



EBOSS

RESEARCH DAY

2018

MESSAGE FROM CHAIR



Welcome to the 14th Annual Student Research Day of the Department of Epidemiology, Biostatistics and Occupational Health. Research Day gives us the opportunity to appreciate the breadth and depth of our students' research experience and the truly outstanding quality of their work. I invite you to actively engage with students during the oral and poster presentations. We are fortunate to have Mr. André Picard, the respected Globe and Mail Columnist, as our keynote speaker and his talk should be both stimulating and engaging. The day is also the opportunity to socialize with fellow students and faculty members and to create strong bonds within our EBOH community.

I thank students who submitted abstracts and who are presenting as well as faculty members and post-doctoral fellows who reviewed abstracts and who will act as judges throughout the day. I thank EBOSS and its leadership for organizing this important event in the scientific life of the Department. Thanks also to all the participants and I wish you all an enjoyable day.

Dr. Gilles Paradis

Professor and Chair

Department of Epidemiology, Biostatistics & Occupational Health

RESEARCH DAY 2018 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	Coffee Break
10:35 - 11:35	Oral Presentations Block B
11:35 - 12:15	Student Keynote Presentation
12:15 - 2:00	Lunch (Poster Judging: 12:50 - 1:50, location: Helen Penfield Auditorium)
2:00 - 3:15	Oral Presentations Block C
3:15 - 3:25	Coffee Break
3:25 - 4:25	Special Keynote: Mr. André Picard
4:25 - 4:45	Distribution of Awards
4:45 - 6:30	Wine & Cheese Reception (Helen Penfield Auditorium)

YEAR-IN-REVIEW

Dear colleagues,

Welcome to the 14th Annual EBOH Student Research Day!

This has been a very exciting year for the Epidemiology, Biostatistics and Occupation 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.

This year, we hosted several well-attended 5 à 7s in addition to our annual holiday party. Our mentorship program ensured that every new student entering the department had someone to turn to for help in getting settled into their program. In April, we are anticipating the return of the Spring Banquet, which will be paired with the sophomore outing of our celebrated Career Day roundtable event. This event will provide students with an opportunity to network with academics and professionals in research, government, and the private sector. This year, we spearheaded a new Volunteer Day event to give back to the community. Our students collected clothing donations and helped to prepare and serve meals at the Old Brewery Mission.



On the academic side, we have hosted numerous events aimed at enriching student education. We held workshops and seminars on such diverse subjects as thesis writing, open health data, fellowship applications, mental health, and data manipulation in R. The applied methods group, now in its third year, covered topics including data documentation, confidence intervals, and time series. Our Three Minute Thesis competition allowed our students to practice distilling their research into one snappy, bite-sized presentation. Two new initiatives this year include a compendium of relevant journal clubs around McGill and Student Spotlight, which highlights recently published articles by students in the department.

Since its inception, Research Day has always been EBOSS's most anticipated event, as 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 our growing Public Health program. We are also looking forward to hearing from our keynote speakers Mr. André Picard and Mr. Sahir Bhatnagar. We would like to give a special thank you to the abstract reviewers, presentation judges, administrative staff, faculty donors, and organizing committee, as well as our volunteers, without whom this event would not have been possible. We would particularly like to thank academic representatives Carla Doyle and Devin Abrahami, who chaired the Research Day organizing committee, for their hard work and dedication to making this event a success.

We hope you enjoy the day as we celebrate the remarkable student research occurring in our department.

Jean-Paul R. Soucy
EBOSS President

Siyana Kurteva
EBOSS Vice President

Stephen Kutcher
EBOSS VP Finance

Selected conference proceedings have been published in the McGill Journal of Medicine and are available at: mjmmmed.com/EBOH_2018

MJM

KEYNOTE SPEAKERS

André Picard

André Picard is the health columnist at The Globe and Mail, where he has been a staff writer since 1987. He is also the author of five books, including the current bestseller, "Matters of Life and Death: Public Health Issues in Canada."

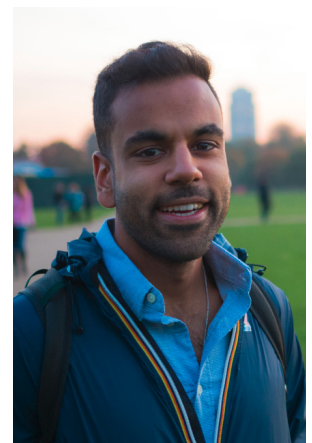
André is a graduate of the University of Ottawa and Carleton University, and has received honorary doctorates from six Canadian universities.

He lives in Montréal.



Sahir Bhatnagar, PhD Candidate

Sahir is currently a Biostatistics PhD candidate in the Department of Epidemiology, Biostatistics and Occupational Health at McGill. His thesis supervisors are Dr. Celia Greenwood and Dr. Yi Yang. He holds a Bachelors in Actuarial Mathematics (Concordia) and a Masters in Biostatistics (Queen's). He recently completed a research term at the Wellcome Trust Sanger Institute in Cambridge, UK as a Queen Elizabeth II scholar. He is broadly interested in developing statistical methods and writing software for analyzing high-dimensional data using penalized regression. For more information visit <http://sahirbhatnagar.com/>.



RECOGNITION

Oral Presentation Judges

Seungmi Yang
Sam Harper
Michal Abrahamowicz
Theresa Gyorkos
Christina Wolfson
Antonio Ciampi

Abstract Reviewers

Robert Allard
Kianoush Dehghani
Alexandra Schmidt
Arijit Nandi
Maida Sewitch
Jaime Caro
Michel Wissing

Poster Presentation Judges

Olga Basso
Paramita Chaudhuri
Laurent Azoulay
Kristian Filion
Talía Malagón
Antonios Douros



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

Faculty Donors

Mathieu Maheu-Giroux & Jill Baumgartner

EBOSS Research Day Planning Committee, Leadership & Volunteers

Devin Abrahami, Carla Doyle, Jean-Paul R. Soucy, Siyana Kurteva, Stephen Kutcher, Jenkin Tsang & the entire EBOSS Council

EBOH Administrative Staff

André Yves Gagnon, Dolores Coletto, Nathalie Théorêt, Katherine Hayden, Eileen Lavery

KEYNOTE PRESENTATIONS

Health advocacy in the age of Twitter

André Picard

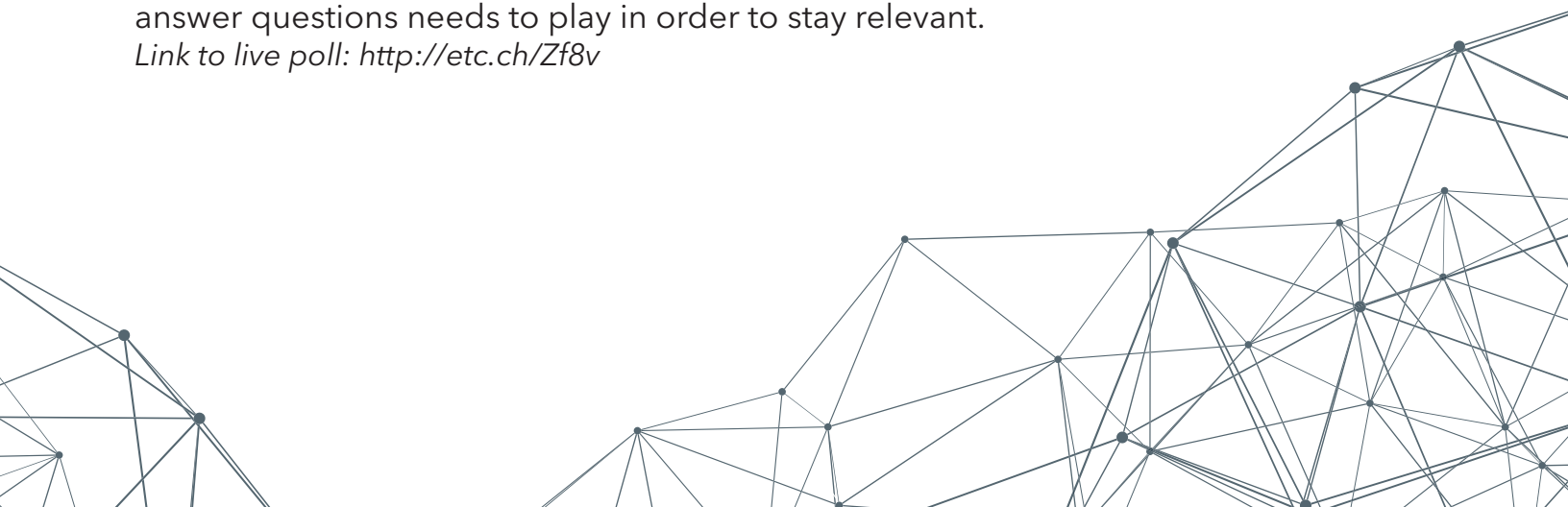
A veteran journalist examines if, when and how clinicians, researchers and public health officials should get involved in public debates of health policy issues, and how to bridge the gap between science and politics, using current examples such as legalization of cannabis and the opioids crisis.

Pick your favorite buzzword: Data Science, Machine Learning, Big Data. Data Science, Machine Learning, Big Data.

Sahir Bhatnagar

While the use of these terms have increased exponentially over the past decade, their meaning has become muddled, causing much confusion among applied scientists. Capitalizing on this confusion are companies that offer 3-month data science boot-camps which has students questioning the role of universities and the utility of their graduate level education. Meanwhile, statisticians are ignoring the movement going on around them, choosing instead to engage in decades old futile debates about Bayesian vs. Frequentist methods. In this talk, I first provide an overview of how these terms are being marketed for profit and used by mainstream media to generate more hype than substance. I will then present some data on the different programs available to the aspiring data scientist and their associated cost. I conclude with some remarks about my personal experience navigating the boundaries of academia and industry. My goal is to generate discussion about the role that any researcher who uses data to answer questions needs to play in order to stay relevant.

Link to live poll: <http://etc.ch/Zf8v>





ORAL PRESENTATIONS

Block A

- Brooke Levis Diagnostic accuracy of the PHQ-9 depression screening tool compared to semi-structured versus fully structured diagnostic interview reference standards: an individual participant data meta-analysis
- Jean-Paul Soucy Modelling environmental risk of Lyme disease using passive tick surveillance in Ontario
- Devin Abrahami Dipeptidyl peptidase-4 inhibitors and the incidence of inflammatory bowel disease among patients with type 2 diabetes
- Gabrielle Simoneau Optimal dynamic treatment regimes with survival outcomes: external validation of rheumatoid arthritis treatment recommendations
- Marina Machado Therapy completion of direct-acting antivirals for Hepatitis C

Block B

- Antonios Douros Use of dipeptidyl peptidase-4 inhibitors and new-onset rheumatoid arthritis in patients with type 2 diabetes
- Emily MacLean Biomarkers to detect active tuberculosis: a systematic review of the evidence, quality, and progress from 2010-2016
- Susannah Ripley Blood and Hair Mercury Concentrations among Cree First Nations of Eeyou Istchee (Quebec, Canada): time trends, prenatal exposure and links to traditional foods
- Karena Volesky Preventable burden of infection-associated cancers among American adults in 2014

Block C

- Francois Montastruc An original pharmacoepidemiological-pharmacodynamic method: application to antipsychotic-induced movement disorders
- Sahar Saeed Reductions in healthcare service usage following direct acting antiviral therapy
- Steve Ferreira Guerra A data-adaptive procedure for the optimal discretization of the timeline for longitudinal causal inference methods
- Sonia Grandi Cardiovascular-Related Morbidity and Mortality in Women with a History of Pregnancy Complications: A Systematic Review and Meta-Analysis
- Sindy Magnan Efficacy of a Carrageenan gel Against Transmission of Cervical HPV (CATCH): interim analysis of a randomized, double-blind, placebo-controlled trial



POSTER PRESENTATIONS

- Lucy Wilson** Exploratory analysis of the association between deworming, hookworm infection and macronutrients in breast milk
- Bidjinie Coriolan** Practicality and Acceptability of the Screening and Management Program on Prevalence and Outcomes of Gestational Hypertension and Diabetes in Haiti
- Christina Santella** Androgen deprivation therapy for prostate cancer and the risk of bladder cancer: a systematic review of observational studies
- Lynn Meng** Interaction Between Obstructive Sleep Apnea, Its Treatment and Parkinson's disease
- Julie Rouette** Pre-diagnostic use of low-dose aspirin and risk of incident metastasis and mortality in patients with colorectal cancer
- Sean MacKnight** Selection of controls in the EnvIMS case-control study: A tribute to Sholom Wacholder
- Lamin Juwara** Virtual Pooling as a Privacy-preserving Analysis Tool to Estimate Covariate Hazard Ratio (HR) of Cox Proportional Hazard Model
- Herak Apelian** PrEP-use experience among gay, bisexual, and other men who have sex with men (gbMSM) in Montreal
- Anita Dabirzadeh** A review of public health interventions to improve hepatitis C treatment adherence
- Henok Ayele** Trends in the Pharmacological Treatment of Benign Prostatic Hyperplasia in the United Kingdom from 1998 to 2016: A Population-Based Cohort Study
- Kathleen Anderson** Are new users of cholinesterase inhibitors and memantine different in terms of their characteristics?
- Ga Eun Lee** Experiences using the community health information system: results from a baseline qualitative assessment in two informal settlements of Nairobi, Kenya
- Vaidehi Nafade** A bibliometric analysis of tuberculosis research indexed in Web of Science, 2007-2016
- Sean Colyer** HIV Treatment Optimism and Crystal Methamphetamine Use and Initiation Among HIV-Negative Men Who Have Sex with Men in Vancouver, Canada: A Longitudinal Analysis
- Hiroshi Mamiya** Development of a community dietary indicator using point-of-purchase grocery transaction data
- Tanya Muphy** Population mean and percentiles of body mass index (BMI) in Quebec children: a comparison of complex survey data analysis methods
- Siyi He** Heat and pregnancy-related emergencies: Risk of placental abruption during hot weather
- Adam Palayew** Values, preferences, and acceptability of hepatitis C testing and treatment in the homeless and vulnerably housed: A scoping review
- Carla Doyle** Combination HIV prevention among Montreal gay, bisexual, and other men who have sex with men in the PrEP era: a Latent Class Analysis
- Menglan Pang** Flexible Accelerated Failure Time Model in Survival Analysis
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