weight management through healthy active living: moving forward by looking back. *Invited presentation to the University of Ottawa, Faculty of Medicine, Weight Management Interest Group* (Ottawa, Canada), 2019.
- 112. Trudeau F, Blanchette S, Faulkner G, Leduc G, Riazi NA, **Tremblay MS**, **Larouche R.** Influence of weather conditions and season on children's active school transportation and physical activity in three diverse regions of Canada. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.

HALO ANNUAL REPORT 2019 58 CHEO – RESEARCH INSTITUTE

- 113. Turner E, Carson S, Guerrero M, Forse M, Tremblay MS. SUNRISE International Surveillance Study of Movement Behaviours in the Early Years: Preliminary 24-hour movement behaviour results from the Canadian pilot *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 114.**Turner E, Carson SJ, Guerrero MD,** Forse ML, **Tremblay MS**. SUNRISE International Surveillance Study of Movement Behaviours in the Early Years: 24-hour movement behaviour results from the Canadian pilot. *International Society of Behavioral Nutrition and Physical Activity Annual Meeting* (Prague, Czech Republic), 2019.
- 115. Vanderloo LM, Goldowitz D, Collet JP, **Tremblay MS** (on behalf of the Expert Panel for Physical Activity and Brain Health in Children and Youth). An expert statement on physical activity and brain health in children and youth: From evidence synthesis to knowledge translation tool. *Active Living Conference* (Charleston, USA.), 2019.
- 116. Vanderloo LM, Maguire JL, Keown-Stoneman Anderson LN, **Tremblay MS**, Birken CS. Association between parent-reported physical activity and cardiometabolic risk in children: a prospective cohort study. *Pediatric Academic Societies Meeting* (Baltimore, USA), 2019.
- 117. Walters A, **Tremblay MS**, Chulak-Bozzer T, Duggan M, **Latimer-Cheung AE**. Dissemination and implementation of the Canadian 24-Hr Movement Guidelines for Children and Youth evaluation summary. *Canadian Society for Exercise Physiology Scientific Conference* (Kelowna, Canada), 2019.
- 118.Yun L, Vanderloo L, Berry TR, **Latimer-Cheung AE**, O'Reilly N, Rhodes R, Spence JC, **Tremblay MS**, Faulkner G. Political orientation and public attributions for the causes and solutions of physical inactivity in Canada: Implications for policy support. *Canadian Society for Psychomotor Learning and Sport Psychology Conference* (Vancouver, Canada), 2019.
- 119.Zahn K, Ibrahim Q, Ball G, Hamilton J, Buchholz A, Ho J, Zenlea I, Legault L, Laberge A, Thabane L, **Tremblay M**, Morrison KM. Characteristics of clinics participating in the CANadian Pediatrc Weight management Registry (CANPWR): a descriptive report. *6th Canadian Obesity Summit* (Ottawa, Canada), 2019.

Number of Presentations 2011 2012

Figure 6: Number of scholarly presentations by HALO Research Group - total of 1443 to date.

HALO ANNUAL REPORT 2019 59 CHEO – RESEARCH INSTITUTE

MEMORANDA OF UNDERSTANDING

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

- HALO-CHEO RI and University Bernardo O'Higgins (Santiago, Chile)
- HALO-CHEO RI and Department of Pediatrics, McMaster University (Hamilton, Canada)
- HALO-CHEO RI and Child and Nature Alliance of Canada (Ottawa, Canada)
- University of Ottawa and the State University of Maringá (Maringá, Brazil)
- HALO-CHEO RI and Pennington Biomedical Research Centre (Baton Rouge, USA)
- HALO-CHEO RI and University of Copenhagen (Copenhagen, Denmark)
- HALO-CHEO RI and University of Wollongong (Wollongong, Australia)
- HALO-CHEO RI and Research Center of Sports and Physical Activity Pedagogic University Mozambique (Maputo, 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
- Andrew Fleck Children's Services
- Canadian Fitness and Lifestyle Research Institute
- Canadian Society for Exercise Physiology
- **Carleton University**
- Champlain Cardiovascular Disease Prevention Network
- **CHEO Foundation**
- **CHEO Research Institute**
- Health Analysis Division, Statistics Canada
- Health Nexus: Best Start Resource Centre
- Kenyatta University
- KidActive
- Kids Brain Health Network
- McMaster University
- Nature Canada

- **Obesity Canada**
- Ottawa Public Health
- **Outdoor Play Canada**
- **ParticipACTION**
- Pennington Biomedical Research Center
- PLaTO-Net
- Sedentary Behaviour Research Network
- State University of Maringá
- The Lawson Foundation
- The Ottawa Hospital
- University Bernardo O'Higgins
- University of Copenhagen
- University of Ottawa
- University of Ottawa Institute of Mental Health Research
- University of Wollongong
- YMCA/YWCA of the National Capital Region





































YMCA-YWCA of the National Capital Region



























CONTACT US (STAFF LIST AS OF MARCH 31, 2020)



Healthy Active Living and Obesity Research Group (HALO) Children's Hospital of Eastern Ontario Research Institute 401 Smyth Road, Ottawa, ON K1H 8L1

Please visit our HALO web site at www.haloresearch.ca

Annick Buchholz Psychologist, CHAL 613-260-1477 ext. 224

abuchholz@cheo.on.ca

Louise de Lannoy

Research Coordinator 613-737-7600 ext. 4148 Idelannoy@cheo.on.ca

Michelle Guerrero

Post-Doctoral Fellow 613-737-7600 ext. 4016 mguerrero@cheo.on.ca

Pat Longmuir

Research Scientist 613-737-7600 ext. 3908 plongmuir@cheo.on.ca

Mark Tremblay

Director, HALO 613-737-7600 ext. 4114 mtremblay@cheo.on.ca

Jean-Philippe Chaput

Research Scientist 613-737-7600 ext. 3683 jpchaput@cheo.on.ca

Iryna Demchenko

Research Coordinator 613-737-7600 ext. 4408 idemchenko@cheo.on.ca

Stasia Hadjiyannakis

Pediatric Endocrinologist, CHAL 613-737-7600 ext. 3939 shadjiyannakis@cheo.on.ca

Scott Rollo

Post-Doctoral Fellow 613-737-7600 ext. 4008 asrollo@cheo.on.ca

Jenna Yaraskavitch

Research Assistant 613-737-7600 ext. 4003 jyaraskavitch@cheo.on.ca

Natasha Cinanni

Research Coordinator 613-737-7600 ext. 4005 ncinanni@cheo.on.ca

Gary Goldfield

Clinical Scientist 613-737-7600 ext. 3288 ggoldfield@cheo.on.ca

Kaamel Hafizi

Research Coordinator 613-737-7600 ext. 4102 khafizi@cheo.on.ca

Jane Rutherford

Exercise Specialist, CHAL 613-260-1477 ext. 222 jrutherford@cheo.on.ca

