



2021 Virtual Conference

**CSEB 2021: MEETING THE DEMANDS  
OF A RAPIDLY CHANGING WORLD**

June 1 - 3, 2021



# Thank you to the Sponsors of the 2021 CSEB Conference



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## Tuesday, June 1, 2021

### Keynote # 1

Modelling & Communicating Risk in the  
Rapidly Changing Environment of the Global  
Pandemic

11:00am – 12:15pm EST

Exhibits, Posters, On-Demand Presentations,  
Networking Lounge

12:15pm – 1:00pm EST

### Concurrent Session A

1:00pm – 2:15pm EST

\*see page 8

Exhibits, Posters, On-Demand Presentations,  
Networking Lounge

2:15pm – 3:00pm EST

### Plenary Panel # 1

The Hidden Impacts of COVID-19

3:00pm – 4:15pm EST

## Wednesday, June 2, 2021

### Plenary # 2

State-of-the Art Contributions of Data Science  
in a Rapidly Changing World

11:00am – 12:15pm EST

Exhibits, Posters, On-Demand Presentations,  
Networking Lounge

12:15pm – 1:00pm EST

### Concurrent Session B

1:00pm – 2:15pm EST

\*see page 9

Exhibits, Posters, On-Demand Presentations,  
Networking Lounge

2:15pm – 3:00pm EST

### Keynote # 2

Ready for a Revolution: The Changing Role of  
Statistics in Data Science and Big Data  
Initiatives

3:00pm – 4:00pm EST

## Thursday, June 3, 2021

### CSEB Student Event:

Speed Mentoring Session

11:00am - 12:00pm EST

### Post-Conference Workshop

Artificial Intelligence and Machine  
Learning for Precision Public Health

1:00pm - 3:00pm EST

### Post-Conference Workshop

Understanding Propensity Score  
Matching

1:00pm - 3:00pm EST

### Post-Conference Workshop

SAS and Open-Source Workshop

1:00pm - 4:00pm EST





# Modelling & Communicating Risk in the Rapidly Changing Environment of the Global Pandemic

Tuesday, June 1, 2021

11:00am to 12:15pm EST

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Presented by **Dr. David Fisman**, Professor,  
Division of Epidemiology, Dalla Lana School  
of Public Health

Moderated by **Dr. Saverio Stranges**, Schulich School of Medicine  
and Dentistry, Western University





# The Hidden Impacts of COVID-19

Tuesday, June 1, 2021  
3:00pm to 4:15pm EST

Presented by:

**Dr. Tracie Afifi**, Faculty of Medicine, University of Manitoba

**Dr. Laura Cowen**, Mathematics and Statistics, University of Victoria

**Dr. Arjumand Saddiqi**, Dalla Lana School of Public Health

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Chair: **Dr. Sue Kirkland**, Faculty of Medicine, Dalhousie University

Discussant: **Dr. Saverio Stranges**, Bloomberg School of Public Health, Johns Hopkins



# State of the Art Contributions of Data Science in a Rapidly Changing World

Wednesday, June 2, 2021  
11:00am to 12:15pm EST

Presented by:

**Dr. Greta Bauer**, Schulich School of Medicine and  
Dentistry, Western University

**Dr. Joon Lee**, Cumming School of Medicine,  
University of Calgary

**Dr. Ruth Etzioni**, Public Health Sciences Division,  
Fred Hutch Cancer Centre

Chair: **Dr. Dan Lizotte**, Schulich School of  
Medicine and Dentistry, Western University

Discussant: **Dr. Zahid Butt**, School of Public  
Health and Health Systems, University of  
Waterloo





# Ready for a Revolution: The Changing Role of Statistics in Data Science and Big Data Initiatives

Wednesday, June 2, 2021

3:00pm to 4:00pm EST

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Presented by **Dr. Sherri Rose**, Centre for  
Health Policy and Centre for Primary Care  
and Outcomes Research, Stanford  
University

Moderated by Dr. Lisa Lix, Faculty of Medicine, University of Manitoba





# CSEB STUDENT EVENT: SPEED MENTORING SESSION

*Join us on **June 3, 2021 11-12 EST***

*Connect with early-career individuals who are forging  
their own paths using epidemiology and biostatistics*

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MENTORS: NICOLE SCHOER, SARAH LABERGE, REBECCA  
RODRIGUES, HANNAH CHUNG, RHIANNON ROBERTS,  
WENSHAN LI, KLAJDI PUKA, ADAM COLE, RYAN NG,  
TIFFANY FITZPATRICK, AND SAMANTHA YAMMINE



# Concurrent Session A

**Tuesday June 1, 2021 (1:00pm to 2:15pm)**

<b>A1</b> Aging and Chronic Disease	Outcomes reported in randomized clinical trials of depression in geriatric patients: a methodological review <b>Myanca Rodrigues</b>	Functional Social Isolation Mediates the Association Between Depressive Symptoms and Executive Function in the Canadian Longitudinal Study on Aging <b>Anita Iacon</b>	What makes people live long and age well?: Characterizing older adults' perspectives on healthy aging in the Canadian Longitudinal Study on Aging <b>Susan Kirkland</b>	The Association Between Diabetes Type, Age of Onset, and Age at Natural Menopause: A Retrospective cohort study using the Canadian Longitudinal Study on Aging <b>Vrati Mehra</b>	Early life adversity and obesity in older adulthood: A longitudinal study using the Canadian Longitudinal Study on Aging (CLSA) <b>Vanessa De Rubeis</b>
<b>A2</b> Maternal and child health	Propensity score analysis for a semi-continuous exposure variable: a study of gestational alcohol exposure and childhood cognition <b>Tugba Akkaya-Hocagil</b>	The Proportion of Preterm Birth Attributable to Modifiable Risk Factors: A Retrospective Cohort Study in Nova Scotia, 2005-2019 <b>Adelaide von Kursell</b>	Gestational diabetes and later childhood cancer <b>Sophie Marcoux</b>	Examining the Association Between Early Maternal Menarche and Preterm Birth: A Prospective Cohort Study <b>Asvini Keethakumar</b>	Adverse childhood experiences and incidence of migraine in adolescence: a prospective analysis using the National Longitudinal Survey of Children and Youth <b>Nicole G. Hammond</b>
<b>A3</b> Cancer	Trends in the Incidence of Cancer among Adolescent and Young Adults in Alberta, 1988 to 2017 <b>Andrew Harper</b>	Predicted impact of the COVID-19 pandemic on cancer care and long-term mortality in Quebec <b>Talía Malagón</b>	Central Nervous System (CNS) tumour incidence rates for different age groups and sexes among Canadian residents <b>Farzana Yasmin</b>	The Alberta Moving Beyond Breast Cancer (AMBER) Cohort Study: Baseline Description of the Complete Cohort of 1,528 Breast Cancer Patients <b>Charlotte Ryder-Burbidge</b>	Occupational solar ultraviolet radiation and breast cancer risk in Canada <b>Sareena McDonald</b>
<b>A4</b> Biostatistics	Active vs. passive imputation of missing maternal pre-pregnancy body mass index values among Nova Scotian women <b>Maggie Brown</b>	Risk of Major Osteoporotic Fracture: A Comparison between Multi-State and Cox Proportional Hazard Models <b>Shamsia Sobhan</b>	Does group-based trajectory modeling estimate spurious trajectories? <b>Miceline Mesidor</b>	Analysis of Misclassified Categorical Response via Incomplete Surrogate Variables and Likelihood Method <b>Zheng Yu</b>	A Joint modeling approach for binary repeated measurement of depression and time-to-dementia in a population-based study <b>Rasel Kabir</b>
<b>A5</b> Epi methods	Quantifying the mitigating influence of urban tree configuration on heat related mortality <b>Beau Ahrens</b>	Comparing approaches to estimating area-based prevalence and classification of child mental disorder and service contacts: administrative health data versus survey data <b>Laura Duncan</b>	Machine learning methods for predicting postpartum depression: A scoping review <b>Kiran Saqib</b>	What can we learn from missing data? Examining nonreporting patterns of height, weight, and BMI among Canadian youth <b>Amanda Doggett</b>	Validity of an Algorithm to Identify Cardiovascular Deaths from Administrative Health Records: A Multi-Database Population-Based Cohort Study <b>Lisa Lix</b>
<b>A6</b> Infectious diseases	Is Hodgkin lymphoma associated with hepatitis B and C viruses? A systematic review and meta-analysis <b>Callum Mullen</b>	Spatiotemporal trends and socioecological factors associated with Lyme disease incidence in eastern Ontario, Canada, 2010-2017. <b>Andreea Slatculescu</b>	Determinants of Arbovirus Vector Density as a Measure of Transmission Risk in Regions of Recent Zika Virus Introduction in the Americas <b>Benoit Talbot</b>	Transmission Reduction And Prevention with HPV vaccination (TRAP-HPV) study: preliminary analysis of HPV incidence and transmission <b>Aaron MacCosham</b>	Male circumcision and the prevalence, incidence, and clearance of human papillomavirus infections in males and females: preliminary results from a systematic review and meta-analysis <b>Samantha Shapiro</b>

# Concurrent Session B

Wednesday, June 2, 2021 (1:00pm to 2:15pm)

<b>B1</b> COVID-19	COVID-19 leads to higher mortality regardless of other risk factors: a population-based retrospective cohort study <b>Anna Kone Pefoyo</b>	What factors influence the intention to use COVID-19 vaccine: a scoping review <b>Bara' AlShurman</b>	The Impact of Congregate Living on Positive COVID-19 Tests Among Adults with Intellectual and Developmental Disability in Ontario <b>Rebecca Hansford</b>	Pan-Canadian survey on the impact of the COVID-19 pandemic on cervical cancer screening and management <b>Mariam El-Zein</b>	Association between education level and COVID-19 incidence at the neighbourhood level in the city of Toronto <b>Nushrat Nazia</b>
<b>B2</b> Mental health/addiction	Taking the High Road: Traffic Violations Among Emerging Adults Who Use Cannabis <b>Tiana Ciccarelli</b>	Life satisfaction and mental health service use: A prospective observational study <b>Camilla Michalski</b>	Mental Disorders Risk Prediction using Objectively Measured Family Health Histories: A Multigenerational Linkage Study <b>Amani Hamad</b>	Trends in the Prevalence of Diagnosed Mood or Anxiety Disorders Among Migrant Groups in Ontario, 1995-2015: A Population-based, Repeated Cross-sectional Study <b>Jordan Edwards</b>	Climate change and mental disorders in low and middle-income countries: A scoping review <b>Isobel Sharpe</b>
<b>B3</b> Social Inequities/determinants	Low social support is associated with low executive function in women but not in men: Results from the Canadian Longitudinal Study on Aging <b>Emily Rutter</b>	Who Sleeps Well in Canada? The Social Determinants of Sleep Health Among Middle-Aged and Older Adults in the Canadian Longitudinal Study on Aging <b>Rebecca Rodrigues</b>	Estimating the inequitable burden of COVID-19 exposure at work across race/ethnicity: The Occupational Exposure to COVID-19 Risk Tool <b>Brendan Smith</b>	Preventable Emergency Department Visits in Canada: An Analysis of the 2015-2016 Canadian Community Health Survey <b>Tammy Lau</b>	Intersectional Social Inequalities and Cognitive Functioning among Community-Dwelling Older Adults in England: A Decomposition Analysis of the Mediating Role of Loneliness <b>Chantel Walwyn</b>
<b>B4</b> Health of marginalized populations	Incidence and Trends of Limb Amputation in First Nations and General Population in Saskatchewan, 2006-2019 <b>Samuel Kwaku Essien</b>	Sense of Belonging and its relationship with Family Functioning among Syrian Refugee parents in Toronto <b>Maria Boulos</b>	Prevalence and Characteristics of Indigenous Populations in Canada without a Regular Medical Doctor <b>Rama Eloulabi</b>	Vaccine Confidence and Hesitancy in Métis Nation of Ontario (MNO) Citizens <b>Sarah Edwards</b>	Variations in Perceived Stress among Syrian Refugee Parents Resettled through Different Sponsorship Programs in Canada <b>Yasma Ali-Hassan</b>
<b>B5</b> Pharmaco-epidemiology and pharmaco-economics	Derivation and validation of predictors for oral anticoagulant-related adverse events in seniors transitioning from hospital to home <b>Harsukh Benipal</b>	Determining an optimal adherence threshold for classifying adherent and non-adherent adult asthma patients in an administrative health database <b>Michael Asamoah-Boaheng</b>	Association between medication adherence and risk of COPD diagnosis in patients with asthma: A 20-year retrospective cohort study in Canada <b>Michael Asamoah-Boaheng</b>	Analysis of health care costs over a one-year period following anticoagulant therapy among Ontario patients diagnosed with atrial fibrillation <b>Michael Situ</b>	Impact of polypharmacy on health service utilization and death of persons with cancer, accounting for MMB <b>Tamara Dean</b>
<b>B6</b> Mental health/addiction 2: children and youth	Mental-Health Service Contacts in Children and Youth with Identified Mental Health Care Needs Using Linked Survey and Health Administrative Data. <b>Jordan Edwards</b>	Measurement Invariance of the Flourishing Scale among a Large Sample of Canadian Adolescents <b>Isabella Romano</b>	Social support and coping strategies in the relationship between childhood maltreatment and major depressive disorder: A causal mediation analysis of a population-based longitudinal cohort <b>Muzi Li</b>	Self-esteem and mental health in young people with epilepsy: A longitudinal mediation analysis via structural equation modeling <b>Peter Cahill</b>	Lost in Transition: Health Service Utilization of IWK Mental Health & Addictions Patients on Transition to Adult Services <b>Cole Bowerman</b>