

# EBOSS RESEARCH DAY 2019



# MESSAGE FROM CHAIR



Whenever I talk about the Department of Epidemiology, Biostatistics and Occupational Health to colleagues outside McGill (and within McGill), I always mention that our Department is the best in Canada by far and one of the best in the world. Although that might sound like hype and I haven't seen rankings for departments such as ours, I believe our methodological strengths, the originality of our research, our successes in grants and publications, the rigor of our graduate programs and that the quality of our graduate students amply justify my claim. The 15th Annual Student Research Day is a case in point. It will showcase some of the outstanding scholarly work conducted by our graduate students and demonstrate the breadth and depth of their research

skills. This is a great opportunity for faculty members and students to interact and build ever stronger bonds within our community. I congratulate the presenters and thank EBOSS and everyone who was involved in the organization of this day that, I'm sure, will be a great success. I wish you all a stimulating and enjoyable day.

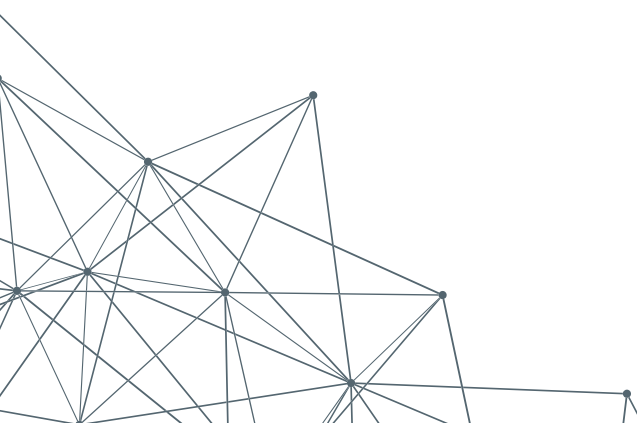
Dr. Gilles Paradis

Professor and Chair

Department of Epidemiology, Biostatistics & Occupational Health

## RESEARCH DAY 2019 AGENDA

8:30 – 8:55	Breakfast, Registration & Poster Set-Up
9:00 – 9:05	Welcome Remarks (Dr. Gilles Paradis)
9:05 – 10:20	Oral Presentations Block A
10:20 – 10:35	Morning Break
10:35 – 11:30	3 Minute Practicum
11:30 – 11:35	Special Announcement from the McGill Journal of Medicine
11:35 – 12:15	Student Keynote Presentation : Ms. Sahar Saeed
12:15 – 2:00	Lunch (Poster Judging: 12:30 – 1:30)
2:00 – 3:15	Oral Presentations Block B
3:15 – 3:30	Afternoon Break
3:30 – 4:30	Special Keynote: Dr. Ian Graham
4:30 – 4:45	Distribution of Awards & Closing Remarks
4:45 - 6:30	Wine & Cheese Reception



# YEAR-IN-REVIEW

Dear colleagues,

Welcome to the 15th Annual EBOH Student Research Day!

This has been a very exciting year for the Epidemiology, Biostatistics and Occupational Health Student Society (EBOSS). Our Council has been extremely busy planning and hosting events to bring the members of our growing department together and support them on their individual career paths. We kicked off our academic year with the mentorship program, pairing every incoming student with a senior to help them settle into their new program. Thus, securing a smooth transition for every new student. Our 5 à 7's have been a hit with all our students and faculty. We ended off 2018 with a bang at our annual department potluck holiday party with an incredible violinist, Berson Augustin, providing us with live music throughout the night of festivities. This April will be the return of our Spring Banquet. This is a great way for students and faculty alike to come and celebrate another excellent academic year; teaching award recipients will be announced at this event.



We are also happy to announce that our department council is going to have a fresh new online platform. With efforts led by Marcus Wong, we are confident that this site will improve our reach towards prospective students interested in joining our department and will also be an accessible hub for current students and faculty to stay updated on all of our EBOSS events!

We are proud to have also seen many of our academic events been received well. This year was the inaugural year of our consulting initiative to connect our talented student base with those seeking help in epidemiological and biostatistical research. Our Council has been working hard to continue to increase our outreach and hammering out the logistics for this project. We held workshops and seminars on diverse subjects such as fellowship applications and

mental health. Our very own Diana Nguyen has also been heading up the 5th annual applied methods group, which has covered topics such as the delivery of substandard drugs & targeted Maximum Likelihood Estimation. The 2018-2019 Three Minute Thesis competition allowed for students to share the progress of their thesis work with the department and greater McGill community.

Since its inception, Research Day has always been EBOSS' most anticipated event; it provides a great opportunity to connect with students and faculty in the EBOH community. We are excited to showcase the research done by students in our department, particularly within our growing Public Health program. This year, we are excited to announce a new part of the itinerary which is the 3-Minute Practicum event targeted towards 2nd year Public Health students. We are looking forward to our keynote speakers for this year, Dr. Ian Graham and Ms. Sahar Saeed. Additionally, we would like to extend our deepest thanks to our abstract reviewers, presentation judges, administrative staff, faculty donors, organizing committee, and all of our volunteers whose collective efforts led to the success of this event! We would particularly like to thank academic representatives Devin Abrahami and Carla Doyle, who chaired the Research Day organizing committee. Their hard work and dedication are what made this event a success for yet another year. We hope you enjoy the day as we celebrate the remarkable student research occurring in our department.

Cheers,  
Jenkin Tsang  
EBOSS President

Diana Nguyen  
EBOSS Vice President

Stephen Kutcher  
EBOSS VP Finance

# KEYNOTE SPEAKERS

## Dr. Ian Graham

Dr. Ian Graham is Professor in the School of Epidemiology & Public Health at the University of Ottawa and Senior Scientist in the Clinical Epidemiology Program of the Ottawa Hospital Research Institute. From 2006-2012 he was on an interchange with the Canadian Institutes of Health Research where he held the position of Vice-President of the Knowledge Translation and Public Outreach. Dr. Graham obtained a Ph.D. in medical sociology from McGill University. His research focuses on knowledge translation (the process of research use) and conducting applied research on strategies to increase implementation of evidence-informed practice.

Dr. Graham has been twice awarded a Queen Elizabeth II Jubilee Medal (2002, 2012) for contributions to research. He is a Fellow of the Canadian Academy of Health Sciences, New York Academy of Medicine, and the Royal Society of Canada. He is the recipient of an inaugural Canadian Institutes of Health Research Foundation Grant entitled, "Moving knowledge into action for more effective practice, programs and policy: A research program focusing on integrated knowledge translation."



## Sahar Saeed, PhD Candidate

Sahar Saeed is currently a Ph.D. candidate in the Department of Epidemiology, Biostatistics and Occupational Health supervised by Dr. Marina Klein and Dr. Erin Strumpf. She holds a Bachelor's degree in Biochemistry (Carleton University, 2005) a Master's degree in Human Genetics (McGill, 2007) and has more than a decade of real world research experience predominantly in infectious diseases. Her doctoral research focuses on access to treatments and the use of quasi-experimental methods to evaluate the impact of these treatments and policies on health outcomes. She has published a total of 32 manuscripts and presented at more than 20 national and International conferences in the last three years. Sahar is funded by a Frederick Banting and Charles Best Canada Graduate Scholarship, from the Canadian Institute of Health Research and by the Canadian Hepatitis C Network.





# KEYNOTE PRESENTATIONS

## Integrated Knowledge Translation: What's all the Fuss About?

Dr. Ian Graham

The presentation will review the concept of integrated knowledge translation, present some of the evidence supporting the value of this approach, and describe the focus of our CIHR foundation grant (known as the Integrated Knowledge Translation Network) and the IKTRN's progress to date.

## The Hepatitis C Treatment Revolution: Who's accessing treatment?

Sahar Saeed, PhD Candidate

Deaths due to Hepatitis C Virus (HCV) will soon surpass HIV, tuberculosis and malaria worldwide. The emergence of direct-acting antivirals (DAAs) for the treatment of the HCV marked one of the most significant advances in modern therapeutics. Unlike previous generations of HCV therapies, DAAs are well-tolerated and cure >90% of chronically infected individuals. In light of these treatments, the World Health Organization (WHO) has defined targets to scale up screening, access to treatment and harm reduction in order to eliminate HCV as a public health threat by 2030. Nonetheless increasing HCV treatment initiation rates, specifically among marginalized populations, remains a significant publichealth challenge. This presentation will address fundamental issues regarding the generalizability of clinical trials and the identification and quantification of barriers to accessing treatments for people living with HIV in Canada.



# ORAL PRESENTATIONS

## Block A

- Farzin Khosrow-Khavar Cardiotoxicity of Aromatase Inhibitors in Post-Menopausal Women with Breast Cancer: A Population-Based Cohort Study
- Michelle Dimitris How Global is Global Health Research? A Large-Scale Investigation of Trends in Authorship
- Karena Volesky The future burden of cancer attributable to hepatitis B and C viruses and Helicobacter pylori in Canada
- Muzi Li Interactions of child maltreatment and genetic variations in adult psychopathology: A systematic review
- Arnaud Godin Modelling the population-level impact of a prison-based universal testing and treatment strategy on hepatitis C incidence among people who inject drugs in Montréal, Canada

## 3-Minute Practicum

- Sarah Williams Improving the Transitioning of Young Adults with Type 1 Diabetes from Pediatric into Adult Care in Newfoundland and Labrador
- Jenkin Tsang Cost-Burden of Obesity in Commercially-Insured Individuals in the US
- Rebecca Bungay Healthcare provider stigma toward individuals seeking STBBI testing and sexual health care in Newfoundland and Labrador
- Mary Brache-Holdsworth Cervical cancer screening in women who live with HIV: results from the EVVA cohort study
- Yannan Shen A Bayesian Spatial-Temporal Model for Projecting Regional Chronic Disease Incidence: The Example of Diabetes in Montreal Health Regions, 1998 to 2014
- Anais Lemyre Equine Encephalitis Surveillance in the Americas
- Dewdunee Marasinghe A hospital-based case control study evaluating the risk of acquiring malaria in those visiting friends and relatives in Calgary, Canada (2013 – 2017)
- Jillian Adams Current Staff Practice Use and Viewpoints Towards Routine Outcome Measurement within Select IWK MHA Clinics
- Berson Augustin ALIGN (Analysis of AIDS cases in Germany)

## Block B

- Kevin McGregor A Bayesian model to estimate microbiome network changes with respect to a continuous covariate
- Yin Wu Evaluation of the Equivalency of the PHQ-8 and PHQ-9: A systematic review and individual participant data meta-analysis
- Hannah Alsdurf How resource intensive is latent TB management? Using time and motion studies to estimate labour needs for LTBI scale-up
- Sonia Grandi The importance of non-traditional risk factors for prediction of cardiovascular disease in women of reproductive age
- Sindy Magnan Efficacy of a carrageenan-based lubricant gel in increasing clearance of HPV infections in women: interim analysis of a double-blind, randomized, placebo-controlled trial



# POSTER PRESENTATIONS

Christina Santella	Testosterone replacement therapy and the risk of prostate cancer in men with late-onset hypogonadism.
Tingting Gao	When adolescents face both Internet addiction and mood symptoms: A cross-sectional study of comorbidity and its predictors
Muzi Li	Development and validation of a short-version of the CECA.Q3 among a population of mood disorder
Vanessa Brunetti	Type-2 Diabetes Mellitus and the Risk of Community-Acquired Pneumonia: a Systematic Review and Meta-analysis
Michelle Dimitris	Does gestational weight gain predict gestational age at birth in twin pregnancies?
Stephen Kutcher	The Ticagrelor Compared to Clopidogrel in aCute Coronary syndrome (TC4) pragmatic randomized controlled trial
Sophie Huddart	Case Fatality Among Indian Tuberculosis Patients: A Systematic Review And Meta-Analysis
Aashna Uppal Charlotte Laniece	Modelling the Epidemiology of Tuberculosis in Nunavut from 1948-2018 Hepatitis C virus (HCV) seroprevalence and associated risk factors in Montreal men who have sex with men (MSM): results from three cross-sectional studies (2005, 2008-2009, 2018)
Joanne Kim	Associations between Parabens and Metabolic Syndrome in the General Canadian Population
Thomas Dilenardo	Exposure to lead and immune function in South African preschool children from a rural area
Kabisha Velauthapillai	Outdoor, indoor, and personal exposures to traffic-related air pollution in retired adults in urban Colombia
Sacha Weill	Estimating Lifetime History of TBI in Canada: Results from the Canadian Longitudinal Study on Aging
Chen He	The Diagnostic Accuracy of the Patient Health Questionnaire-9 (PHQ-9) algorithm for Detecting Major Depression: An Individual Participant Data Meta-analysis
Khalidha Nasiri	Racial Disparities and Adverse Birth Outcomes among Women with a Prior Preterm Birth: Effect of Access to Adequate Prenatal Care
Talia Sternbach	Challenges in Air Pollution Exposure Assessment: An Example in Peri-Urban Beijing.
Dominik Yang	A comparison of privacy-preserving statistical methods for analyzing distributed data with binary outcome variables
Emily Maclean Cassandra Laurie	Stool Xpert for diagnosing childhood TB: A systematic review and meta analysis Lubricant Investigation in Men to Inhibit Transmission of HPV Infection (LIM-IT-HPV): protocol for a phase IIB, placebo-controlled, randomized controlled trial
Jessica Maitland	Psychological Health of Canadian Veterans: Data from the Canadian Longitudinal Study on Aging
Vivian Ukah	The relationship between pregnancy weight gain by body mass index (BMI) category and adverse birth outcomes
Lujain Daghar	Tobacco use and cessation among a national online sample of MSM in Malaysia



# RECOGNITION

## Oral Presentation Judges

Dr. Jay Kaufman  
Dr. Theresa Gyorkos  
Dr. Michel Abrahamowicz  
Dr. Arijit Nandi  
Dr. Alissa Koski  
Dr. Scott Weichenthal  
Dr. Tina Wolfson

## Abstract Reviewers

Dr. Geoffrey Dougherty  
Dr. Xiangfei Meng  
Dr. Robert Allard  
Dr. Sam Harper  
Dr. Michel Wissing  
Dr. Olga Basso  
Dr. Maida Sewitch  
Dr. Kianoush Dehghani  
Dr. Seungmi Yang  
Dr. Alissa Koski

## Poster Presentation Judges

Dr. Talía Malagón  
Dr. Antonis Douros  
Dr. Robert Platt  
Dr. Antonio Ciampi  
Dr. Xiangfei Meng  
Dr. Kristian Filion  
Dr. Marta Kaminski  
Dr. Azar Mehrabadi  
Dr. Tina Wolfson



Epidemiology, Biostatistics and Occupational Health Student Society (EBOSS)  
The Post Graduate Student Society  
Department of Epidemiology, Biostatistics and Occupational Health (EBOH)

## Faculty Donors

Dr. Maida Sewitch, Dr. Mathieu Maheu-Giroux, Dr. Nitika Pai, Dr. Sam Harper,  
Dr. Amélie Quesnel-Vallée, Precision Analytics

## EBOSS Research Day Planning Committee

Devin Abrahami, Carla Doyle, Stephen Kutcher, Gayatri Marathe, Helen Cerigo,  
Mathew Thompson, Rebecca Bungay, Sarah Williams, Mary Brache-Holdsworth,  
Emily MacLean

## EBOH Administrative Staff

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Eileen Lavery