#### **ME/CFS Canadian Collaborative Team Conference**

Advancing an International Research Agenda to Address ME/CFS Research Priorities: From Basic Research to Clinical Practice

#### DAY 1 - Healthcare community

	ncare community
May 3, 2018	Pre-Conference Medical Education Symposium on ME/CFS
7:00-7:55	Registration & Continental Breakfast
7:55-8:00	Welcome Address
	Morris Duhaime, MD, Conference Chair
Session 1	ME/CFS: Spectrum of a Complex and Chronic Disease
	[Amphitheatre 250]
8:00-08:40	Review of Myalgic Encephalomyelitis/Chronic Fatigue Syndrome for Clinicians Alison C. Bested, MD, FRCP(C), Clinical Director, Institute for Neuro-Immune Medicine, Nova Southeastern University, Fort Lauderdale, Florida, USA
8:40-9:20	Brain Imaging and How to Examine a Prospective ME/CFS Patient  Byron Hyde, MD, Nightingale Research Foundation, Ottawa, ON, Canada
9:20-10:00	Orthostatic Intolerance in ME/CFS  Peter C. Rowe, MD, Director, Children's Center Chronic Fatigue Clinic, John-Hopkins University, Baltimore, MD, USA
10:00-10:15	Break
10:15-10:55	ME/CFS: Central Sensitivity Syndromes and the Complex Chronic Diseases Program at BC Women's Hospital Ric Arseneau, MD, FRCPC, MA(Ed), MBA, FACP, CGP, Clinical Associate Professor Division of General Internal Medicine St. Paul's Hospital, Women's Hospital University of British Columbia, BC, Canada
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10:55-11:35	Objective Diagnosis of ME/CFS  Lucinda Bateman, MD, Founder and Medical Director, Bateman Horne Center Salt Lake City, UT, USA
11:35-12:15	Peripheral and Central Mechanisms of Chronic Fatigue Syndrome Roland Staud, MD, Professor of Medicine, University of Florida, FL, USA
12:15-13:15	Lunch (Meditation session available from 12:45 to 13:10 in the Conference room)
Session 2	How to Differentiate and Manage ME/CFS
	[Amphitheatre 250]
13:15-13:55	Differentiating ME/CFS from Psychiatric Disorders Eleanor Stein, MD, FRCP(C), Calgary, AB, Canada
13:55-14:35	Management of Pediatric ME/CFS  Peter C. Rowe, MD, Director, Children's Center Chronic Fatigue Clinic, John-Hopkins University, Baltimore, MD, USA
14:35-15:15	What do we Learn About ME/CFS From a Cardiopulmonary Exercise Test?  Betsy Keller, PhD, Professor, Department of Exercise and Sport Sciences, Ithaca College, Ithaca, NY, USA
15:15-15:30	Break
15:30-16:10	Diagnostic Dilemmas: Etiology and Treatment of the Fatigued Patient Riina I. Bray, BASc, MSc, MD, FCFP, MHSc, Medical Director, Environmental Health Clinic, Women's College Hospital, Toronto, ON, Canada
16:10-16:50	ME/CFS Pharmacotherapies and Drug Interactions Kevin Mejo, BPharm, Montreal, QC, Canada

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16:50-17:00 Closing Remarks

Alain Moreau, PhD, Chair, Scientific Committee, Professor, Université de

Montréal, QC, Canada

17:00-19:00 Cocktail [Atrium]

#### Session 2B 13:15 – 17:00 [Amphitheatre 125]

**Pre-Conference** Workshop on Meeting Unmet Needs Organized by the National ME/FM Action Network Participation in the Workshop is open to anyone interested in discussing how services could be delivered to people with ME/CFS and related illnesses in the years to come.

#### DAY 2 – Healthcare community and patients

# May 4, 2018 ME/CFS Canadian Collaborative Team Conference: From Basic Research to Clinical Practice

7:00-8:00	Registration & Continental Breakfast
8:00-8:30	Opening Remarks [Amphitheatre 250]
8:30-9:00	Plenary Lecture 1: A Short History of ME and CFS Byron Hyde, MD, Nightingale Research Foundation, Ottawa, ON, Canada [Amphitheatre 250]
9:00-9:30	Plenary Lecture 2: The Future of ME/CFS Research in the Multi-omic and Big Data Era Ronald Davis, PhD, Director Stanford Genome Centre, Stanford University, Palo Alto, CA, USA [Amphitheatre 250]
9:30-9:45	<ul> <li>Breakout to reach concurrent sessions:</li> <li>Session A for researchers in Amphitheatre 125</li> <li>Session B for ME/CFS patients in Amphitheatre 250</li> </ul>
Session 1A	Genetics, Genomics and Epigenetics [Amphitheatre 125]
09:45-10:05	The Epigenetic Landscape of ME/CFS: Deciphering Complex Phenotypes Patrick O. McGowan, PhD, University of Toronto, ON, Canada
10:05-10:25	An Integrative, Molecular, Data and Technology-Driven Approach to ME/CFS Ronald Davis, PhD, Director, Stanford Genome Center, Stanford University, Palo Alto, CA, USA
10:25-10:45	Genetic and Nutriepigenetic Regulation of Plasma Homocysteine Levels in

	ME/CFS Alain Moreau, PhD, Université de Montréal, QC, Canada
10:45-11:05	Cultivating Change: Leveraging Epigenetics via Lifestyle Modification: An Integrative Multidisciplinary Treatment Model in ME/CFS Alexis Goth, MD, and Tara Sampalli, PhD, Integrated Chronic Care Service in Primary Health Care at the Nova Scotia Health Authority, NS, Canada
11:05-11:20	Break

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Session 2A	Biochemistry, Metabolomics and Proteomics
	[Amphitheatre 125]
11:20-11:40	Metabolism in ME/CFS Maureen Hanson, MD, Cornell University, NY, USA
11:40-12:00	The Biochemistry to Support the Evidence of Neuroinflammatory Involvement in ME/CFS
	Jonas Bergquist, MD, PhD, Uppsala University, Sweden
12:00-12:20	Cellular Bioenergetics is Impaired in Patients with ME/CFS  Cara Tomas, PhD candidate, Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, UK
12:20-12:40	Connective Tissue Laxity and Adverse Neural Tension in ME/CFS  Peter C. Rowe, MD, Director, Children's Center Chronic Fatigue Clinic, John-Hopkins University, Baltimore, MD, USA
12:40-13:40	Lunch (Meditation session available from 13:05 to 13:35 in the Conference room)
Session 3A	Infection, Immunity and Clinical Research
	[Amphitheatre 125]
13:40-14:00	Diagnosis of ME/CFS: Can Immune Modulators Play a Role?  Amir Landi, MD, PhD, University of Alberta, Edmonton, AB, Canada
14:00-14:20	Epidemiological and Clinical Research in ME/CFS: How can they Support Hypothesis Generation and Testing?  Luis Nacul, MD, PhD, Faculty of Infectious and Tropical Diseases, CURE-ME Team, London School of Hygiene and Tropical Medicine Disability and Eye Health Group, UK
14:20-14:40	Clinical Trial on Immunoadsorption in ME/CFS  Carmen Scheibenbogen, MD, Professor and Deputy Chair, Institute of Medical Immunology, Charité – Universitätsmedizin, Berlin, Germany
14:40-15:00	Fine-tuned interaction between human immune system and gut microbiota: potential impact on ME/CFS  Derya Unutmaz, MD, The Jackson Laboratory, Farmington, CT, USA
15:00-15:15	Break
Session 4A	Biomarkers, Biobanking, and Clinical Trials – Part 1
	[Amphitheatre 125]
15:15-15:35	The EUROMENE Biomarker Project  Carmen Scheibenbogen, MD, Professor and Deputy Chair, Institute of Medical Immunology, Charité – Universitätsmedizin, Berlin, Germany
15:35-15:55	Cerebral Blood Flow and Functional Connectivity in ME/CFS Roland Staud, MD, Professor of Medicine, University of Florida, FL, USA
15:55-16:15	UK ME/CFS Biobank: A Resource for International Research Luis Nacul, MD, PhD, Faculty of Infectious and Tropical Diseases, CURE-ME Team, London School of Hygiene and Tropical Medicine Disability and Eye Health Group, UK

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Session 4A	Biomarkers, Biobanking, and Clinical Trials – Part 2
	[Amphitheatre 250]
16:15-16:35	Australian ME/CFS Databases and Biobanks: The Down Under Experience Chris Armstrong, BSc, Researcher, University of Melbourne, Bio21 Molecular Science and Biotechnology Institute, Department of Biochemistry and Molecular Biology, Melbourne, Australia
16:35-16:55	From Biomarkers and modeling to implemented targeted clinical trials: Comparison between Gulf War Illness and ME/CFS  Nancy Klimas, MD, Director, Institute for Neuro-Immune Medicine, Dr Kiran C Patel College of Osteopathic Medicine, Nova Southeastern University and Director of Environmental Medicine, Miami VA Medical Center, FL, USA
16:55-17:15	The Future of Research on ME/CFS Vicky Holets Whittemore, PhD, National Institute of Neurological Disorders and Stroke, National Institute of Health, Bethesda, MD, USA
17:15-17:35	Open Collaboration and Patient Engagement, a Must Linda Tannenbaum, CEO/President, Open Medicine Foundation, Los Angeles, CA, USA
17:35-19:35	Cocktail [Atrium]

Day 2 – Health May 4, 2018	care community and patients Addressing Unmet Needs of the ME/CFS Community
Session 1B	What We Know and Still Don't Know About ME/CFS Etiology and Pathomechanism [Amphitheatre 250]
9:45-10:05	Pathophysiological Mechanisms in ME/CFS  Alison C. Bested, MD, FRCP(C), Clinical Director, Institute for Neuro-Immune Medicine, Nova Southeastern University, Fort Lauderdale, Florida, USA
10:05-10:25	Objective Diagnosis of ME/CFS Lucinda Bateman, MD, Founder and Medical Director, Bateman Horne Center Salt Lake City, UT, USA
10:25-10:45	ME/CFS: Could Neuroplasticity Play a Role? Eleanor Stein, MD, FRCP(C), Calgary, AB, Canada
10:45-11:05	Panel Discussion
11:05-11:20	Break
Session 2B	Advancing ME/CFS Research and Treatments [Amphitheatre 250]
11:20-11:40	ME/CFS Research Landscape in Canada: How can Science/Innovation Address Unmet Needs?  Margaret Parlor, President of the National ME/FM Action Network, Ottawa, ON, Canada
11:40-12:00	Is Heart Rate a Valid Exertional Index in ME/CFS?  Betsy Keller, PhD, Professor, Department of Exercise and Sport Sciences at Ithaca College, Ithaca, NY, USA

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12:00-12:20	Alberta Healthy Living Program: The Role of ME/CFS Education  Eleanor Stein, MD, FRCP(C), Calgary, AB, Canada, Judy-Anne Wilson, representative of Edmonton ME Society and Alison Rae, Board Chair and CEO, Action CIND, ON, Canada
12:20-12:40	Panel Discussion
12:40-13:40	Lunch
Session 2B	Panel Discussion: Meet the Experts  [Amphitheatre 250]  Moderator: Raeka Aiyar, PhD, Stanford University and Open Medicine Foundation, Palo Alto, CA, USA
13:40-14:00	Medication and ME Kevin Mejo, BPharm, Montreal, QC, Canada
14:00-14:20	Nutrition and ME Speaker TBA
14:20-14:40	Genetics and ME Speaker TBA
14:40-15:00	Discussion Period
15:00-15:15	Break
15:15-16:15	Panel Discussion: Creating a Transformative Research Agenda for ME/CFS [Amphitheatre 250]

[Amphitheatre 250]

**Moderator: Raeka Aiyar, PhD,** Stanford University and Open Medicine Foundation, Palo Alto, CA, USA

#### Panelists:

- Diane Ching, President, M.E. Society of Edmonton
- Kati Debelic, Board member, ME/FM Myalgic Encephalomyelitis and Fibromyalgia Society of BC, Canada
- Barbara Fifield, Board member, Millions Missing Canada
- Bev Friesen, Chairperson of the Board, Manitoba ME/CFS Support Group, MA, Canada
- Gloria Gray, President, M.E. Victoria Association, BC, Canada
- Carol Head, President and CEO of Solve ME/CFS Initiative
- Kimberly Hicks, Board Member and Treasurer, Open Medicine Foundation, Los Angeles, CA, USA
- Valérie Miller, General Coordinator, Association Québécoise pour l'Encéphalomyélite Myalgique (AQEM), QC, Canada
- Margaret Parlor, President, The National ME/FM Action Network, ON, Canada
- Alison Rae, Board Chair and CEO, Action CIND, ON, Canada
- Elizabeth Sanchez, President, ME/FM Myalgic Encephalomyelitis and Fibromyalgia Society of BC, Canada
- Linda Tannenbaum, CEO/President, Open Medicine Foundation, Los Angeles, CA, USA

Panelists will share their thoughts on how innovation is transforming the ME/CFS research landscape in Canada and abroad for five minutes. Special attention will be given to developing a collaborative, sustainable, and transformative ME/CFS research agenda.

Participants will have the opportunity to interact with panelists to discuss research priorities and the role of patients and advocacy groups in the ME/CFS research ecosystem.

#### Montreal, May 3 – 5, 2018 **ME/CFS Canadian Collaborative Team Conference**

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12:20-12:30

**Closing Remarks** 

Day 3 – Healthcare community May 5, 2018 Advancing an International ME/CFS Research Agenda	
	[Amphitheatre 250]
7:00-08:00	Registration & Continental Breakfast
8:00-08:15	Introduction and Objectives, <b>Alain Moreau, PhD</b> , Université de Montréal, QC, Canada [BMO Conference Center]
	<ul> <li>Context:</li> <li>Where have we been – where are we going?</li> <li>Creating a shared vision for the future</li> <li>Sustaining collaborative research in a competitive landscape</li> <li>Attracting world-class researchers from other disciplines</li> <li>Mentoring the next-generation of ME/CFS researchers and clinicians</li> </ul>
Session 1	<b>Developing ME/CFS Networks and International Collaboration</b> [Amphitheatre 250]
	Moderator: Raeka Aiyar, PhD, Stanford University and Open Medicine Foundation, Palo Alto, CA, USA
8:15-8:30	Report from the ME/CFS Patient Community about Creating a Transformative Agenda for ME/CFS  Margaret Parlor, President of the National ME/FM Action Network, Ottawa, ON, Canada
8:30-9:00	The Common Data Element Challenge in Establishing ME/CFS Research Consortia  Becky McNeil, PhD, Biostatistics and Epidemiology Division, RTI International, Research Triangle Park, NC, USA
9:00-10:30	Roundtable 1 Moderator: Raeka Aiyar, PhD, Stanford University and Open Medicine Foundation, Palo Alto, CA, USA
	Participants will discuss the creation of a sustainable, collaborative, and transformative ME/CFS research agenda and the strategies to attract more funding through national and international research initiatives as well as to sustain talent development to prepare the next-generation of researchers in this field
10:30-10:45	Break
Session 2	Development of International Working Groups on ME/CFS
	[Amphitheatre 250]
10:45- 12:20	Roundtable 2 Moderator: Alain Moreau, PhD, Chair Scientific Committee, Professor, Université de Montréal, QC, Canada
	Participants will discuss the creation of virtual working groups to further develop international research collaboration and interdisciplinary teams.

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Alain Moreau, PhD, Université de Montréal, QC, Canada