



## 2022 Traumatic Brain Injury Conference

Advances in Research & Clinical Practice in mTBI

February 11, 2022 | Remo Interactive Virtual Platform

### PROGRAM AGENDA

Time	Program Title
08:00 – 08:30	<b>Virtual Platform Opens for Self Orientation</b>
08:30 – 08:45	<b>Welcoming Remarks</b>  <b>Mark Bayley, MD, FRCPC</b> Physiatrist-in-Chief & Program Medical Director, Toronto Rehabilitation Institute, University Health Network; Professor, University of Toronto
08:45 – 09:30 09:20 – 09:30 Q&A	<b>Grant Iverson, PhD</b> Professor, Department of Physical Medicine and Rehabilitation, Harvard Medical School, and Spaulding Rehabilitation Hospital; Director, Sports Concussion Program, MassGeneral Hospital for Children; Associate Director, Traumatic Brain Injury Program, Home Base, A Red Sox Foundation and Massachusetts General Hospital Program
09:30 – 10:15 10:05 – 10:15 Q & A	<b>Clinical Pearls in the Assessment and Management of the Patient with Headaches Following a Traumatic Brain Injury</b>  <b>Jonathan P. Gladstone, MD FRCPC</b> Director, Gladstone Headache Clinic; Consult Neurologist, Headache Clinic, Hospital for Sick Children; Headache Specialist, Cleveland Clinic Canada; Consultant Neurologist, Toronto Raptors, Toronto 905, Toronto Blue Jays  Headache is the most common symptom following a mild traumatic brain injury. It is also the symptom that typically lasts the longest and is the most disabling. This session will address how to assess and manage individuals with persisting headaches following a traumatic brain injury. Common pitfalls in headache management will be discussed and strategies to facilitate successful management will be highlighted.  <b>Learning Objectives</b> <ul style="list-style-type: none"><li>• Discuss the critical aspects of the headache history necessary to facilitate successful post-traumatic headache management</li><li>• Explore non-pharmacologic and pharmacologic strategies for the acute and prophylactic management of post-traumatic headache management</li></ul>
10:15 – 10:45 30 minutes	<b>Morning Break, Poster and Sponsor Exhibit Viewing</b>
10:45 – 11:45 60 minutes	<b>The following four workshops will run concurrently.</b> <b><u>Workshop #1: Sleep and mTBI: Advances in Clinical Research and Practice</u></b>  <b>Catherine Wiseman-Hakes, PhD., Reg. CASLPO</b> Assistant Clinical Professor, School of Rehabilitation Science, McMaster University; Scientist, Hull Ellis Concussion and Research Clinic; Affiliate Scientist, KITE Research Institute, UHN Toronto Rehab



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Our understanding of the role and trajectory of sleep as a response to neurotrauma concurrent with implications for clinical practice. This workshop will provide an overview of current knowledge and practices regarding sleep following mTBI.

### **Learning Objectives**

- Gain an understanding of current evidence regarding the role of sleep in acute mTBI.
- Understand the common trajectory of sleep across recovery, and risk factors for the development of post injury sleep disorders.
- Consider implications for clinical practice from the perspective of assessment, monitoring and intervention.

### **Workshop #2: Dizziness in Head Injury: Management Options and What Big Data Demonstrates from the UHN WSIB Head Injury Data Base**

#### **John Rutka, MD FRCSC**

Professor of Otolaryngology-Head and Neck Surgery, University of Toronto, University Health Network

This presentation will explore a tailored approach to the dizzy patient requires a thorough history, pertinent physical examination and appropriate vestibular laboratory testing. How this is done and the insights gained from our large UHN WSIB Head Injury Data Base is presented. Special attention will be directed towards the management of post-traumatic benign positional vertigo.

### **Learning Objectives**

At the end of the session participants will be able to:

- Learn what red flag symptoms/signs help differentiate central from peripheral vestibular disorders.
- Appreciate the most common causes of dizziness post head injury.
- Learn the physical therapy manoeuvres and available surgical procedures for the management of post traumatic positional vertigo.

### **Workshop #3: Process, Merits and Challenges of Delivering Telerehabilitation Services to the TBI Population**

#### **Brenda Colella, MA, C. Psych. Assoc**

Clinical Research Manager, Telerehab Centre for ABI; Kite Research Institute, University Health Network

Remote delivery of rehabilitation services can obviate most barriers to accessing care after mild traumatic brain injury and nearly all forms of rehabilitation can be partially or fully administered remotely. Based in part on our experience of establishing our own telerehabilitation centre for ABI in 2018, this workshop will provide an overview of the need for remote rehabilitation - before, during and after the pandemic - and of practical technical and professional considerations for establishing a remote clinical practice. We will also discuss ongoing challenges, risks and limitations of remote delivery of rehabilitation services to the mTBI population.

### **Learning Objectives**

At the end of the session participants will be able to:

- Explain the rationale for remote delivery of rehabilitation to patients with mTBI both during and after the pandemic.



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- Describe and address the major technical and professional considerations for establishing a remote (or blended) clinical practice.
- Describe the limitations of remote vs. in-person rehabilitation.

### **Workshop #4: Challenges in Proving the Mild TBI Claim**

#### **Gary Will**

Managing Partner of Will Davidson LLP

The devastating impact of mild TBI claims present many unique challenges to prove in a courtroom. There are imaging technologies to help diagnose MTBI but these technologies often are not sophisticated enough to detect more subtle injuries and microscopic damage. In the absence of confirming imaging, it will be necessary to prove the MTBI through testimony of the injured party and their friends and family and have medical testimony correlate symptoms to the traumatic event.

#### **Learning Objectives**

- Understand how legal and rehabilitation teams coordinate their efforts to ensure the best outcome for the injured party.
- Establish a baseline for how the injured party functioned before the traumatic event;
- And document the challenges faced after the traumatic event.

**11:45 – 12:45**

60 minutes

### **Networking Lunch Break, Poster and Sponsor Exhibit Viewing**

**12:45 – 13:30**

13:15 – 13:30 Q & A

### **Imaging Concussion**

#### **David Mikulis, MD**

Professor and Director of the JDMI Functional Neuroimaging Research Lab  
Senior Scientist Krembil Research Institute; Full Member Institute of Medical  
Science, University of Toronto Dept. of Medical Imaging; The University of Toronto; The  
University Health Network; The Toronto Western Hospital

This presentation will provide an overview of the following topics concerning imaging of concussion, what is injured in the brain following concussion, distinguishing concussion from mild traumatic brain injury, what features of this injury can be used to detect concussion, the feasibility of using imaging to establish the diagnosis of concussion in a single individual and recent advances in imaging of concussion.

**13:30 – 14:00**

13:55 – 14:00 Q & A

### **Rapid Podium Presentations**

Five presentations, taken from the Call for Abstracts, will have five minutes each to present. A group Q & A with the audience will be held at the end, time permitting.

**Presentation 1:** The Role of the Occupational Therapist on Catastrophic Criterion 6: Assisting Physicians in Determining a Whole Person Impairment (WPI) for Clients with Mild Traumatic Brain Injury and/or Post-Concussion Syndrome - **Galit Liffshiz**, MA OT Reg. (Ont.) CCLCP, GLA Rehab

**Presentation 2:** Evaluating Demographic and Concussion-Related Factors that Contribute to Pharmacological Treatment Efficacy of Persistent Post-Concussion Headache - **Dina Safarini**, HBSc, MSc, Canadian Concussion Centre



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**Presentation 3:** The Effect of Cognitive Challenges on Spatiotemporal Measures of Gait in Community-Dwelling Adults with Concussion - **Hajr Hameed**, BSc, School of Kinesiology and Health Science, York University

**Presentation 4:** Personalized Regional and Symmetry Assessment of Normalized Spatial Coefficient of Variance (sCoV), Based on Cerebral Blood Flow, in Retired Canadian Football League Players - **Ethan Danielli**, BSc, MSc, McMaster University, St. Joseph's Healthcare Hamilton

**Presentation 5:** Using Magnetic Resonance Imaging (MRI) to Detect Structural and Functional Damage in the Cerebellum of patients with a history of mild Traumatic Brain Injury (mTBI) – **Nicholas Simard**, B.Eng., M.A.Sc., School of Kinesiology and Health Science, York University

**14:00 – 14:15**

15 minutes

**Afternoon Break, Poster and Sponsor Exhibit Viewing**

**14:15 – 15:00**

14:50 – 15:00 Q & A

**Helping Patients with Post-Concussion Syndrome Move Forward – An Interactive, Case-Based Journey**

**Chantal Vaidyanath, MD, FRCPC, CSCN Dip (EMG)**

Physiatrist and Physician Lead

St. Michael's Hospital Head Injury Clinic

### **Learning Objectives**

At the end of the presentation, the participant will be able to:

- Appreciate that paradigms of Patient Centred Medicine and Evidence Based Medicine can both be applied in the goal-oriented treatment of patients with PCS.
- Understand the limitations of an impairment-focused approach to treatment.
- Redefine measures of success in treating patients with PCS.
- Reflect on their own experiences with PCS to identify opportunities for growth.

**15:00 – 15:10**

**Closing Remarks**

**Mark Bayley, MD, FRCPC**

Physiatrist-in-Chief & Program Medical Director, Toronto Rehabilitation Institute, University Health Network; Professor, University of Toronto