



EVENT PROGRAM

# 2018 MEDICINE RESEARCH EXPO

NOVEMBER 7, 2018 | PAETZOLD HEALTH EDUCATION CENTRE | VGH





# WELCOME

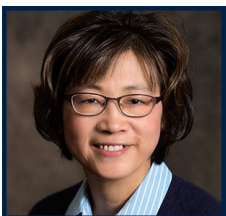
*from the UBC Department of Medicine and Experimental Medicine Program*



On behalf of the UBC Department of Medicine, the Experimental Medicine Program, and the Expo organizing committee, it gives us great pleasure to welcome you to the 2018 Medicine Research Expo. We are proud of this annual tradition, now in its seventh year, which consistently engages clinicians and researchers both within our department and from our community of local health research partners. Expo is a wonderful opportunity to bring together our large and diverse department to celebrate our collective successes and explore crosscutting themes and collaborative opportunities.



The Department of Medicine is the largest department within the Faculty of Medicine, and a major research force at UBC. Expo is an important venue for sharing our collective knowledge and experience. This year's program has an impressive roster of distinguished speakers, representing many of our divisions, coming together to highlight our latest discoveries, celebrate our successes, and reflect on the challenges facing our communities. This year's program celebrates the success of our faculty members, highlighting the work of Department of Medicine researchers who have been recognized as leaders in their respective fields at the local, national, and international level. We are delighted to once again to be hosting this event collaboratively with the Experimental Medicine Program, and we hope you will join us in celebrating the many contributions of our students by engaging with the work they share today. We recognize the central role played by trainees in moving our science forward, and are excited for this opportunity to highlight the work of our exceptional young researchers as they blaze the trail ahead.



Thank you all for your leadership in creating a culture of scholarship, innovation, and research here at the Department of Medicine. Together, we can shape the future of our health care system and, more importantly, have a positive global impact on the health and well-being of individuals. We hope that you enjoy all this year's Expo has to offer and take this opportunity to connect with your peers.



Warmest regards,

**Diane Lacaille, MD, FRCPC, MHSc**

Mary Pack Chair in Arthritis Research

Professor, Division of Rheumatology

Associate Head Academic Affairs and Co-Acting Head, Department of Medicine, UBC

**Andrea Townson, MD, FRCPC, MSCHPEd**

Medical Co-Chair, Regional Rehab Program, VCHA

Clinical Professor, Division of Physical Medicine and Rehabilitation

Associate Head Education and Co-Acting Head, Department of Medicine, UBC

**Teresa S.M. Tsang, MD, FRCPC, FACC, FASE**

Director of Echo Lab, VGH and UBC

Professor, Division of Cardiology

Associate Head Research and Co-Acting Head, Department of Medicine, UBC

**Tricia S. Tang, PhD, RPsych**

Associate Professor, Division of Endocrinology

Director, Experimental Medicine Graduate Program

Department of Medicine, UBC

# AGENDA

## Lunch session

11:30 - 14:30

11:30 - 12:30

### Lunch and Poster Session

12:30 - 12:40

### Welcome and Introductory Remarks

**Dr. Teresa Tsang**

Acting Co-Head, Department of Medicine, UBC

12:40 - 13:00

### Integrating Research Into Clinical Work: The HIRO Initiative

**Dr. Andrew Krahn**

Division of Cardiology, Department of Medicine, UBC

13:00 - 13:10

### Missed Opportunities for Earlier Diagnosis of HIV in BC: A Retrospective Cohort Study

Trainee: Ni Gusti Ayu (Ditha) Nanditha (MSc program)

Supervisor: Dr. Viviane Lima, Division of AIDS, Department of Medicine, UBC

13:10 - 13:40

### Invited Guest Speaker

#### How paying attention improves sex?

#### The Science of Mindfulness Meditation in the Treatment of Women's Sexual Concerns

**Dr. Lori Brotto**

Women's Health Research Institute

Department of Obstetrics & Gynecology, UBC

13:40 - 13:50

### The Effect of Timing of Tetanus-Diphtheria and Pertussis Vaccine Administration in Pregnancy on the Avidity of Pertussis Antibodies

Trainee: Bahaa Abu Ray (PhD program)

Supervisor: Dr. Manish Sadarangani, Department of Pediatrics, UBC

13:50 - 14:10

### Traffic Fatalities on Halloween and Cannabis Celebration Day

**Dr. John Staples**

Division of General Internal Medicine, Department of Medicine, UBC

14:10 - 14:30

### Experimental Medicine Lighting Poster Presentations

#### Development of a Novel Bio-engineered Skin Substitute for Pressure Ulcers Combination of Adipose Micro Fragments and MeshFill for Treatment of Delayed Wounds

Avisa Abbasi (PhD student)

Supervisor: Dr. Aziz Ghahary

#### Cardiac Function after Acute Spinal Cord Injury

Shane Balthazaar (MSc student)

Supervisor: Dr. Andrei Krassioukov

#### Implementation of Pharmacogenomic Risk Prediction Models in Pediatric Oncology

Tessa Benhyshe-Walton (MSc student)

Supervisor: Dr. Bruce Carleton

#### Impact of Lower Limb Deformities on the Health Related Quality of Life of Children in India

Harpreet Chhina (PhD student)

Supervisor: Dr. Anthony Cooper

#### Then and Now: Has Quality of Life Improved over Time in Patients with Dysautonomia of Adolescence

Claire Galvin (MSc student)

Supervisor: Dr. Kathryn Armstrong

#### Roles of Inflammasome during Salmonella Typhimurium Infection in Intestinal Enteroids Monolayer Infection Model

Vivian Han (MSc student)

Supervisor: Dr. Bruce Vallance

#### Amyloid Formation Impairs IL-1 Receptor Antagonist Production in Human Islets

Queenie Hui (PhD student)

Supervisor: Dr. Lucy Marzban

#### Islet macrophages are the Islet Source of IGF-1 and Positively Contribute to Glucose Homeostasis Following Pancreatic Beta-Cell Death

Dominika Nackiewicz (PhD student)

Supervisor: Dr. Bruce Verchere

#### Control of Human Regulatory T cells by Tumor Necrosis Factor Alpha Receptor 2 (CD120b)

Uyen Nguyen (MSc student)

Supervisor: Dr. Megan Levings

#### Early and Intermittent IL-4Ra Blockade Prevents H1N1-mediated Weight Loss in a Mouse Model of Allergic Asthma

Kimia Shahangian (MSc student)

Supervisor: Dr. Don Sin

#### Outcomes and Injuries in Persons Who Jump from Bridges: A Systematic Review of Literature

Dylan Stephanian (MSc student)

Supervisor: Dr. Jeff Brubacher

#### Effects of Lifetime Traumatic Brain Injury on Depressive Symptoms, Psychotic Symptoms, and Quality of Life in Marginally Housed Individuals

Jacob Stubbs (PhD student)

Supervisor: Dr. William Panenka

#### Detection of Circulating Tumor DNA in de novo Metastatic Prostate Cancer

Gillian Vanderkerkhove (PhD student)

Supervisor: Dr. Alexander Wyatt

#### Developing a Mobile App through a Human-Centered Approach and a Participatory Process to Promote Healthy Behaviours in Children

Kiana Yau (MSc student)

Supervisor: Dr. Tricia Tang

#### Secular Trends in the Incident Risk of Acute Myocardial Infarction in Incident Rheumatoid Arthritis Relative to the General Population

Kiana Yazdani (MSc student)

Supervisor: Dr. Diane Lacaille



# AGENDA

## Afternoon session

14:30 - 18:30

14:30 - 15:00	<b>Coffee Break and Poster Viewing</b>
15:00 - 15:30	<b>Keynote</b> <b>10 Years of Neuroethics at UBC: Aligning Human Values, Health, and Clinical Care</b> <b>Dr. Judy Illes</b> Division of Neurology, Department of Medicine, UBC
15:30 - 15:40	<b>Proteomic Analysis to Identify Blood Biomarkers Predictive of Response to Azithromycin in Children and Adolescents with Cystic Fibrosis</b> Trainee: Kang Dong (MSc program) Supervisor: Dr. Bradley Quon, Division of Respiratory Medicine, Department of Medicine, UBC
15:40 - 16:00	<b>What's New in the Okanagan?</b> <b>Introducing the Chronic Disease Prevention Program</b> <b>Dr. Kathleen Martin Ginis</b> Southern Medical Program, Department of Medicine, UBC School of Exercise and Health Sciences, UBC Okanagan
16:00 - 16:10	<b>Cholesteryl Ester Transfer Protein Influences High-Density Lipoprotein Levels and Survival in Sepsis</b> Trainee: Mark Trinder (MD/PhD program) Supervisor: Dr. Liam Brunham, Division of General Internal Medicine, Department of Medicine, UBC
16:10 - 16:40	<b>Keynote</b> <b>IPF on the Internet: Navigating a Sea of Misinformation</b> <b>Dr. Christopher Ryerson</b> Division of Respiratory Medicine, Department of Medicine, UBC
16:40 - 16:50	<b>Vascular-Cognitive Impairment After High-Thoracic Experimental Chronic Spinal Cord Injury</b> Trainee: Mengyao (Michelle) Jia (MSc program) Supervisor: Dr. Andrei Krassioukov, Division of Physical Medicine and Rehabilitation, Department of Medicine, UBC
16:50 - 17:00	<b>Closing Remarks</b> <b>Dr. Tricia Tang</b> Division of Endocrinology, Department of Medicine, UBC Director, Experimental Medicine Graduate Program
17:00 - 18:30	<b>Reception and Networking</b>

# SPEAKER BIOGRAPHIES

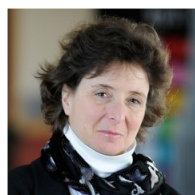
*in alphabetical order*



## **Lori A. Brotto, PhD, R Psych**

Professor, Department of Obstetrics & Gynecology, University of British Columbia  
Canada Research Chair in Women's Sexual Health  
Executive Director, Women's Health Research Institute

Dr. Lori Brotto is a Professor in the UBC Department of Obstetrics and Gynaecology, and a Registered Psychologist. She is the Executive Director of the Women's Health Research Institute at BC Women's Hospital. Dr. Brotto holds a Canada Research Chair in Women's Sexual Health. She is the director of the UBC Sexual Health Laboratory where research primarily focuses on advancing the science of psychological and mindfulness-based interventions for women's sexual health. Dr. Brotto is an Associate Editor for the *Archives of Sexual Behavior*, has over 150 peer-reviewed publications, is passionate about knowledge translation, and as such, is frequently featured in the media on sexual health topics. Her book, *Better Sex Through Mindfulness: How Women Can Cultivate Desire* (Greystone Publishing) is a knowledge translation of her research over the past 15 years demonstrating the benefits of mindfulness for women's sexual concerns and genital pain.



## **Judy Illes, CM, PhD**

Professor, Division of Neurology  
Department of Medicine, University of British Columbia  
Canada Research Chair in Neuroethics  
Director, Neuroethics Canada

Dr. Illes is Professor of Neurology and Canada Research Chair in Neuroethics at UBC. She is Director of the Neuroethics Canada (formerly the National Core for Neuroethics established in 2007), and faculty in the Centre for Brain Health and at the Vancouver Coastal Health Research Institute. Her research, teaching and service focus on ethical, legal, social and policy challenges specifically at the intersection of the brain sciences and biomedical ethics.

Dr. Illes also holds associate faculty appointments in the School of Population and Public Health and the School of Journalism at UBC, and in the Department of Computer Science and Engineering at the University of Washington in Seattle, WA. USA, and is a Life Member of Clare Hall, Cambridge University. She is Vice Chair of the Standing Committee on Ethics of the Canadian Institutes of Health Research (CIHR), and Vice Chair of the CIHR's Internal Advisory Board of the Institute on Neuroscience, Mental Health and Addiction. She was elected to the Royal Society (Life Sciences) in 2012, to the Canadian Academy of Health Sciences in 2011, and to the American Association for the Advancement of Science (Division of Neuroscience) in 2013. She is immediate past President of the International Neuroethics Society, founded in 2006. Her latest book, a series on Developments in Neuroethics and Bioethics, features *Pain Neuroethics* (vol. 1, 2018).

Dr. Illes was appointed to the Order of Canada in December 2017.

# SPEAKER BIOGRAPHIES

*in alphabetical order*



## **Andrew D. Krahn, MD, FRCPC, FHRS**

Professor, Division of Cardiology

Department of Medicine, University of British Columbia

Dr. Krahn is a Professor in the Division of Cardiology at the University of British Columbia. He received his MD from the University of Manitoba. His clinical expertise is in management of cardiac arrhythmias. Current research interests include investigation of genetic causes of arrhythmias, causes of loss of consciousness and implantable arrhythmia devices.

Dr. Krahn has research funded by the Heart and Stroke Foundation and the Canadian Institute of Health Research. His research has been published in scientific journals such as *Circulation*, *JAMA*, *Journal of the American College of Cardiology*, *The New England Journal of Medicine*, *Heart Rhythm*, *Journal of Cardiovascular Electrophysiology*, *European Heart Journal*, *American Journal of Medicine*, *American Heart Journal*, *American Journal of Cardiology*, *Canadian Journal of Cardiology* and the *Canadian Medical Association Journal*. He has published 368 papers in peer-reviewed journals. He is an Associate Editor for *Heart Rhythm*, and sits on the Editorial Board of the *Canadian Journal of Cardiology* and the *Journal of Cardiovascular Electrophysiology*.

Dr. Krahn is affiliated with several professional associations including the Royal College of Physicians of Canada, the Canadian Cardiovascular Society and the Heart Rhythm Society. He is a member of the Canadian Cardiovascular Society Council and Vice President (2016-2018). He is the Sauder Family Chair and UBC Chief of Cardiology, and the Paul Brunes Chair in Heart Rhythm Disorders. He is on the Board of Trustees of the Heart Rhythm Society as their Secretary Treasurer.

He is married with a 26-year-old daughter, and enjoys skiing, hiking, golf and a good glass of red wine.



## **Kathleen Martin Ginis, PhD**

Professor, Division of Physical Medicine and Rehabilitation

Department of Medicine, University of British Columbia

Professor, School of Health and Exercise Sciences, UBC Okanagan

Director, SCI Action Canada

Dr. Kathleen Martin Ginis is the Reichwald Family Chair in Preventive Medicine at University of British Columbia's Southern Medical Program. She is also a UBC Distinguished University Scholar, Professor in the School of Health and Exercise Sciences, and an ICORD Principal Investigator. Dr. Martin Ginis completed her B.Sc. in Psychology at the University of Toronto, her PhD in Kinesiology at the University of Waterloo, and a postdoctoral fellowship at Wake Forest University. Her research program focuses on physical activity behaviour change, and the psychosocial consequences of physical activity participation. She has a particular interest in spinal cord injury and established the SCI Action Canada partnership in 2007 to advance physical activity participation research and knowledge translation for people with SCI.

Dr. Martin Ginis has received over \$11 million in research funding. She currently holds a \$2.6M SSHRC Partnership Grant to study social participation among people with physical disabilities (The Canadian Disability Participation Project [www.cdpp.ca](http://www.cdpp.ca)). She has published over 250 peer-reviewed research articles and book chapters. Her research frequently appears in the media and has been featured on CBC's *Quirks & Quarks*, and in "O" *The Oprah Magazine*, *Men's Health & Fitness*, and *Shape Magazine*, among others.

In 2014, the Government of Ontario recognized Dr. Martin Ginis's long-standing contributions to science designed to improve the lives of people with spinal cord injury, by awarding her the Ontario Medal of Good Citizenship.

Dr. Martin Ginis resides in Kelowna, British Columbia where she loves to run, snowshoe, and kayak with her husband and daughter.

# SPEAKER BIOGRAPHIES

*in alphabetical order*



## **Christopher Ryerson, MD, FRCPC**

Associate Professor, Division of Respiratory Medicine  
Department of Medicine, University of British Columbia

Dr. Christopher Ryerson is a respirologist and Assistant Professor at the UBC Centre for Heart Lung Innovation. He completed his undergraduate degree at Queen's University, medical school at the University of Western Ontario, and his internal medicine residency and respirology fellowship at the University of British Columbia. Dr. Chris Ryerson completed his core clinical training at the University of British Columbia and an interstitial lung disease (ILD) fellowship and Masters degree in clinical research at the University of California San Francisco before joining UBC faculty in 2011. He is an Associate Professor at UBC, director of the St. Paul's Hospital ILD clinical and research program, and Head of the Division of Respiratory Medicine at Providence Health Care. He has over 90 publications, with his research focusing on management and prognostication of ILD. He is also involved in several national and international clinical practice guidelines on the diagnosis and management of fibrotic ILD.

Dr. Ryerson's two main areas of research interest include prognostication and prediction of mortality, and the non-pharmacologic management of interstitial lung disease. His research is primarily aimed at identifying management strategies to improve symptoms and quality of life in patients with interstitial lung disease. Dr. Ryerson is also engaged in several clinical trials of new therapeutics for idiopathic pulmonary fibrosis, has contributed to the development of recent international consensus statements and clinical practice guidelines, and is involved in efforts to establish an international registry and research network for idiopathic pulmonary fibrosis.



## **John Staples, MD, FRCPC, MPH**

Clinical Assistant Professor, Department of Medicine, University of British Columbia

John Staples MD FRCPC MPH is a UBC Clinical Assistant Professor in the Division of General Internal Medicine. His research training includes an editorial fellowship at the New England Journal of Medicine and a research fellowship at Toronto's Institute for Clinical Evaluative Sciences. His research interests include unplanned hospital readmissions and risk factors for motor vehicle crash. His work has been discussed in publications including US News & World Report, the World Bank Group's Disease Control Priorities (Third Edition), TIME magazine and the New York Times.



# POSTER PRESENTATIONS

*in alphabetical order*

**Avisa Abbasi (PhD program)**

Supervisor: Dr. Aziz Ghahary

Development of a Novel Bio-engineered Skin Substitute for Pressure Ulcers Combination of Adipose Micro Fragments and MeshFill for Treatment of Delayed Wounds

**Bahaa Abu Raya (PhD program)**

Supervisor: Dr. Manish Sadarangani

The Effect of Timing of Tetanus-diphtheria and Pertussis Vaccine Administration in Pregnancy on The Avidity of Pertussis Antibodies

**Emad Awad (PhD program)**

Supervisor: Dr. Karin Humphries

Investigating the factors influencing post-cardiac arrest resuscitation outcomes: Sex-based analysis

**Shane Balthazar (MSc program)**

Supervisors: Dr. Andrei Krassioukov

Cardiac Function after Acute Spinal Cord Injury

**Tessa Bendyshe-Walton (MSc program)**

Supervisor: Dr. Bruce Carleton

Implementation of Pharmacogenomic Risk Prediction Models in Pediatric Oncology

**Amber Campbell (MSc program)**

Supervisor: Dr. Melanie Murray

Designing a culturally safe and appropriate mHealth program for Indigenous people living with HIV: Community collaboration and questionnaire validation.

**Harpreet Chhina (PhD program)**

Supervisor: Dr. Anthony Cooper

Impact of lower limb deformities on the health related quality of life of children in India

**Patrick Coulombe (PhD program)**

Supervisor: Dr. Aly Karsan

Innate immune signaling via Sash1 in hematopoietic stem cell development

**Kang Dong (MSc program)**

Supervisor: Dr. Bradley Cooper

Proteomic Analysis to Identify Blood Biomarkers Predictive of Response to Azithromycin in Children and Adolescents with Cystic Fibrosis

**Claire Galvin (MSc program)**

Supervisor: Dr. Kathryn Armstrong

Then and Now: Has Quality of Life Improved over Time in Patients with Dysautonomia of Adolescence

**Katie Green (MSc program)**

Supervisor: Dr. Amrit Dhariwal

Exploring Somatization in Adolescents with Persistent Concussive Symptoms

**Colin Hammond (PhD program)**

Supervisor: Dr. Connie Eaves

Developmental/age-related alterations in survival and proliferation control in primitive human hematopoietic cells

**Vivian Han (MSc program)**

Supervisor: Dr. Bruce Vallance

Roles of Inflammasome during Salmonella Typhimurium Infection in Intestinal Enteroids Monolayer Infection Model

**Queenie Hui (PhD program)**

Supervisor: Dr. Lucy Marzban

Amyloid Formation Impairs IL-1 Receptor Antagonist Production in Human Islets

**Mimi Kuan (MSc program)**

Supervisor: Dr. Kevin Harris

Physical Activity and Aortic Stiffness in Children with Congenital Heart Disease

**Daniel Lisko (PhD program)**

Supervisor: Dr. Theodore Steiner

Single Chain Antibodies for Treatment of Clostridium difficile Infection (CDI) in Mice

# POSTER PRESENTATIONS

*in alphabetical order*

**Arshdeep Marwaha (MSc program)**

Supervisor: Dr. Andrei Krassioukov

A Triple Combination Approach Involving Nerve Transplantation, Glial Scar Digestion and Passive Exercise Promotes Cardiovascular Recovery after Spinal Cord Injury

**Dominika Nackiewicz (PhD program)**

Supervisor: Dr. Bruce Verchere

Islet macrophages are the islet source of IGF-1 and positively contribute to glucose homeostasis following pancreatic beta-cell death

**Ni Gusti Ayu (Ditha) Nanditha (MSc program)**

Supervisors: Dr. Viviane Lima

Missed Opportunities for Earlier Diagnosis of HIV in British Columbia, Canada: A Retrospective Cohort Study

**Doreen Nehumba (MSc program)**

Supervisor: Dr. Viviane Lima

Higher Prevalence of Mood and/or Anxiety Disorders among Individuals Vulnerable to Acquire HIV in Canada

**Uyen Nguyen (MSc program)**

Supervisor: Dr. Megan Levings

Control of human regulatory T cells by Tumor necrosis factor alpha receptor 2 (CD120b)

**Nicholas Salterio (MSc program)**

Supervisor: Dr. Thomas Zwinpfer

Cognitive and Quality of Life Outcomes after Endoscopic Third Ventriculostomy in Adult Obstructive Hydrocephalus: Project Proposal

**Kimia Shahangian (MSc program)**

Supervisor: Dr. Don Sin

Early and intermittent IL-4Ra Blockade Prevents H1N1-mediated Weight Loss in a Mouse Model of Allergic Asthma

**Gurjot Singh (PhD program)**

Supervisor: Dr. Baljinder Salh

Project Overview: DCLK1 and Prognosis in HCC

**Dylan Stephanian (MSc program)**

Supervisor: Dr. Jeff Brubacher

Outcomes and injuries in persons who jump from bridges: A systematic review of literature

**Jacob Stubbs (PhD program)**

Supervisor: Dr. William Panenka

Effects of lifetime traumatic brain injury on depressive symptoms, psychotic symptoms, and quality of life in marginally housed individuals

**Mark Trinder (MD/PhD program)**

Supervisor: Dr. Liam Brunham

Cholesteryl ester transfer protein influences high-density lipoprotein levels and survival in sepsis.

**Gillian Vanderkerkhove (PhD program)**

Supervisor: Dr. Alexander Wyatt

Detection of circulating tumor DNA in de novo metastatic prostate cancer

**Diana Vikulova (MSc program)**

Supervisor: Dr. Liam Brunham

Sex Differences in Cardiovascular Risk Factors, Comorbidities, and Outcomes in Patients with Very Premature Atherosclerotic Cardiovascular Disease: A Cohort Study of 12,519 Individuals over a 16 Year Period

**Kiana Yau (MSc program)**

Supervisor: Dr. Tricia Tang

Developing a mobile app through a human-centered approach and a participatory process to promote healthy behaviours in children

**Kiana Yazdani (MSc program)**

Supervisor: Dr. Diane Lacaille

Secular Trends in the Incident Risk of Acute Myocardial Infarction in Incident Rheumatoid Arthritis Relative to the General Population

## EVENT SPONSORS

We would like to thank the following organizations for their generous support of the 2017 Medicine Research Expo:



**UBC Department of Medicine**

# NOTES

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# THANK YOU FOR JOINING US

## 2018 DEPARTMENT OF MEDICINE EXPO ORGANIZING COMMITTEE

Diane Lacaille, MD, FRCPC, MHSc  
Ginny Mak  
Anna Meredith, PhD  
Andrea Townson, MD, FRCPC, MSChPEd  
Tricia Tang, PhD, RPsych  
Teresa Tsang, MD, FRCPC, FACC, FASE

## 2018 EXPERIMENTAL MEDICINE TRAINEE EXPO ORGANIZING COMMITTEE

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