

2019 Research Conference

An Impactful Past ~ A Formidable Future 2005-2020

CONFERENCE PROGRAM

January 27-30, 2019

Marriott Downtown
Toronto Eaton Centre Hotel
525 Bay Street, Toronto, ON



 **AllerGen**
Allergy, Genes and Environment Network

AllerGen gratefully acknowledges the support of its 2019 Research Conference Sponsors



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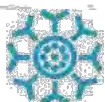
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CONFERENCE OBJECTIVES

CELEBRATE 14 years of discoveries, accomplishments and impacts of AllerGen's co-produced research, involving researchers, Highly Qualified Personnel (HQP), collaborators and partners across sectors.

COLLABORATE with other delegates, share experiences, and discuss challenges with renowned Canadian and international experts in asthma, allergy, anaphylaxis and related immune disease research, commercialization and knowledge mobilization.

ACTIVATE sustained commercialization, clinical translation and knowledge mobilization of Network outputs to tackle the rising burden of asthma, allergies and anaphylaxis.

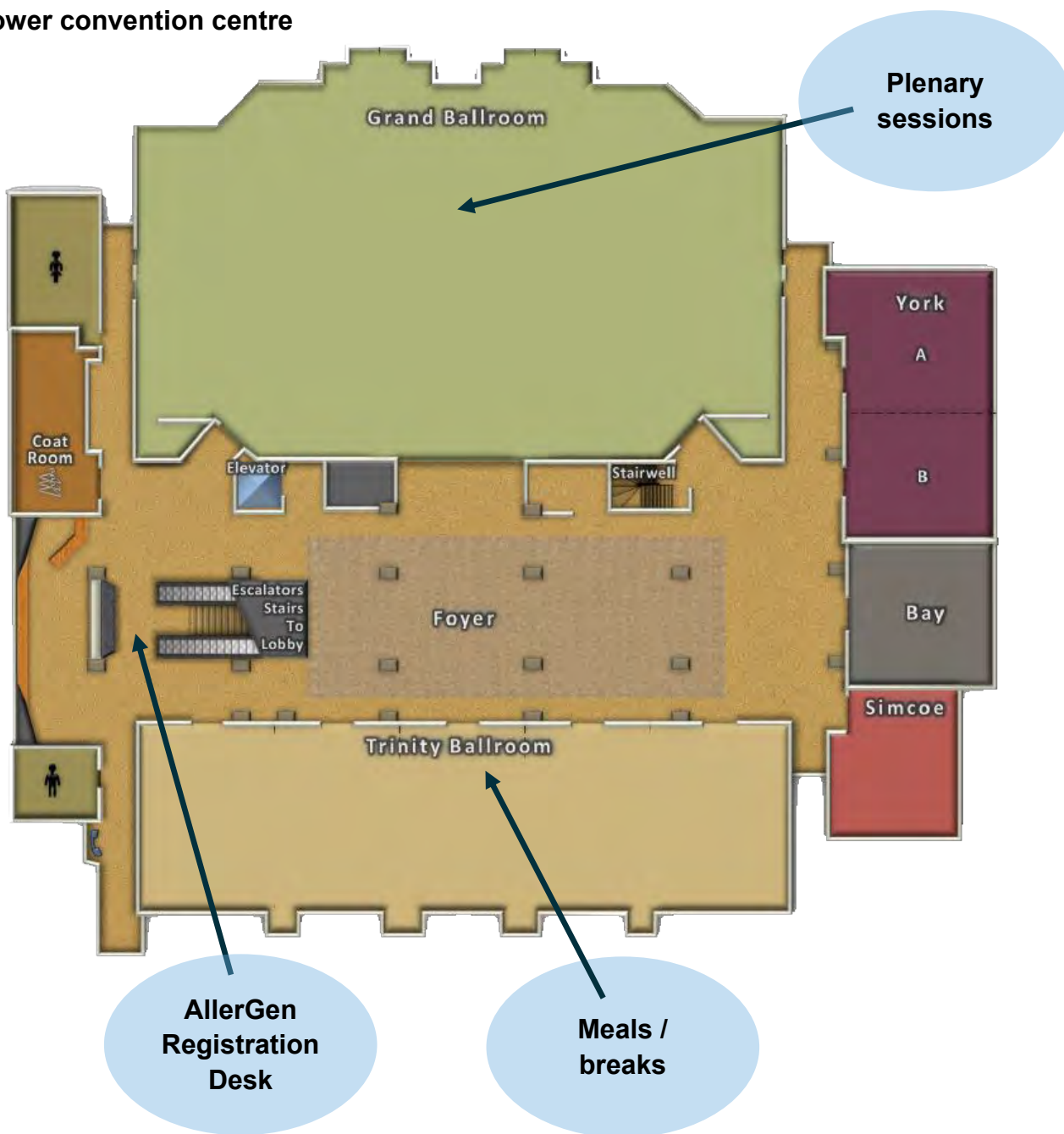


Join the conversation!
#AllerGen2019TO

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525 Bay Street • Toronto, ON • +1 416-597-9200

Lower convention centre



CONFERENCE REGISTRATION DESK HOURS

Sunday, January 27	2:00 pm - 5:30 pm
Monday, January 28	8:00 am - 6:00 pm
Tuesday, January 29	8:00 am - 6:00 pm
Wednesday, January 30	8:00 am - 4:30 pm

WELCOME FROM ALLERGEN'S BOARD CHAIR & SCIENTIFIC DIRECTOR

On behalf of AllerGen's Board of Directors, Research Leaders, Administrative Centre Staff, and our generous conference sponsors and supporters, we are delighted to welcome you to AllerGen's ninth and final Research Conference, *Innovation from cell to society?*, at the Marriott Eaton Centre Hotel in downtown Toronto, Ontario.

After receiving its full 14 years of funding, AllerGen's term as a national Networks of Centres of Excellence (NCE) will end in March 2019.

The 2019 conference highlights the many discoveries, accomplishments and impacts of AllerGen's co-produced research—involving researchers, trainees, partners, collaborators and stakeholders—over the past 14 years. This dynamic forum for knowledge exchange will celebrate the legacy of discovery and innovation that AllerGen has forged since 2005 and set the stage for ongoing post-NCE collaborations across disciplines and sectors. By featuring trainee research throughout the program, the conference also nurtures world-class talent that forms the foundation for Canada's future success in responding to the urgent challenges posed by asthma and allergic disease.

In April 2019, AllerGen launches its NCE wind-down process with clear goals for facilitating the commercialization, knowledge mobilization and continued business-related operations of the Network's three high-impact Legacy Projects: the CHILD Study, the Clinical Investigator Collaborative and the National Food Allergy Strategic Team. This conference provides a unique opportunity to extend and deepen collaborations between the Legacy Project teams and AllerGen's research, care, policy, and patient partners.

Finally, we would like to thank AllerGen's host institution and Platinum Sponsor, McMaster University, a widely recognized Canadian centre of excellence in allergy and clinical immunology, asthma diagnosis and management, and an internationally recognized centre for excellence in cohort research.

We are extremely grateful to the sponsors and supporters who have contributed to making this year's conference successful and accessible. Their belief in and steadfast support of AllerGen's vision since 2005 have been key components of our success.

This promises to be an outstanding event. We look forward to celebrating AllerGen's many accomplishments with you!



A handwritten signature in black ink, appearing to read 'Pieter Cullis'.

Pieter Cullis, PhD, FRSC
Chair of the Board



A handwritten signature in black ink, appearing to read 'Judah Denburg'.

Judah Denburg, MD, FRCPC
Scientific Director and CEO

ABOUT ALLERGEN NCE

AllerGen NCE Inc. (AllerGen), the Allergy, Genes and Environment Network, is a national research network funded by Innovation, Science and Economic Development Canada through the federal Networks of Centres of Excellence (NCE) Program. **AllerGen's mandate is to support research, networking, commercialization, knowledge mobilization, and capacity building activities that contribute to reducing the morbidity, mortality and socioeconomic impacts of allergic diseases.**

Led by internationally recognized Canadian researchers with **expertise across nearly 50 disciplines**, AllerGen's research projects and strategic initiatives employ cross-sectoral, multidisciplinary approaches to accelerate the development of new diagnostic tests, better medications, accessible patient education tools and effective public policies relevant to allergic disease.

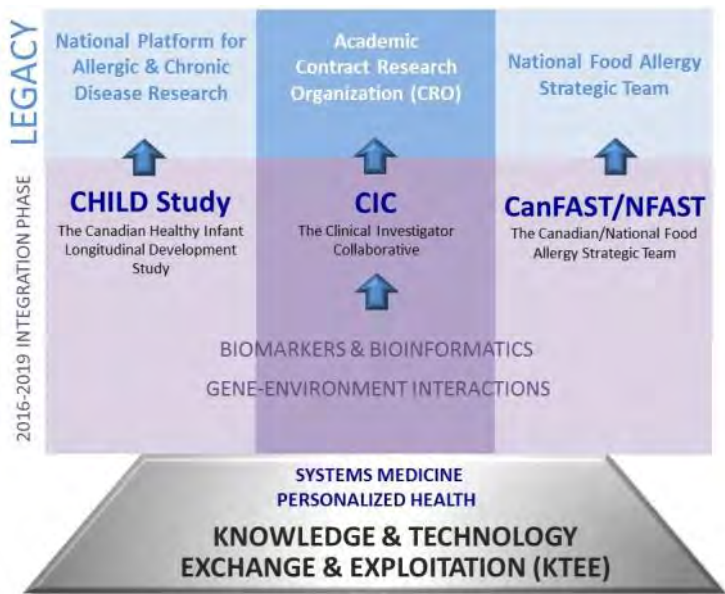
AllerGen research teams focus their discovery, commercialization and knowledge mobilization efforts on:

Three Legacy Projects:

- The Canadian Healthy Infant Longitudinal Development (CHILD) Study;
- The Clinical Investigator Collaborative (CIC); and
- The Canadian/National Food Allergy Strategic Team (CanFAST/NFAST).

Two Integrated Legacy Platforms:

- Gene-Environment Interactions; and
- Biomarkers and Bioinformatics



PROGRAMMES DES RÉSEAUX DE CENTRES D'EXCELLENCE (RCE)

Une initiative des organismes fédéraux de financement de la recherche (les Instituts de recherche en santé du Canada, le Conseil de recherches en sciences naturelles et en génie du Canada, et le Conseil de recherches en sciences humaines du Canada) les Réseaux de centres d'excellence (RCE) offrent une série de programmes qui font appel aux plus grands experts du Canada dans les domaines de la recherche, du développement et de l'entrepreneuriat et qui concentrent leur expertise sur des questions spécifiques et des domaines stratégiques.

NETWORKS OF CENTRES OF EXCELLENCE (NCE) PROGRAM

An initiative of Canada's federal research granting agencies (the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council, and the Social Sciences and Humanities Research Council), the Networks of Centres of Excellence (NCE) offers a suite of programs that mobilize the best research, development and entrepreneurial expertise and focus them on specific issues and strategic areas.



2019 CONFERENCE PROGRAM PLANNING COMMITTEE



Dr. Richard Leigh (Chair)
University of Calgary



Dr. Allan Becker
University of Manitoba



Dr. Susan Elliott
University of Waterloo



Ms. Laura Feldman
Hospital for Sick Children



Dr. Gail Gauvreau
McMaster University



Dr. Samuel Godefroy
Université Laval



Dr. John R. Gordon
University of Saskatchewan



Dr. Christine Hampson
The Sandbox Project



Dr. Richard Hegele
University of Toronto



Ms. Thelma Horwitz
Hospital for Sick Children



Dr. Michael Kobor
University of British Columbia



Dr. Jean Marshall
Dalhousie University



Dr. Bruce Mazer
McGill University



Dr. Kelly McNaghy
University of British Columbia



Dr. Padmaja Subbarao
Hospital for Sick Children



COMMITTEE SUPPORT

Leah Graystone
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Executive Assistant

April O'Connell
Manager, Research Programs

Marshall Beck
Digital Initiatives Manager

Kim Wright
Director, Communications & Knowledge Mobilization

Diana Royce, EdD
Managing Director and COO

KEYNOTE SPEAKERS



Dr. David W. Bates, MD, MS, is an internationally renowned expert in patient safety, using information technology to improve care, quality-of-care, cost-effectiveness, and outcomes assessment in medical practice.

He is a Professor of Medicine at Harvard Medical School, and a Professor of Health Policy and Management at the Harvard School of Public Health where he co-directs the Program in Clinical Effectiveness. He directs the Center for Patient Safety Research and Practice at Brigham and **Women's Hospital, and serves as external program lead for research in the World Health Organization's Global Alliance for Patient Safety. He has been elected to the Institute of Medicine, the American Society for Clinical Investigation, the Association of American Physicians and the American College of Medical Informatics, and was chairman of the Board of the American Medical Informatics Association. He has published over 700 peer-reviewed papers and has an h-index of 115, which ranks him among the 400 most cited biomedical researchers.**



Prof. Timothy Caulfield, LL.B., LL.M., is a Canada Research Chair in Health Law and Policy, a Professor in the Faculty of Law and the School of Public Health, and Research Director of the Health Law Institute at the University of Alberta.

His interdisciplinary research on topics like stem cells, genetics, research ethics, and the public representations of science and health policy issues have allowed him to publish over 350 academic articles. He has received numerous academic and writing awards and is a Fellow of the Royal Society of Canada, the Trudeau Foundation and the Canadian Academy of Health Sciences. He contributes frequently to the popular press and is the author of two national bestsellers: *The Cure for Everything: Untangling the Twisted Messages about Health, Fitness and Happiness* (Penguin 2012) and *Is Gwyneth Paltrow Wrong About Everything?: When Celebrity Culture and Science Clash* (Penguin 2015). Prof. Caulfield also has a strong social media presence and is the host and co-producer of the documentary TV show, **"A User's Guide to Cheating Death."**



Dr. James E. Gern, MD, is a Professor in the Department of Pediatrics at the University of Wisconsin. He is board-certified in Allergy and Immunology and Pediatrics, and his areas of interest include childhood allergies, asthma, food allergies, and immune deficiency.

Dr. Gern leads several NIH-funded studies to define the role of viral infections in the initiation and disease activity of asthma, and to identify interactions between host, viral and environmental factors that determine the severity of respiratory illnesses. He leads the Urban Environment and Childhood Asthma (URECA) study for the Inner-City Asthma Consortium, the Wisconsin Infant Study Cohort in Marshfield, and a consortium of asthma birth cohorts as part of the national ECHO study. The goals of the birth cohort studies are to identify lifestyle and environmental factors (including viral infections) unique to the urban and farming environments that influence early immune development, which modify the risks for allergic diseases and asthma.

Dr. Gern also leads translational research projects to identify virus-induced inflammatory mechanisms involving airway epithelial cells. The Gern lab group is also conducting experiments to define the basic biology of a newly discovered species of rhinovirus (RV-C) that provokes wheezing episodes and exacerbations of asthma.

KEYNOTE SPEAKERS



Dr. Leroy Hood, MD, PhD, is Senior Vice-President and Chief Science Officer, Providence St. Joseph Health, and is Chief Strategy Officer, Co-founder and Professor for the Institute for Systems Biology (ISB).

Dr. Hood's outstanding contributions have had a resounding effect on the advancement of science since the 1960s. He was involved in the development of six instruments critical for contemporary biology—namely, automated DNA sequencers, DNA synthesizers, protein sequencers, peptide synthesizers, the ink jet printer for constructing DNA arrays and large-scale synthesis of DNA and the nanostring instrument for the single molecule analysis of RNA (and later DNA). These instruments opened the door to high-throughput biological data and the era of big data in biology and medicine. He helped pioneer the human genome program—making it possible with the automated DNA sequencer.

In 2000, Dr. Hood co-founded the ISB, the first Institute committed to a systems approach to **biology and disease. He has pioneered systems medicine in the years since ISB's founding and** has argued for healthcare that is predictive, preventive, personalized and participatory (P4). He has made many seminal discoveries in the fields of immunology, neurobiology, cancer biology and biotechnology and has pioneered technologies and strategies that bring systems biology to personalized medicine.



Dr. Kari Nadeau, MD, PhD, FAAAAI, is the Director of the Sean N. Parker Center for Allergy and Asthma Research at Stanford University and is an endowed professor under the Naddisy Family Foundation. She is one of the foremost experts in adult and pediatric allergy and asthma.

Dr. Nadeau studies the mechanisms involved in allergies and asthma to better understand how to prevent and cure these diseases. She has led many clinical research studies of asthma and allergic disorders. She was the first to successfully desensitize individuals to more than one allergy at a time using multi-allergen oral immunotherapy. She continues to push forward with innovative clinical research using novel antibodies, peptide vaccines, and nanoparticles in order to provide safe and effective therapeutic options for those with allergies and asthma. She has authored or co-authored more than 100 original papers.

Dr. Nadeau's work has been recognized with numerous grants and awards, and her research is part of a prestigious Clinical and Translational Science Award from the National Institutes of Health (NIH). As a member of a national network of leading allergy and asthma researchers, Dr. Nadeau collaborates with colleagues from institutions around the globe and the United Nations.



Dr. Sally E. Wenzel, MD, is a Professor of Medicine in the Department of Pathology of the University of Pittsburgh, and Director of the University of Pittsburgh Asthma Institute.

Dr. Wenzel is considered a global expert in severe asthma. She has pioneered the concept of asthma phenotypes, including the progression to molecular phenotyping. Dr. Wenzel and Dr. Samuel Yousem were the first scientists to identify a new disease, termed asthmatic granulomatosis, which has features of both asthma and autoimmune-like diseases.

Dr. Wenzel's research interest derives from her clinical experience. She often follows a bedside-to-bench approach regarding biomarkers and in relation to asthma phenotypes and treatment. Additionally, she is currently involved in multiple "omics" projects, including gene expression profiling in human airway cells from a range of asthmatics and controls. She is directly involved in better understanding the impact of Type-2 inflammation on human airway epithelial cells and is able to match cultured/experimental cells with fresh cells, obtained directly from asthmatic patients. She utilizes these cells to model immune processes in asthma *in vitro*. She has also been interested in the convergence of additional immune pathways with Type-2 inflammation, particularly that related to Type-1 inflammation.

O Canada!

O Canada!

O Canada!

Terre de nos aïeux,
Ton front est ceint de fleurons glorieux!

Car ton bras sait porter l'épée,
Il sait porter la croix!

Ton histoire est une épopée
Des plus brillants exploits.
Et ta valeur, de foi trempée,
Protégera nos foyers et nos droits.
Protégera nos foyers et nos droits.

O Canada!

O Canada!

Our home and native land!
True patriot love in all of us command.
With glowing hearts we see thee rise,
The True North strong and free!

From far and wide,
O Canada, we stand on guard for thee.
God keep our land glorious and free!
O Canada, we stand on guard for thee.
O Canada, we stand on guard for thee.

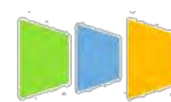
SUNDAY, JANUARY 27, 2019



KEYNOTE PRESENTATION



PANEL DISCUSSION



TRAINEE POSTERS

CARLTON ROOM 12:00–3:00 pm	BOARD OF DIRECTORS' LUNCHEON AND MEETING <i>(by invitation)</i>
GRAND BALLROOM 2:00–4:00 pm	HQP MEET & GREET HQP POSTER SET-UP
BALLROOM FOYER 2:00–5:30 pm	REGISTRATION DESK OPENS
BALLROOM FOYER 4:00–5:00 pm	OPENING RECEPTION <i>(all conference attendees welcome)</i>
GRAND BALLROOM 5:00–5:30 pm	2019 CONFERENCE OPENING REMARKS Dr. Pieter Cullis, PhD, FRSC Board Chair, Allergan Professor, Department of Biochemistry & Molecular Biology, The University of British Columbia Ms. Laura Feldman President, Allergan Students & New Professionals Network Research Analyst, The Hospital for Sick Children Dr. Patrick Deane President & Vice-Chancellor, McMaster University <i>(by video)</i> Mr. Jean Saint-Vil Associate Vice-President of the Networks of Centres of Excellence at the Natural Sciences and Engineering Research Council Dr. Judah Denburg, MD, FRCPC Scientific Director and CEO, Allergan Professor and William J. Walsh Chair in Medicine, McMaster University
GRAND BALLROOM 5:30–7:00 pm 	OPENING KEYNOTE: 21ST CENTURY MEDICINE WILL TRANSFORM HEALTHCARE Dr. Leroy Hood, MD, PhD Senior Vice-President and Chief Science Officer, Providence St. Joseph Health Chief Strategy Officer, Co-founder and Professor for the Institute for Systems Biology
7:00 pm	FREE EVENING
YORK A & B 7:10–10:00 pm	Allergan BOARD OF DIRECTORS DINNER <i>(by invitation)</i>

MONDAY, JANUARY 28, 2019

TRINITY BALLROOM 7:30–8:30am	BREAKFAST REGISTRATION DESK OPEN 8:00 am–6:00 pm BALLROOM FOYER
GRAND BALLROOM 8:45–9:00 am	WELCOME REMARKS Dr. Norman Rosenblum Scientific Director, CIHR Institute of Nutrition Metabolism & Diabetes Professor of Pediatrics, Physiology, and Laboratory Medicine and Pathobiology, University of Toronto
GRAND BALLROOM 9:00–10:00 am 	KEYNOTE: <i>DECIPHERING THE EQUATIONS FOR CHILDHOOD ASTHMA(S)</i> Dr. James Gern Professor, Department of Pediatrics, University of Wisconsin Board-Certified, Allergy and Immunology, and Pediatrics Moderator: Dr. Allan Becker, MD, FRCPC Manitoba Site Co-Leader, CHILD Study Professor and Head of Allergy & Clinical Immunology, Department of Pediatrics & Child Health, University of Manitoba
GRAND BALLROOM 10:00–10:55 am 	CHILD STUDY: OVERVIEW AND IMPACTS Charting CHILD's journey: From fetus to first grade Dr. Malcolm Sears, MB, ChB Founding Director, CHILD Study AstraZeneca Chair in Respiratory Epidemiology; Professor, Division of Respiriology, Department of Medicine, McMaster University
	CHILD's greatest hits (Volume 1) Dr. Padmaja Subbarao (session moderator), MD, MSc, FRCPC Director, CHILD Study Associate Professor, Department of Paediatrics, University of Toronto Staff Respiriologist, The Hospital for Sick Children
	It takes a village: Engaging stakeholders to raise CHILD Dr. Meghan Azad, PhD Chair, CHILD Study Kmb Stakeholder Advisory Committee Assistant Professor, Pediatrics & Child Health, University of Manitoba Research Scientist, Children's Hospital Research Institute of Manitoba Panel Discussion with CHILD Study Knowledge Mobilization Stakeholder Advisory Committee Members: <ul style="list-style-type: none"> • Zak Bhamani, Director, Products & Services, TELUS Health • Mary-Ellen Rayner, Chief Partnerships and Communications Officer, The Sandbox Project • Lisa Wolff, Director, Policy & Education, UNICEF Canada
TRINITY BALLROOM 10:55–11:20 am	BREAK
GRAND BALLROOM 11:20–11:50 am	TRAINEE ORAL PRESENTATIONS 1 1-minute, 1-slide presentations by trainees spanning the spectrum of AllerGen research.
GRAND BALLROOM 11:50–12:50 pm	CHILD STUDY SITES AND PARTICIPANT EXPERIENCES Moderator: Dr. Allan Becker, MD, FRCPC Manitoba Site Co-Leader, CHILD Study Professor and Head of Allergy & Clinical Immunology, Department of Pediatrics & Child Health, University of Manitoba A unique Canadian cohort Dr. Meghan Azad, PhD Manitoba Site Co-Leader, CHILD Study Assistant Professor, Pediatrics & Child Health, University of Manitoba Research Scientist, Children's Hospital Research Institute of Manitoba
	Sleep studies and neurodevelopment in the CHILD Edmonton cohort Dr. Piush Mandhane, MD, PhD, FRCPC Edmonton Site Leader, CHILD Study Associate Professor, Faculty of Medicine & Dentistry – Pediatrics Department, University of Alberta



MONDAY, JANUARY 28, 2019

<p>GRAND BALLROOM 11:50–12:50 pm</p> 	<p>Physiologic phenotyping in the CHILD Toronto cohort</p> <p>Dr. Theo Moraes, MD, PhD, FRCPC Toronto Site Leader, CHILD Study Staff Respiriologist, The Hospital for Sick Children Assistant Professor of Paediatrics, The University of Toronto</p> <hr/> <p>The REAL SCOOP: What it's like to be a CHILD Study participant</p> <p>Moderator: Linda Warner, RN, BSN, CCRP Senior Research Coordinator, CHILD Study Vancouver</p> <p>Panel Discussion with CHILD Study families:</p> <ul style="list-style-type: none"> CHILD Vancouver participants: Maxime Doucas-Mooy Natasha Doucas Robert Mooy CHILD Edmonton participants: Sara Celemin Tatiana Celemin Reuben Celemin CHILD Manitoba participants: Lily Raine Hoffman Harmoni Hoffman Eric Hoffman CHILD Toronto participants: Brynn Eddie Kat Kinch Aaron Eddie
<p>TRINITY BALLROOM 12:50–2:00pm</p>	<p>LUNCH</p>
<p>GRAND BALLROOM 2:00–2:30 pm</p>	<p>TRAINEE ORAL PRESENTATIONS 2</p> <p>1-minute, 1-slide presentations by trainees spanning the spectrum of AllerGen research.</p>
<p>GRAND BALLROOM 2:30–3:30 pm</p> 	<p>CHILD STUDY: GENE-ENVIRONMENT, EPIGENETICS & THE MICROBIOME</p> <p>Moderator: Jeff Brook, PhD, MSc AllerGen Research Co-Leader, Gene-Environment Interactions Enabling Platform Assistant Professor, Occupational & Environmental Health Division, Dalla Lana School of Public Health, University of Toronto Scientific Director, Canadian Urban Environmental Health Research Consortium (CANUE)</p> <hr/> <p>Interaction of the environment and the microbiome</p> <p>Dr. Hind Sbihi, PhD AllerGen Highly Qualified Personnel Postdoctoral Research Fellow, Faculty of Medicine, The University of British Columbia</p> <hr/> <p>Gene-environment interactions on lung health and the risk of asthma in the CHILD Study</p> <p>Dr. Qingling Duan, PhD AllerGen/CHILD Study investigator Assistant Professor, Biomedical and Molecular Sciences, Faculty of Health Sciences, Queen's University</p> <hr/> <p>Indoor exposures and the microbiome</p> <p>Dr. Anita Kozyrskyj, PhD AllerGen/CHILD Study investigator Professor, Department of Pediatrics, University of Alberta</p> <hr/> <p>An epigenetic lens on CHILD</p> <p>Dr. Meaghan Jones, PhD AllerGen Highly Qualified Personnel Assistant Professor, Department of Biochemistry and Medical Genetics, University of Manitoba</p> <hr/> <p>CHILD Study and the Canadian Urban Environmental Health Research Consortium (CANUE)</p> <p>Dr. Jeff Brook, PhD, MSc AllerGen Research Co-Leader, Gene-Environment Interactions Enabling Platform Assistant Professor, Occupational & Environmental Health Division, Dalla Lana School of Public Health, University of Toronto Scientific Director, Canadian Urban Environmental Health Research Consortium (CANUE)</p>

MONDAY, JANUARY 28, 2019

TRINITY BALLROOM 3:30–4:00 pm	BREAK
GRAND BALLROOM 4:00–4:30 pm	<p>THE FUTURE OF CHILD: WHAT'S NEXT?</p> <p>Moderator: Dr. Padmaja Subbarao, MD, MSc, FRCP(C) Director, CHILD Study Associate Professor, Department of Paediatrics, University of Toronto Staff Respiriologist, The Hospital for Sick Children</p> <p>Developmental Origins of Health and Disease (DOHaD) and cardiometabolic outcomes</p> <p>Dr. Sonia Anand, MD, PhD, FRCP(C) AllerGen/CHILD Study investigator Professor, Department of Medicine; Associate Director, Population Health Research Institute, McMaster University</p>
	<p>Trajectories towards anxiety and depression</p> <p>Dr. Peter Szatmari, MD, MSc, FRCPC Professor and Head, Division of Child and Youth Mental Health, The Hospital for Sick Children</p>
GRAND BALLROOM 4:30–5:00 pm	<p>THE FUTURE OF CHILD: PATHWAY FROM EPIDEMIOLOGY TO TRIALS</p> <p>Big data and CHILD</p> <p>Dr. Anna Goldenberg, PhD Scientist, Genetics & Genome Biology, Research Institute, The Hospital for Sick Children Assistant Professor, Department of Computer Science, University of Toronto</p>
	<p>CHILD as a vehicle to improve child health</p> <p>Dr. Stuart Turvey (session moderator), MBBS, DPhil, FRCPC Co-Director and Vancouver Site Leader, CHILD Study Professor, Department of Pediatrics, The University of British Columbia</p>
GRAND BALLROOM 5:00–6:00 pm 	<p>KEYNOTE: <i>ELECTRONIC HEALTH RECORDS AND HOW BIG DATA CAN OFFER NEW INSIGHTS</i></p> <p>Dr. David Bates, MD, MS Professor of Medicine, Harvard Medical School Professor of Health Policy & Management, Harvard School of Public Health Director, Center for Patient Safety Research and Practice, Brigham and Women's Hospital Program Lead for Research, World Health Organization's Global Alliance for Patient Safety</p> <p>Moderator: Dr. Richard Leigh, MBChB, PhD, FCP (SA), FRCPC AllerGen investigator Associate Professor, Department of Medicine and Physiology and Pharmacology, Cumming School of Medicine, University of Calgary</p>
6:00 pm	FREE EVENING
YORK A & B 6:15–8:00 pm	<p>HQP NETWORKING DINNER <i>(by invitation)</i></p> <p>A networking dinner for AllerGen HQP, committee members and investigators.</p>

TUESDAY, January 29, 2019

TRINITY BALLROOM 7:30–8:30am	BREAKFAST	REGISTRATION DESK OPEN 8:00 am–6:00 pm BALLROOM FOYER
GRAND BALLROOM 8:45–9:00 am	WELCOME REMARKS Dr. Brian Rowe , MD, MSc Scientific Director, CIHR Institute of Circulatory and Respiratory Health Professor, Department of Emergency Medicine and School of Public Health, University of Alberta	
GRAND BALLROOM 9:00–10:00 am 	KEYNOTE: <i>PRECISION MEDICINE IN ASTHMA—FROM BIOLOGY TO BIOLOGICS</i> Dr. Sally Wenzel, MD Professor of Medicine, Department of Pathology, University of Pittsburgh Director, University of Pittsburgh Asthma Institute Moderator: Dr. Paul O'Byrne , MB, FRCPI, FRCPC Director, AllerGen's Clinical Investigator Collaborative Dean and Vice-President, Faculty of Health Sciences; Dean, Michael G. DeGroote School of Medicine; Professor of Respiriology, McMaster University	
GRAND BALLROOM 10:00–10:30 am	TRAINEE ORAL PRESENTATIONS 3 1-minute, 1-slide presentations by trainees spanning the spectrum of AllerGen research.	
TRINITY BALLROOM 10:30–11:00 am	BREAK	
GRAND BALLROOM 11:00 am– 12:30 pm 	CLINICAL INVESTIGATOR COLLABORATIVE (CIC) OVERVIEW & IMPACTS: CLINICAL TRIALS AND DRUG DEVELOPMENT Moderator: Dr. Paul O'Byrne , MB, FRCPI, FRCPC Director, AllerGen's Clinical Investigator Collaborative Dean and Vice-President, Faculty of Health Sciences; Dean, Michael G. DeGroote School of Medicine; Professor of Respiriology, McMaster University <i>Understanding drug targets: What the CIC has achieved to date</i> Dr. Gail Gauvreau, PhD Co- Director, AllerGen's Clinical Investigator Collaborative Professor of Respiriology, McMaster University	
	<i>New pathways of allergic airway disease uncovered using CIC models of asthma</i> Dr. Scott Tebbutt, PhD AllerGen investigator Professor, Department of Medicine, Division of Respiratory Medicine, The University of British Columbia Principal Investigator, James Hogg Research Centre for Heart Lung Innovation, Institute for Heart + Lung Health, St. Paul's Hospital	
	<i>Partnering with the CIC: The role of clinical models in drug development</i> Dr. Paul Newbold, PhD Senior Medical Affairs Leader, Respiratory Global Medical Affairs, AstraZeneca	
	<i>The Severe Asthma CIC: Overview and impacts</i> Dr. Parameswaran Nair, MD, PhD, FRCP, FRCPC Frederick E. Hargreave Teva Innovation Chair in Airway Diseases Professor of Respiriology, McMaster University Staff Respiriologist, Firestone Institute for Respiratory Health	
	Panel Discussion	


TUESDAY, January 29, 2019

TRINITY BALLROOM 12:30–1:45 pm	LUNCH
GRAND BALLROOM 1:45–3:00 pm 	<p>BIOMARKERS AND BIOINFORMATICS ENABLING PLATFORM: DISCOVERY & DEVELOPMENT ON THE ROAD TO ECONOMIC AND SOCIAL BENEFIT</p> <p>Moderator: Dr. Kelly McNaghy, PhD Associate Scientific Director, Allergan Allergan Research Co-Leader, Biomarkers & Bioinformatics Enabling Platform Professor of Medical Genetics, The University of British Columbia</p> <p>Improved diagnosis of airways disease: Metabolomic urine profiling</p> <p>Dr. Darryl Adamko, MD, FRCPC Allergan investigator Pediatric Respiriologist, Professor of Medicine, University of Saskatchewan</p>
	<p>CABS1: A novel biomarker of stress with anti-inflammatory activity</p> <p>Dr. Dean Befus, PhD Allergan Research Co-Leader, Biomarkers & Bioinformatics Enabling Platform Professor Emeritus, Pulmonary Medicine, University of Alberta Co-Director, Alberta Respiratory Centre</p>
	<p>Cord blood flow cytometric predictors of atopy and asthma in the CHILd Study</p> <p>Dr. Judah Denburg, MD, FRCPC Scientific Director and CEO, Allergan Professor and William J. Walsh Chair in Medicine, McMaster University</p>
	<p>Regulatory dendritic cell immunotherapy for allergic disease</p> <p>Dr. John R. Gordon, PhD Allergan Research Co-Leader, Biomarkers & Bioinformatics Enabling Platform Professor, Respiriology, University of Saskatchewan</p>
	<p>CyTOF as a tool for cord blood biomarker discovery in allergic disease</p> <p>Dr. Kelly McNaghy, PhD Associate Scientific Director, Allergan Allergan Research Co-Leader, Biomarkers & Bioinformatics Enabling Platform Professor of Medical Genetics, The University of British Columbia</p>
	Panel Discussion
GRAND BALLROOM 3:00–3:30 pm	<p>TRAINEE ORAL PRESENTATIONS 4</p> <p>1-minute, 1-slide presentations by trainees spanning the spectrum of Allergan research.</p>
GRAND BALLROOM 3:30–5:30 pm	<p>POSTER VIEWING & JUDGING</p> <p>NETWORKING WINE & CHEESE</p> 
GRAND BALLROOM 6:30–7:30 pm	<p>Allergan GALA AND AWARDS DINNER</p> <p>Dr. Judah Denburg, MD, FRCPC Scientific Director and CEO, Allergan Professor and William J. Walsh Chair in Medicine, McMaster University</p>
GRAND BALLROOM 7:30–8:00 pm 	<p>KEYNOTE: <i>TWISTED SCIENCE—A CALL TO ACTION</i></p> <p>Prof. Timothy Caulfield, LL.B., LL.M. Canada Research Chair in Health Law and Policy Professor, Faculty of Law and the School of Public Health; Research Director, Health Law Institute, University of Alberta</p>
GRAND BALLROOM 8:00–9:45 pm	<p>Allergan NETWORK AND AWARDS CELEBRATION</p> <p>Moderator: Dr. Judah Denburg, MD, FRCPC Scientific Director and CEO, Allergan Professor and William J. Walsh Chair in Medicine, McMaster University</p>

WEDNESDAY, JANUARY 30, 2019

TRINITY BALLROOM 7:30–8:30 am	<p>BREAKFAST</p> <p style="text-align: right;">REGISTRATION DESK OPEN 8:00 am–4:30 pm BALLROOM FOYER</p>
GRAND BALLROOM 8:45–9:00 am	<p>WELCOME REMARKS</p> <p>Stephen Norman Director, Bureau of Chemical Safety, Food Directorate, Health Products and Food Branch, Health Canada</p>
GRAND BALLROOM 9:00–10:30 am 	<p>CANGOFAR TO CANFAST: HOW AllerGen CHANGED THE GLOBAL LANDSCAPE OF FOOD ALLERGY RESEARCH</p> <p>Moderator: Dr. Susan Elliott, PhD Research Co-Leader, AllerGen's Canadian Food Allergy Strategic Team (CanFAST)/National Food Allergy Strategic Team (NFAST) Legacy Initiative Professor, Department of Geography and Environmental Management, University of Waterloo</p> <p>Is the prevalence of food allergy in Canada increasing?</p> <p>Dr. Ann Clarke, MD, MSc Research Co-Leader, AllerGen's Canadian Food Allergy Strategic Team (CanFAST)/ National Food Allergy Strategic Team (NFAST) Legacy Initiative Professor of Medicine, University of Calgary</p>
	<p>Anaphylaxis in Canada: Lessons learned from the Cross-Canada Anaphylaxis REgistry (C-CARE)</p> <p>Dr. Moshe Ben-Shoshan, MD, MSc AllerGen investigator Assistant Professor, Division of Allergy and Clinical Immunology, McGill University Pediatric Allergy and Immunology Specialist, Montreal Children's Hospital investigator</p>
	<p>Food allergy genetics: Past, present and future</p> <p>Dr. Yuka Asai, MD, PhD AllerGen investigator Assistant Professor, Department of Medicine, Queen's University</p>
	<p>Models of tolerance mechanisms</p> <p>Dr. Jean Marshall, PhD Research Co-Leader, AllerGen's Canadian Food Allergy Strategic Team (CanFAST)/ National Food Allergy Strategic Team (NFAST) Legacy Initiative Professor of Microbiology & Immunology, Dalhousie University</p>
	<p>Cow's milk protein allergy: What can be learned from biomarkers?</p> <p>Dr. Bruce Mazer, MD AllerGen investigator Executive Director and Chief Scientific Officer (Interim), Research Institute of the McGill University Health Centre; Professor, Pediatrics, McGill University Head of Child Health Research, Montreal Children's Hospital</p>
	<p>Panel Discussion</p>
TRINITY BALLROOM 10:30–11:00am	BREAK
GRAND BALLROOM 11:00 am– 1:00 pm	<p>HOW AllerGen CHANGED THE GLOBAL LANDSCAPE OF FOOD ALLERGY RESEARCH (CONTINUED)</p> <p>Moderator: Dr. Jean Marshall, PhD Research Co-Leader, AllerGen's Canadian Food Allergy Strategic Team (CanFAST)/National Food Allergy Strategic Team (NFAST) Legacy Initiative Professor of Microbiology & Immunology, Dalhousie University</p> <p>The science of translating food allergy science</p> <p>Dr. Susan Elliott, PhD Research Co-Leader, AllerGen's Canadian Food Allergy Strategic Team (CanFAST)/National Food Allergy Strategic Team (NFAST) Legacy Initiative Professor, Department of Geography and Environmental Management, University of Waterloo</p>

WEDNESDAY, JANUARY 30, 2019

<p>GRAND BALLROOM 11:00 am–1:00 pm</p> 	<p>Risks associated with consuming foods with allergen precautionary labelling in Canada</p> <p>Dr. Samuel Godefroy, PhD AllerGen investigator Professor, Department of Food Sciences, Faculty of Agriculture, Food Sciences/Institute of Nutrition and Functional Foods (INAF), Laval University</p>
	<p>Identifying barriers to and enablers of Oral Food Challenge implementation in Canada</p> <p>Dr. Edmond Chan, MD, FRCPC AllerGen investigator Associate Professor, Department of Pediatrics, The University of British Columbia Head, Allergy Clinic, BC Children's Hospital</p>
	<p>Development of an interactive food allergy education program for adolescents</p> <p>Dr. Allan Becker, MD, FRCPC Manitoba Site Co-Leader, CHILD Study Professor and Head of Allergy & Clinical Immunology, Department of Pediatrics & Child Health, University of Manitoba</p>
	<p>Managing food allergies at university: What are the gaps?</p> <p>Dr. Susan Waserman, MD, MSc, FRCPC AllerGen investigator Professor, Allergy & Clinical Immunology, Department of Medicine, McMaster University</p>
	<p>Taking it political: The importance of taking the food allergy policy discussion to the level of the Federal government</p> <p>Ms. Jennifer Gerdtz Executive Director, Food Allergy Canada AllerGen legacy partner organization</p>
	<p>Panel Discussion</p>
<p>TRINITY BALLROOM 1:00–2:00 pm</p>	<p>LUNCH</p>
<p>GRAND BALLROOM 2:00–2:45 pm</p> 	<p>KEYNOTE: THE FUTURE OF FOOD ALLERGY</p> <p>Dr. Kari Nadeau, MD, PhD, FAAAAI Director, Sean N. Parker Center for Allergy and Asthma Research, Stanford University Endowed professor under the Naddisy Family Foundation</p> <p>Moderator: Dr. Philippe Bégin, MD, PhD, FRCPC AllerGen investigator Allergist & immunologist; Adjunct clinical professor, Centre hospitalier universitaire Sainte-Justine Researcher, University of Montreal</p>
<p>GRAND BALLROOM 2:45–3:00 pm</p>	<p>CONFERENCE CLOSING REMARKS</p> <p>Dr. Judah Denburg, MD, FRCPC Scientific Director and CEO, AllerGen Professor and William J. Walsh Chair in Medicine at McMaster University</p> <p>Dr. Diana Royce, EdD Managing Director & COO, AllerGen</p>
<p>3:00 pm</p>	<p>2019 CONFERENCE ADJOURNMENT</p>
<p>GRAND BALLROOM 3:30–6:30 pm</p>	<p>CHILD STUDY DATA ACCESSIBILITY WORKSHOP (<i>all conference attendees welcome</i>)</p>

CONFERENCE SPEAKERS | MODERATORS

Dr. Darryl Adamko, MD, FRCPC, is a pediatric respirologist and a Professor of Medicine at the University of Saskatchewan.

Dr. Adamko's research focuses primarily on asthma. He has studied the mechanisms of virus-induced asthma attacks and those underlying the development of asthma from infancy, using *in vitro* and *in vivo* models in humans and animals. In recent years, he has been developing a novel urine-based diagnostic to detect and monitor asthma using mass spectrometry. Based on this research, he is first author on a patent and Director of the company Respirlyte, Inc. ©



Dr. Darryl Adamko

Dr. Sonia Anand, MD, PhD, FRCPC, is Associate Director of the Population Health Research Institute; Director of the Population Genomics Program, Department of Clinical Epidemiology and Biostatistics; Professor of Cardiology; and Associate Chair, Equity and Diversity, in the Department of Medicine, all at McMaster University.

Dr. Anand holds a Canada Research Chair in Ethnic Diversity and Cardiovascular Disease and the Heart and Stroke Foundation of Ontario/Michael G. DeGroote Chair in Population Health Research. Her present research focuses upon the environmental and genetic determinants of vascular disease in populations of varying ancestral origin, women and cardiovascular disease. She has published over 200 articles in peer-reviewed journals and received the Queen Elizabeth II Diamond Jubilee Medal.



Dr. Sonia Anand

Dr. Yuka Asai, MD, PhD, is an Assistant Professor in the Department of Medicine at **Queen's University**. **She also provides consultation service to Kingston General Hospital and outpatient service at Hotel Dieu Hospital.**

Dr. Asai's research interests include allergy, genetics, and epidemiology. She analyzes how skin interacts with other systems and its possibility to act as a therapeutic tool for systemic disease. She also conducted a study to determine the association of eczema genes and filaggrin to peanut allergy.



Dr. Yuka Asai

Dr. Meghan Azad, PhD, is a Canada Research Chair in the Developmental Origins of Chronic Disease; an Assistant Professor in Pediatrics & Child Health at the University of **Manitoba**; **Research Scientist at the Children's Hospital Research Institute of Manitoba**; Population Health Pillar co-Lead for the Manitoba Developmental Origins of Chronic Diseases in Children Network (DEVOTION). She is also co-leader of the Manitoba site of the CHILD Study and chairs the CHILD Study KMb Stakeholder Advisory Committee.

Dr. Azad's present research focuses on the developmental origins of chronic disease, including asthma, allergies, obesity and diabetes, with a particular interest in maternal nutrition, infant feeding and human milk composition. She has dual expertise in molecular biology and epidemiology, and her research program incorporates administrative database studies, human birth cohorts, and collaboration with basic scientists to establish animal models and explore biological mechanisms.



Dr. Meghan Azad

CONFERENCE SPEAKERS | MODERATORS

Dr. Allan Becker, MD, FRCPC, is Professor and Head of the Section of Allergy & Clinical Immunology in the Department of Pediatrics & Child Health at the University of Manitoba. His primary research interest is the origins of allergy and asthma and other chronic, non-communicable diseases in early life. He has led several birth cohorts (The Canadian Asthma Primary Prevention Study: CAPPS; and the 1995 Manitoba birth cohort Study of Asthma Genes and the Environment: SAGE) focused on that area and he co-leads the Manitoba site for the CHILD Study. He has over 260 publications.

Dr. Becker led development of the process for National Asthma Educator certification in Canada and development of an Asthma Educator Education Program, *Asthma Trec*, which is now used across Canada. He was lead author of the first Canadian Pediatric Asthma Guidelines and is a member of the Scientific Committee of the Global Initiative for Asthma (GINA).



Dr. Allan Becker

Dr. Dean Befus, PhD, is a Professor Emeritus, Department of Medicine at the University of Alberta and Co-Director of the Alberta Respiratory Centre. He is a Research Co-Leader of **AllerGen's Biomarkers and Bioinformatics Enabling Platform**.

Dr. Befus focuses on finding new therapeutic treatments for asthma patients when their airways become inflamed by an asthma trigger, such as moulds, pollen and dust. His research focuses on the cooperation between mast cells and airway epithelial cells in host defence against influenza A; and on the neuro-endocrine-immunologic network in inflammation and stress. As Co-Director of the Alberta Respiratory Centre, he has broad interests in asthma, ranging from its management to the development, implementation and evaluation of education programs for adults and children, their families and health care professionals.



Dr. Dean Befus

Dr. Philippe Bégin, MD, PhD, is an allergist at the Centre Hospitalier universitaire Sainte-Justine in Montreal, QC, and an Adjunct clinical professor at the University of Montreal. Dr. Bégin was an AllerGen Emerging Clinician Scientist Research Fellow. During his Fellowship, he worked with Dr. Kari Nadeau at the Sean N. Parker Center for Allergy and Asthma Research at Stanford University.

Dr. Bégin is a Canadian expert in oral immunotherapy (OIT) for the treatment of severe food allergies. He leads an oral immunotherapy clinic established at Sainte-Justine Hospital in 2017. The clinic aims to treat 750 food-allergic children over a three-year pilot period and to establish provincial clinical standards and treatment costs for OIT.

In 2017, Dr. Bégin received the Early Career Award from the Canadian Society of Allergy and Clinical Immunology (CSACI) for dedication to his specialty.



Dr. Philippe Bégin

Dr. Moshe Ben-Shoshan, MD, MSc is an Assistant Professor in the Division of Allergy and Clinical Immunology at McGill University and a Pediatric Allergy and Immunology Specialist at **the Montreal Children's Hospital**. He received a special distinction award for his service as the head of an air-force medical team, Special Research Fellowship Award, and Allergists for Israel. He also received the 2017 Estelle Simons Award for Excellence in Research from the Canadian Society of Allergy and Clinical Immunology (CSACI).

Dr. Ben-Shoshan's research focuses on food allergy, anaphylaxis, chronic urticaria, and primary immunodeficiency. His current project analyzes genetic and environmental causes of food allergy, and the role of genetics in hypersensitivity reactions to antibiotics. He also conducted the first nationwide Canadian study to determine the prevalence of severe food allergies at the Montreal General Hospital. He leads AllerGen's Cross-Canada Anaphylaxis Registry (C-CARE).



Dr. Moshe Ben-Shoshan

CONFERENCE SPEAKERS | MODERATORS

Dr. Jeffrey R. Brook, PhD, MSc, is Assistant Professor in the Occupational & Environmental Health Division of the Dalla Lana School of Public Health at the University of Toronto. He is also a former Senior Research Scientist in the Air Quality Research Division of Environment and Climate Change Canada, and a Research Leader of AllerGen's Gene-Environment Interactions Enabling Platform.

Dr. Brook is internationally recognized as a Canadian expert on urban air quality and air quality-health linkages. He studies the sources, atmospheric behaviour and impacts of air pollutants across Canada. He has led scientific assessments to inform policy nationally and internationally, and advised multi-stakeholder groups shaping policy. He has led a variety of multi-disciplinary research teams in government, government-academic partnerships and in academia. He is currently Scientific Director for the CHILD-linked five-year, \$4.16 million project, funded by an Operating Grant from the CIHR's Environments and Health Signature Initiative, entitled CANUE: Canadian Urban Environmental Health Research Consortium.



Dr. Jeffrey Brook

Dr. Edmond Chan, MD, FRCPC, is a Clinical Associate Professor in the Department of Pediatrics, The University of British Columbia, and Head of the Division of Allergy & Clinical Immunology Clinic at BC Children's Hospital. He is a recipient of the Canadian Society of Allergy and Clinical Immunology's Jerry Dolovich Award for his contributions to allergy and clinical immunology in Canada.

Dr. Chan's research includes conducting clinical trials for epicutaneous peanut immunotherapy; studying the association between food allergy and anxiety; development and evaluation of an e-health tool to educate the general public about food allergy; co-leading an eosinophilic esophagitis registry; and examining the barriers and solutions towards greater adoption of oral food challenges.

Dr. Chan has taken a national role in health advocacy as lead author of the first Canadian position statement on allergy prevention and dietary exposure in high-risk infants, representing both the Canadian Pediatric Society and the CSACI.



Dr. Edmond Chan

Dr. Ann Clarke, MD, MSc, is a Professor of Medicine at the University of Calgary. She is an established investigator in the epidemiology, economics, and outcomes of chronic atopic and autoimmune diseases, specifically food allergy and systemic lupus erythematosus (SLE). She is a Research Leader of AllerGen's Canadian Food Allergy Strategic Team (CanFAST) Legacy Project and its National Food Allergy Strategy (NFAST) Legacy Initiative.

Dr. Clarke is developing the Alberta Food Allergy Research (AFAR) program, which 1) maintains and expands longitudinal databases of children with food allergy and anaphylaxis, recruited from clinic and community settings across; 2) examines nationwide temporal trends in food allergy prevalence; and 3) translates knowledge about the prevalence, impacts, and experiences of food allergy.



Dr. Ann Clarke

Dr. Pieter Cullis, PhD, FRSC, is a Professor of Biochemistry and Molecular Biology in the Faculty of Medicine of The University of British Columbia. He is also the Director of the Life Sciences Institute and of the NanoMedicines Research Group, Chair of the Personalized Medicine Initiative at UBC, and the Chair of the Board for AllerGen.

His laboratory has been responsible for fundamental advances in the generation, loading and targeting of liposomal systems for intravenous delivery of conventional and genetic drugs. This work has led to two products that have been approved by regulatory agencies in the U.S. and Europe for the treatment of cancer and its complications, one that is in late stage (Phase III) clinical trials and two more that are about to enter Phase I studies.



Dr. Pieter Cullis

CONFERENCE SPEAKERS | MODERATORS

Dr. Judah Denburg, MD, FRCPC, Professor and William J. Walsh Chair in Medicine at McMaster University, received his MD from McGill University Medical School and Hebrew University (Israel) followed by Fellowship Certification (FRCPC) in Internal Medicine and Hematology. Dr. Denburg is the Director and Chief of Service of Clinical Immunology and Allergy at Hamilton Health Sciences and he is active as a physician with one of the largest academic group practices in Allergy and Immunology in Canada. He is also the Scientific Director and CEO of the Allergy, Genes & Environment Network of Centres of Excellence (AllerGen NCE Inc.), a research and knowledge translation network in allergic diseases and asthma that has positioned Canada as a global leader in allergy and asthma research and development.

Dr. Denburg's primary research interests are the developmental biology of eosinophils, basophils and mast cells, and immune regulation in allergic airways. His pioneering, multi-disciplinary studies have led to the widely-accepted concept of "allergy as a systemic disease". His publication list is extensive, with over 340 peer-reviewed scientific journal articles, reviews and book chapters.



Dr. Judah Denburg

Dr. Qingling Duan, PhD, is an Assistant Professor jointly appointed to the Department of Biomedical & Molecular Sciences and the School of Computing at Queen's University.

Dr. Duan completed her postdoctoral training in genomics and bioinformatics at the Channing Division of Network Medicine, affiliated with Harvard Medical School and Brigham and Women's Hospital in Boston. **The primary aim of her research is to identify genetic factors that regulate multifactorial traits in human populations including chronic diseases and variable response to common drug therapies. Dr. Duan recently received the Queen's National Scholar Award in recognition of her expertise in Bioinformatics.**



Dr. Qingling Duan

Dr. Susan Elliott, PhD, is a professor in the Department of Geography and Environmental Management at the University of Waterloo and an Adjunct Professor with the United Nations University Institute for Water, Environment and Health (UNU-INWEH), a partner in much of the global water and sanitation research that she undertakes. She is a health geographer whose primary area of research focuses on relationships between **environment and health, broadly defined. She is a Research Leader for AllerGen's national Food Allergy Strategy (NFASt) Legacy Initiative: a knowledge mobilization platform that will position Canada as a global leader in improving the management of food allergy across environments and settings.**

Her current research activities are organized around three broad themes: health and the built environment; health and the socially constructed environment; and health and the physical environment.



Dr. Susan Elliott

Ms. Laura Feldman, MPH, is a Research Analyst working with Dr. Teresa To at The Hospital for Sick Children, and President of the AllerGen Students & New Professionals Network (ASNP). Ms. Feldman is a recent graduate of the Masters of Public Health: Epidemiology program at the Dalla Lana School of Public Health, University of Toronto.



Ms. Laura Feldman

CONFERENCE SPEAKERS | MODERATORS

Dr. Gail Gauvreau, PhD, is a Professor of Respiriology at McMaster University and Co-Director of **AllerGen's Clinical Investigator Collaborative**, a multi-centred, Canadian-based, Phase II clinical trials group that fast-tracks potential drug candidates for the treatment of asthma.

Dr. Gauvreau completed her BSc/MSc at the University of Guelph, her PhD at McMaster University and a Postdoctoral Fellowship at the Johns Hopkins University in Baltimore, Maryland.

Her research interests include the mechanisms of allergic inflammation, novel therapeutic targets for asthma and COPD, airway inflammation in asthma and COPD, and cysteinyl leukotrienes (cysLT) and cysLT receptors.



Dr. Gail Gauvreau

Ms. Jennifer Gerdts is the Executive Director of Food Allergy Canada, a national not-for-profit patient advocacy and education organization that works to make life safer for people with food allergies and those that may be at risk from anaphylaxis.

Ms. Gerdts' prior professional experience was in business strategy, planning and organizational effectiveness with a focus in sales and marketing functional areas, with clients across several industries including pharmaceuticals, financial sector, industrial equipment and consumer goods.



Ms. Jennifer Gerdts

Dr. Samuel Godefroy, PhD, is a Professor in the Department of Food Sciences, Faculty of Agriculture and Food Sciences/Institute of Nutrition and Functional Foods (INAF), at Université Laval.

Dr. Godefroy does research in Food Science, Analytical Chemistry, Risk Analysis and Food Regulatory Policies. His current research projects are related to the management of emerging issues: development of risk based measures associated with allergens in food; regulatory policy development for food fraud prevention and management; evaluation and enhancement of food regulatory systems in developing nations; implementation of regional initiatives for food regulatory policy; and standards development.



Dr. Samuel Godefroy

Dr. Anna Goldenberg, PhD, is a Scientist in Genetics and Genome Biology program at the SickKids Research Institute, an Assistant Professor in the Department of Computer Science at the University of Toronto, cross-appointed in the Department of Statistics, faculty member at Vector and a fellow at the Canadian Institute for Advanced Research (CIFAR), Child and Brain Development group. She is trained in machine learning and statistics at Carnegie Mellon University, with a post-doctoral focus in computational biology and medicine.

Dr. Goldenberg is an expert in developing machine learning approaches for biological data, network methods and data integration of omics and clinical data. The current focus of her lab is on developing methods that capture heterogeneity and identify disease mechanisms in complex human diseases.



Dr. Anna Goldenberg

CONFERENCE SPEAKERS | MODERATORS

Dr. John R. Gordon, PhD, is a Professor of Respiriology at the University of Saskatchewan, and a Research Leader of AllerGen's Biomarkers & Bioinformatics Enabling Platform.

Dr. Gordon's laboratory focuses on immunotherapeutics in the context of allergic and other inflammatory diseases. His team has developed regulatory dendritic cell protocols to reverse asthma and food allergen sensitivity in animal models and has shown that these approaches are relevant also to human disease. His team is presently moving to translate regulatory dendritic cell immunotherapies into the clinic. His lab also patented a series of anti-inflammatory drugs that attenuate neutrophilic inflammation in an array of animal models, but has more recently shown that these same agents potentially antagonize the growth, metastasis and development of chemotherapeutic resistance in multiple tumours.



Dr. John Gordon

Dr. Meaghan Jones, PhD, is an Assistant Professor in the Department of Biochemistry and Medical Genetics at the University of Manitoba.

Dr. Jones' current research focus is the role of epigenetic changes in the link between mothers' exposure to inhaled pollutants like cigarette smoke and their children's risk of developing asthma. She pursued post-doctoral training at The University of British Columbia studying epigenetics of early-life environments with Dr. Michael Kobor.



Dr. Meaghan Jones

Dr. Anita Kozyrskyj, PhD, is a Professor in the Department of Pediatrics, Faculty of Medicine & Dentistry, of the University of Alberta.

Dr. Kozyrskyj is interested in epidemiological research using population-based birth cohort studies with linkages to existing healthcare databases. Her current research interests focus on early life programming of childhood atopic disease and overweight, as influenced by birth method, infant diet and antibiotic use during pregnancy, birth and infancy. She is principle investigator of the SyMBIOTA (Synergy in Microbiota) research program, one of seven CIHR-funded Canadian Microbiome Initiative teams. The SyMBIOTA program derives its data from the CHILD Study to investigate pre- and postnatal influences on infant gut microbiota and their connection to the development of atopy and overweight.



Dr. Anita Kozyrskyj

Dr. Richard Leigh, MBChB, MSc, PhD, FCP (SA), FRCPC, is a Professor of Medicine and of Physiology and Pharmacology; Division Head, Division of Respiratory Medicine; and GlaxoSmithKline-CIHR Professor of Inflammatory Lung Disease at the University of Calgary.

Dr. Leigh's clinical and research interest areas include understanding the basic mechanisms underlying airway remodelling in asthma, the assessment of airway inflammation, and clinical trials in asthma and Chronic Obstructive Pulmonary Disease (COPD). Within AllerGen, Dr. Leigh is the Calgary site leader of the Clinical Investigator Collaborative (CIC) clinical trials group, contributing his expertise to the evaluation of new drug compounds for the treatment of allergic asthma.



Dr. Richard Leigh

CONFERENCE SPEAKERS | MODERATORS

Dr. Piush Mandhane, MD, PhD, FRCPC, is an Associate Professor at the Faculty of Medicine & Dentistry – Pediatrics Department in University of Alberta. His research focuses on pediatric health, child development and epidemiology. He is the Alberta site leader for the CHILD Study.

Dr. Mandhane is the Principal Investigator of the CIHR-funded projects such as “**SLEEP-E: Neurodevelopment at 2 years of age**” and “**Sleep, Learning, Education, hEalth Project – Edmonton (SLEEP-E at 2 years of age).**” During his PhD at McMaster University, he examined the gender differences in the presentation of atopy. He also conducted a study to understand the role of estrogen and progesterone in females with asthma.



Dr. Piush Mandhane

Dr. Jean Marshall, PhD, is a Professor of Microbiology & Immunology at Dalhousie University, and a Research Leader of AllerGen's Canadian Food Allergy Strategic Team (CanFAST) Legacy Project and its National Food Allergy Strategy (NFAST) Legacy Initiative.

Dr. Marshall is interested in the biology and function of mast cells in host defence and disease. This includes study of mast cells in models of viral infection, cancer and allergic disease such as asthma and food allergy. Her work often involves multidisciplinary teams of scientists and multiple research trainees.



Dr. Jean Marshall

Dr. Bruce Mazer, MD, is the Executive Director and Chief Scientific Officer (Interim) of the Research Institute of the McGill University Health Centre (RI-MUHC). He is Professor of Pediatrics at McGill University and associate member of the Department of Medicine, and Division of Experimental Medicine.

Dr. Mazer's research focuses B-lymphocytes and development of antibody producing cells, particularly IgE. He uses a combination of human studies and animal modelling to determine new ways of changing the immune response to allergens, and to help to naturally shape immune tolerance in individuals with allergies and asthma. He has been funded by CIHR, FRQ-S, NSERC, AllerGen and Canadian Blood Services and is a proud member of the AllerGen NCE.



Dr. Bruce Mazer

Dr. Kelly McNagny, PhD, is a Professor of Medical Genetics at The University of British Columbia, a Member of the Stem Cell Network of Canada, and Associate Director of AllerGen NCE Inc. He is also a Research Leader of AllerGen's Biomarkers & Bioinformatics Enabling Platform.

Dr. McNagny's laboratory is interested in two aspects of hematopoietic stem cell biology: 1) the networks that regulate the commitment of multipotent progenitors to a specific lineage, and 2) the surface receptors expressed by a) hematopoietic precursor cells that regulate their interactions with their microenvironment, and by b) mature cells that regulate their trafficking in disease.



Dr. Kelly McNagny

CONFERENCE SPEAKERS | MODERATORS

Dr. Theo Moraes, MD, PhD, FRCPC, is Staff Respiriologist at The Hospital for Sick Children, a Scientist in the Program for Translational Medicine at the SickKids Research Institute, and an Associate Professor of Paediatrics at the University of Toronto. He is also the Toronto site leader for the CHILD Study.

Dr. Moraes is interested in respiratory epithelial biology and has ongoing research focused on respiratory syncytial virus (RSV), Cystic Fibrosis and asthma.



Dr. Theo Moraes

Dr. Parameswaran Nair, MD, PhD, FRCP, FRCPC, is the Frederick E. Hargreave Teva Innovation Chair in Airway Diseases, a Professor of Respiriology at McMaster University, and Staff Respiriologist at the Firestone Institute for Respiratory Health. He is also an Adjunct Professor of Medicine at McGill University. He leads the Severe Asthma component of **AllerGen's Clinical Investigator Collaborative (CIC)**, a multi-centred, Canadian-based, Phase II clinical trials group that fast-tracks potential drug candidates for the treatment of asthma.

Dr. Nair's research focuses on developing and applying non-invasive measurements of airway inflammation in the treatment of severe asthma and Chronic Obstructive Pulmonary Disease (COPD). His laboratory characterizes the types of bronchitis in airway diseases using measurements in sputum; develops novel biomarkers in sputum; identifies mechanisms of bronchitis; and explores novel targeted therapies of bronchitis.



Dr. Parameswaran Nair

Dr. Paul Newbold, PhD, is a Senior Medical Affairs Leader in the Respiratory Global Medical Affairs group of AstraZeneca.

Dr. Newbold has been with the AstraZenca/MedImmune organization for 23 years, always in the Respiratory and Inflammation therapeutic area. He has worked mainly on the development of new medicines (both small molecule and biologics) for asthma and Chronic Obstructive Pulmonary Disease (COPD). His interests have been in biomarker development for pharmacodynamic and pharmacological activity; understanding mechanism of action of disease and potential new therapies; predicting response to treatment; precision medicine; and early clinical trial design for proof of concept testing.



Dr. Paul Newbold

Mr. Stephen Norman **joined Health Canada's Food Directorate in January 2019 as Director** of the Bureau of Chemical Safety. The Bureau of Chemical Safety has a clear mandate to ensure that chemicals are not present in foods at levels that may lead to adverse health effects for Canadians. Previously Stephen held a number of positions at the Canadian Food Inspection Agency, most recently as Director of the Food Safety Science Services Division with oversight for coordination of food chemistry and microbiology laboratory services as well as food surveillance planning, design, analysis and reporting.



Mr. Stephen Norman

CONFERENCE SPEAKERS | MODERATORS

Dr. Paul O'Byrne, MB, FRCPI, FRCPC, FRCPE, FRCP(Glasg), FAPC, FCCP, FERS, FRSC, is Dean and Vice-President of the Faculty of Health Sciences, Dean of the Michael G. DeGroote School of Medicine, and a Professor of Respiriology at McMaster University, where he also holds the title of Distinguished University Professor. He is Director of **AllerGen's Clinical Investigator Collaborative (CIC)**, a multi-centred, Canadian-based, Phase II clinical trials group that fast-tracks potential drug candidates for the treatment of asthma.

Dr. O'Byrne is a world-renowned researcher and a practicing respirologist. His research interests are on the mechanisms and treatment of asthma, particularly the role of environmental allergens and the mechanisms by which these cause airway inflammation.



Dr. Paul O'Byrne

Dr. Norman Rosenblum was named Scientific Director of the CIHR Institute of Nutrition, Metabolism and Diabetes effective January 1, 2018. He is a professor of pediatrics, physiology, and laboratory medicine and pathobiology at the University of Toronto, and a pediatric nephrologist and Senior Scientist at the Research Institute of The Hospital for Sick Children (SickKids).

He is deeply engaged in developing and managing career development programs for clinician-scientists. He founded and led the Canadian Child Health Clinician Scientist Program from 2001-2012. From 2009-2017, he served as Associate Dean, Physician Scientist Training in the Faculty of Medicine, University of Toronto, and he is Director of both the MD/PhD and Clinician Investigator programs.



Dr. Norman Rosenblum

Dr. Brian H. Rowe, MD, MSc, is Director of the Institute for Circulatory and Respiratory Health (ICRH) at the Canadian Institutes of Health Research (CIHR).

Dr. Rowe is also a professor in the Department of Emergency Medicine and the School of Public Health at the University of Alberta in Edmonton and holds a Tier I Canada Research Chair (CRC) in Evidence-based Emergency Medicine (2011-2018). He is co-editor of the Cochrane Airways Group, and the editor of the textbook Evidence-Based Emergency Medicine. He is a Fellow of the Canadian Academy of Health Sciences and has authored over 491 peer-reviewed publications and 31 book chapters.



Dr. Brian Rowe

Dr. Diana Royce, EdD, is Managing Director & COO of AllerGen NCE Inc. She has been involved with AllerGen since its conceptual origins in 2002.

Dr. Royce has over 30 years of experience in the post-secondary and health sectors related to public consultation and research, program implementation, strategic and operational planning, network administration, national/international partnership and public policy development, advocacy, fundraising, knowledge mobilization, communications, conference planning and meeting facilitation.



Dr. Diana Royce

Mr. Jean Saint-Vil is the Associate Vice President of the Networks of Centres of Excellence at the Natural Sciences and Engineering Research Council (NSERC). Mr. Saint-Vil has over 23 years of experience working with NSERC.



Mr. Jean Saint-Vil

CONFERENCE SPEAKERS | MODERATORS

Dr. Hind Sbihi, PhD, is a Postdoctoral Research Fellow at BC Children's Hospital Research Institute and a Research Associate at the School of Population and Public Health of The University of British Columbia (UBC).

Dr. Sbihi's research focuses on the human health effects of the built environment (air pollution, natural spaces, microbiome) with a growing interest in identifying intervention strategies to reduce exposures and improve health. Her postdoctoral training focuses on transforming plausible mechanistic insights into effective applications for the prevention of pediatric allergic diseases such as asthma.



Dr. Hind Sbihi

Dr. Malcolm Sears, MB, ChB, FRACP, FRCPC, FAAAAI, is an internationally-renowned respirologist and epidemiologist. He is a professor in the Division of Respirology, Department of Medicine, at McMaster University, and Founding Director of the Canadian Healthy Infant Longitudinal Development (CHILD) Study.

Dr. Sears is involved in many studies investigating the epidemiology and natural history of asthma with particular focus on its frequency, risk factors and characteristics in large populations. His research activities include the Dunedin Multidisciplinary Health and Development Study (a longitudinal birth cohort study in New Zealand), the assessment of asthma therapies, and investigations into the effects of indoor allergens, viral infections, air pollutants, and smoking and hormones in respiratory disease.



Dr. Malcolm Sears

Dr. Padmaja Subbarao, MD, MSc, FRCP(C), FAAP, LMCC, is Staff Respirologist at The Hospital for Sick Children; a Scientist in Physiology & Experimental Medicine at the SickKids Research Institute; an Associate Professor of Paediatrics at the University of Toronto; and an Assistant Clinical Professor of Respirology at McMaster University. She is also the Director of AllerGen's CHILD Study.

Dr. Subbarao's primary research interest is in the early determinants and development of asthma. Specifically, she is studying changes in infant lung function and biomarkers of inflammation in infants, to elucidate the effect of environment and viruses on the early development of disease.



Dr. Padmaja Subbarao

Dr. Peter Szatmari, BA, MD, MSC, FRCPC, is Chief of the Child and Youth Mental Health Collaborative at the Centre for Addiction and Mental Health (CAMH) and The Hospital for Sick Children (SickKids) in Toronto, as well as a professor in and the Director of the Division of Child and Youth Mental Health at the University of Toronto.

Dr. Szatmari holds the Patsy and Jamie Anderson Chair in Child and Youth Mental Health. Dr. Szatmari is the head of one of the largest divisions of child and adolescent psychiatry in the world, and an international expert in autism spectrum disorder (ASD). He has also published more generally in psychiatric epidemiology and in clinical research in developmental psychopathology.



Dr. Peter Szatmari

CONFERENCE SPEAKERS | MODERATORS

Dr. Scott Tebbutt, PhD, is a Professor in the Department of Medicine, Division of Respiratory Medicine, The University of British Columbia, and Principal Investigator at the James Hogg Research Centre for Heart Lung Innovation, Institute for Heart + Lung Health, St. Paul's Hospital. **Since 2006, he has served as Co-Director of the Molecular Phenotyping and Genotyping Core of the James Hogg Research Centre, and he is currently Director of the Technology Development Core.** He is also Chief Scientific Officer of the Prevention of Organ Failure (PROOF) Centre of Excellence, focused on heart, lung and kidney failure.

Dr. Tebbutt's research program is focused on the genomics of complex respiratory disease, including the early and late reactions in allergic asthma and rhinitis.



Dr. Scott Tebbutt

Dr. Stuart Turvey, MBBS, DPhil, FRCPC, is Aubrey J. Tingle Professor of Pediatric Immunology at The University of British Columbia. He is also a Pediatric Immunologist and the Director of Clinical Research at the BC Children's Hospital, as well as Co-Director and Vancouver site leader of AllerGen's CHILD Study.

Dr. Turvey's research program focuses on pediatric infectious and inflammatory diseases; specifically, the role of innate immunity in protecting infants and young children from infectious agents, and how abnormalities of the innate immune system contribute to inflammatory diseases of childhood.



Dr. Stuart Turvey

Ms. Linda Warner, RN, BScN, CCRP, is the Senior Clinical Research Coordinator of the CHILD Study Vancouver site and she works for the UBC Department of Pediatrics at BC Children's Hospital.

Ms. Warner specialized as a pediatric nurse for over 25 years in a variety of clinical settings, and has been active in research for most of this time. She is passionate about recruitment and retention strategies in research related to participant engagement.



Ms. Linda Warner

Dr. Susan Waserman, MD, MSc, FRCPC, is a professor of Medicine in the Division of Clinical Immunology & Allergy, as well as the Training Program Director for the Clinical Immunology & Allergy and the Basic Clinical Trainees training programs, all at McMaster University. She is also the Director of the Adverse Reactions Clinic at the Firestone Institute of Respiratory Health, staff physician at Hamilton Health Sciences, and President of the Canadian Allergy, Asthma and Immunology Foundation (CAAIF).

Dr. Waserman's research interests and activities include: clinical trials in a variety of therapeutic areas related to allergy, including rhinitis and asthma; and determinants of allergic expression in asthma and food-related anaphylaxis. As President of CAAIF, she is involved in developing practice guidelines in areas such as anaphylaxis and immunotherapy.



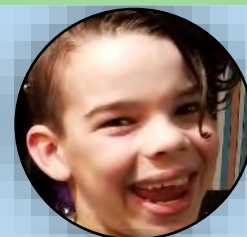
Dr. Susan Waserman

STAKEHOLDERS | PANELLISTS

CHILD Study Participants

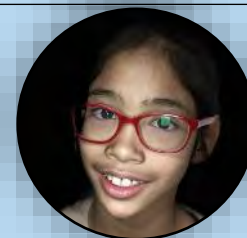
VANCOUVER

Maxime Doucas-Mooy (almost 10 years) lives in Vancouver with his parents Robert Mooy and Natasha Doucas. Maxime's favourite part of being in the CHILD Study is playing the interactive game blowing balloons to test his lung capacity (spirometry) .



EDMONTON

Sara Celemin (8 years) lives in Edmonton with her dad Reuben, her mom Tatiana and her older brother Lucas. **Sara's favourite part about participating in the CHILD Study is knowing that she is helping other children.**



WINNIPEG

Lily Raine Hoffman (9 years) lives with her parents, Eric and Harmoni Hoffman. Lily's favourite part about being in the Winnipeg arm of the CHILD Study is meeting new and friendly people.



TORONTO

Brynn Eddie (8 years) relocated with her family from BC to Ontario in 2014. She has been a CHILD Study participant on both the west coast and in Toronto. Two highlights of her experience: the five-year-old visit at Sick Kids in Toronto with Aimée, and hearing her own heartbeat through a stethoscope as a toddler.



CHILD Study Kmb Stakeholder Committee Members

Zak Bhamani is Director of Corporate Development in TELUS Health and Payment Solutions. In that role, he supports **TELUS Health's M&A activities** and strategic projects. Previously, he helped develop **TELUS's portfolio in consumer health and patient engagement capabilities**. He has also worked with Delisle Youth Services, Asthma Canada, and the Mental Health Working Group of The Sandbox Project.



Mary-Ellen Rayner specializes in communications and partnerships at The Sandbox Project, a national charity that fosters cross-sector collaboration toward improved child **and youth health and wellbeing in Canada**. She works with **Sandbox's national network** of charities, researchers, youth, policymakers and corporate Canada to help pool resources, share promising practices and facilitate knowledge-sharing.



Lisa Wolff is Director, Policy and Education for UNICEF Canada. She has worked in the organization for more than a decade directing the domestic education and policy **programs, which advance the rights of Canada's children to develop to their fullest potential**, consistent with international human rights standards.



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