

Canadian Concussion Centre

WELCOME!

13th Annual Concussion Research Symposium

*Harnessing Science for
Clinical Care in Concussion*



**THURSDAY,
JUNE 4, 2026**



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Canadian Concussion Centre

13th Annual Concussion Research Symposium
Harnessing Science for Clinical Care in Concussion

Thursday June 4, 2026

Hybrid: Zoom & In-Person

BMO Education and Conference Centre

Toronto Western Hospital - University Health Network



7:00 - 8:00	Registration and Breakfast
8:00 - 8:10	Canadian Concussion Centre Conference: Opening Remarks Dr. Charles H. Tator , Professor of Neurosurgery, University of Toronto, Director, Canadian Concussion Centre (CCC)
Chair: Dr. Carmela Tartaglia Marion and Gerald Soloway Chair in Brain Injury and Concussion Research, Professor, Tanz Centre for Research in Neurodegenerative Diseases, University of Toronto	
8:10 - 8:50	Invited Speaker: Dr. Robert C. Cantu , MD, FACS, FAANS, FICS, FACSM Clinical Professor of Neurology and Neurosurgery, Clinical Therapeutics Leader AD-CTE Center Boston University Medical Center, Boston, MA Medical Director and Director of Clinical Research, Dr. Robert C. Cantu Concussion Center, Concord, MA Title: Reflections on the Last 20 Years of Concussion and CTE Research
8:50 - 9:05	Podium Presentation: <u>Cassis Varlow</u> , Vishaal Sumra, Carme Uribe, Celine Sakran, Mozghan Khodadadi, Ariel Graff-Guerrero, Antonio P. Strafella, Charles Tator, Neil Vasdev, Carmela Tartaglia Title: Synaptic Vesicle Glycoprotein 2A PET Imaging in Contact Sport Athletes with Repetitive Head Impacts
9:05 - 9:45	Invited Speaker: Dr. Steven Broglio , PhD Associate Dean, Graduate Affairs, Director, Michigan Concussion Center, University of Michigan, School of Kinesiology President, Concussion in Sport Group Title: Concussion Recovery in High-Performance Athletes: Insights from the CARE Consortium
9:45 - 10:00	POSTER SESSION: Rapid Podium Presentations (2-minute presentation) Posters # 1-4
10:00 - 10:15	Refreshment Break and Poster Viewing

10:15 - 10:55	<p>Invited Speaker: Dr. Jonathan Cherry, Assistant Professor of Pathology and Laboratory Medicine, Neurology, and Anatomy & Neurobiology, Boston University School of Medicine, Director of the Digital Pathology Core, Boston University School of Medicine, Research Health Scientist, VA Boston Healthcare System</p> <p>Title: Repetitive Head Injury Causes Neuronal Loss and Neuroinflammation in Young Contact Sport Athletes</p>
10:55 - 11:10	<p>Podium Presentation: <u>Azra Delpak</u>, Robin Green, Brenda Collela, Mozghan Khodadadi, Nusrat Sadia, Charles Tator, Carmela Tartaglia</p> <p>Title: Operationalizing TES in Athletes: Mapping Neurobehavioral Dysregulation and Cognitive Impairment to Clinical Measures</p>
11:10 - 12:30	<p>Update on Treatment of Concussion - Moderator: Dr. Carmela Tartaglia</p>
11:10 - 11:15 11:15 - 11:25 11:25 - 11:35 11:35 - 11:45 11:45 - 11:55 11:55 - 12:05 12:05 - 12:15 12:15 - 12:30	<p>Introduction</p> <p>Dr. Kristine Dalton, Optometrist, Vision Scientist - Concussion and Vision Therapy</p> <p>Dr. Claire Sandoe, Neurologist - Concussion and Headache</p> <p>Shaleen Sulway, Physiotherapist - Concussion and Dizziness</p> <p>Shelley Vaisberg, Occupational Therapist - Concussion and Return to Work</p> <p>Dr. Robin Green, Clinical Neuropsychologist - Concussion and Tele-Rehab</p> <p>Tamara MacAulay, Physiotherapist - Concussion and Aerobic Exercise</p> <p>Q&A</p>
12:30 - 13:20	<p>Lunch Break and Poster Viewing</p>
<p style="text-align: center;">Chair: Dr. Robin Green</p> <p style="text-align: center;">Clinical Neuropsychology, Saunderson Chair in Acquired Brain Injury, Founder/Director TeleRehab Centre for Acquired Brain Injury</p>	
13:20 - 14:00	<p>Invited Speaker: Dr. Donald Redelmeier, MD FRCPC MSHSR FACP (Clinician Scientist) Professor, Department of Medicine, University of Toronto</p> <p>Title: Concussions and Subsequent Traffic Risks</p>
14:00 - 14:15	<p>Podium Presentation: <u>Coljae Berry</u>, Gabriel Ramírez-García, Antonin Holowka, Dylan Graff, Kim Mary Huynh, Sebastian D'Amario, Melissa T. Lamanna, Nicole Coverdale, Douglas J. Cook</p> <p>Title: Fixel-Based Analysis Reveals Commissural White Matter Changes Undetected by Diffusion Metrics in Collegiate Football Players Following Repetitive Head Impacts</p>
14:15 - 14:30	<p>Podium Presentation: <u>Alice Wang, Mark Bayley</u>, Laura Langer, Tharshini Chandra, Sarah Abdelgalil, Paul Comper</p> <p>Title: Exploring Potential Associations Between Pre-Injury Physical Activity and Concussion Recovery</p>

14:30 - 14:45	POSTER SESSION: Rapid Podium Presentations (2-minute presentation) Posters # 5-9
14:45 - 15:05	Refreshment Break and Poster Viewing
15:05 - 15:45	<p>Invited Speaker: Dr. Shawn Rhind, PhD, Senior Defence Scientist, Defence Research and Development Canada, Associate Professor, University of Toronto</p> <p>Title: Low-Level Blast, High Impact: Measuring Risk, Detecting Change, and Translating Evidence to Protect Military Brain Health</p>
15:45 - 16:00	<p>Podium Presentation: <u>Nikol Rybolov</u>, Isabelle Boileau, Carmela Tartaglia, Lucas Narciso, Katherine Zukotynski, Antonio P. Strafella, Neil Vasdev, Shahtaj S. Dheda, Tina McCluskey, Kim L. Desmond, Emily Murrell, Caitlin Chow</p> <p>Title: Investigating Tauopathy in Repeated Head Impact and Blast Overpressure Cases: Positron Emission Tomography Study with Novel Tau Tracer [18F]OXD-2314</p>
16:00 - 16:40	<p>Invited Speaker: Dr. Lyndia Wu, Ph.D., P.Eng., Associate Professor of University of British Columbia</p> <p>Title: Wearable Sensors for Detecting and Understanding Concussion in Sports</p>
16:40 - 16:55	<p>Podium Presentation: <u>Faiza Robbani</u>, <u>Dr. Carmela Tartaglia</u>, Carmen Wong, Kosaran Gumarathas, Nusrat Sadia, Mohsen Hadian, Mozghan Khodadadi</p> <p>Title: Integrating Blood Biomarkers [GFAP and NFL] and Symptom Burden to Predict Concussion Recovery Outcomes</p>
16:55 - 17:00	<p>Closing Remarks</p> <p>Dr. Charles H. Tator</p>

Rapid Podium Presentations	
Poster#	Title & Presenter
1	<p><u>Lian Lopes Troncoso</u>, Mohsen Hadian, Chloe Anastassiadis, Simrika Thapa, Vishaal Sumra, Nusrat Sadia, Mozghan Khodadadi, Robin Green, Charles Tator, Carmela Tartaglia</p> <p>Title: Neuroinflammatory Markers in Former Athletes with Repetitive Head Impacts: A Network and Machine-learning Approach</p>
2	<p><u>Nusrat Sadia</u>, Mohsen Hadian, Mozghan Khodadadi, Carmen Wong, Carmela Tartaglia, Charles Tator</p> <p>Title: To Evaluate the Effect of Delayed Initiation of Multidisciplinary Treatment on Return-to-Work (RTW) Outcomes</p>
3	<p><u>Shannon Celiz Lopez</u>, Marie-Helene Bellemare, Laurianne Bouchard, Rosalie Lalonde, Eric Wagnac, Laure-Ann Corbin-Berrigan</p>

	Title: Concussion Symptoms During the Competitive Season in Contact Sports Explained by Repeated Head Impact
4	<u>Melissa T. Lamanna</u> , Sebastian D'Amario, Nicole S. Coverdale, Douglas J. Cook Title: Associations Between Subconcussive Impacts and Macrostructural Alterations in Collegiate Female Flag Football
5	<u>Kim Mary Huynh</u> , Coljae Berry, Antonin Holowka, Dylan Graff, Nicole Coverdale, Douglas J. Cook Title: Cerebrovascular Alterations in Collegiate Football Athletes Following Repetitive Nonconcussive Impacts
6	<u>Tim Butson</u> , Karen Davis, Robin Green, Vishaal Sumra, Zane Grossinger, Mozhgan Khodadadi, Charles Tator, Carmela Tartaglia Title: Does Pain in Retired Professional Athletes with a History of Repetitive Head Insults Contribute to Cognitive and Psychological Changes That May Account for Symptoms Attributed to CTE or TES?
7	<u>Sebastian D'Amario</u> , Blaire Magee, Allen A. Champagne, Madison E. Wilson, Gabriel Ramírez-García, Nicole S. Coverdale, Douglas J. Cook Title: White Matter Alteration and Impaired Bimanual Coordination Following Repeated Subconcussive Impacts in American Football Players
8	<u>Mary-Io Daher</u> , Tisha Ornstein Title: The Different Dimensions of Pain and Cognitive Difficulties Following mTBI: A Preliminary Investigation
9	<u>Melissa Biscardi</u> , Mark Bayley, Kevin Thorpe, Patric Quaid, Angela Colantonio, Tatyana Mollayeva Title: Visually Induced Motion Sickness Decreases with Repeated Virtual Reality-Based Oculomotor Rehabilitation After Concussion

Rapid Podium Presentations - Display in Room C

Morning - Refreshment Break and Poster Viewing

TV	Time & Presenters			
A	Poster#	Time	Name	Title
	1	10:02 - 10:08	Lian Lopes Troncoso	Neuroinflammatory Markers in Former Athletes with Repetitive Head Impacts: A Network and Machine-learning Approach
	2	10:08 - 10:14	Nusrat Sadia	To Evaluate the Effect of Delayed Initiation of Multidisciplinary Treatment on Return-to-Work (RTW) Outcomes
B	Poster#	Time	Name	Title
	3	10:02 - 10:08	Shannon Celiz Lopez	Concussion Symptoms During the Competitive Season in Contact Sports Explained by Repeated Head Impact

	4	10:08 - 10:14	Melissa T. Lamanna	Associations Between Subconcussive Impacts and Macrostructural Alterations in Collegiate Female Flag Football
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Lunch Break and Poster Viewing

TV **Time & Presenters**

A	Poster#	Time	Name	Title
	1	12:50 - 12:56	Lian Lopes Troncoso	Neuroinflammatory Markers in Former Athletes with Repetitive Head Impacts: A Network and Machine-learning Approach
	2	12:56 - 13:02	Nusrat Sadia	To Evaluate the Effect of Delayed Initiation of Multidisciplinary Treatment on Return-to-Work (RTW) Outcomes
	5	13:02 - 13:08	Kim Mary Huynh	Cerebrovascular Alterations in Collegiate Football Athletes Following Repetitive Nonconcussive Impacts
	6	13:08 - 13:14	Tim Butson	Does Pain in Retired Professional Athletes with a History of Repetitive Head Insults Contribute to Cognitive and Psychological Changes That May Account for Symptoms Attributed to CTE or TES?
	7	13:14 - 13:20	Sebastian D'Amario	White Matter Alteration and Impaired Bimanual Coordination Following Repeated Subconcussive Impacts in American Football Players

B	Poster#	Time	Name	Title
	3	12:50 - 12:56	Shannon Celiz Lopez	Concussion Symptoms During the Competitive Season in Contact Sports Explained by Repeated Head Impact
	4	12:56 - 13:02	Melissa T. Lamanna	Associations Between Subconcussive Impacts and Macrostructural Alterations in Collegiate Female Flag Football
	8	13:02 - 13:08	Mary-Jo Daher	The Different Dimensions of Pain and Cognitive Difficulties Following mTBI: A Preliminary Investigation
	9	13:08 - 13:14	Melissa Biscardi	Visually Induced Motion Sickness Decreases with Repeated Virtual Reality-Based Oculomotor Rehabilitation After Concussion
	-	13:14 - 13:20	No Presentation Scheduled	

Afternoon - Refreshment Break and Poster Viewing

TV **Time & Presenters**

A	Poster#	Time	Name	Title
	5	14:46 - 14:52	Kim Mary Huynh	Cerebrovascular Alterations in Collegiate Football Athletes Following Repetitive Nonconcussive Impacts
	6	14:52 - 14:58	Tim Butson	Does Pain in Retired Professional Athletes with a History of Repetitive Head Insults Contribute to Cognitive and Psychological Changes That May Account for Symptoms Attributed to CTE or TES?

	7	14:58 - 15:04	Sebastian D'Amario	White Matter Alteration and Impaired Bimanual Coordination Following Repeated Subconcussive Impacts in American Football Players
B	Poster#	Time	Name	Title
	8	14:46 - 14:52	Mary-Jo Daher	The Different Dimensions of Pain and Cognitive Difficulties Following mTBI: A Preliminary Investigation
	9	14:52 - 14:58	Melissa Biscardi	Visually Induced Motion Sickness Decreases with Repeated Virtual Reality-Based Oculomotor Rehabilitation After Concussion
	-	14:58 - 15:04	No Presentation Scheduled	

Poster Presentations Only	
Poster #	Title & Presenter
10	<u>Thomas Hoshizaki</u> , Amir Azadi, Heidi Sveistup, T. Blaine Hoshizaki, Keyon Tohidi Title: The Effect of Neck Strength and Pre-release Activation State on Head Angular Displacement During a Body-first Fall
11	<u>Heather Nuttall and Rahila Kuyoro</u> , Gillian Cattle, Stephanie Wadge Title: Life After Impact: A Gender-Based Violence and Concussion Support Program
12	<u>Kiersten Mangold</u> , Jacob Kay, Jeffrey Holloway, R. Davis Moore Title: Sex Differences in Heart Rate Variability During Physical Exertion and Its Association to Symptom Severity Following Adolescent Concussion
13	<u>Sonja Jevric, Alyssa Smith</u> Title: Navigating Concussions in MVAs: The Role of Early Intervention in Hospital Care
14	<u>Sofia Chavez</u> , Fergal Kerins Title: Using an Anisotropic Diffusion Phantom and Bundle Analysis to Compare Diffusion MRI Protocols Within and Across Sites for Improved Sensitivity and Data Harmonization
15	<u>Dylan B. Graff</u> , Coljae Berry, Gabriel Ramírez-García, Antonin Holowka, Sebastian D'Amario, Nicole S. Coverdale, Douglas J. Cook Title: Longitudinal Gradient Analysis to Identify Alterations in Functional Organization Caused by Repetitive Subconcussive Impacts in Collegiate Athletes
16	<u>Jeremy Colangelo</u> , Charles Tator, Benjamin Elkin, Mozghan Khodadadi, Carmela Tartaglia Title: Improving Understanding of Concussions Caused by Rear-End Collisions using Vehicle Examination Data
17	<u>Chloé Buso</u> , Jeremy Colangelo, Kristine Dalton, Mozghan Khodadadi, Carmela Tartaglia, Charles Tator Title: Pupillometry Methodology and Analysis in Concussion Patients with Computer Screen Intolerance
18	<u>Rosalie Lalonde</u> , Shannon Celiz Lopez, Marie-Hélène Bellemare, Edouard Proust, Jean-François Brunelle, Louis De Beaumont, Isabelle Pagé, Eric Wagnac, Laurie-Ann Corbin-Berrigan

	Title: Association Between Cervical ROM Changes and Head Impact Exposure in University Ice Hockey Players
19	<u>Davina Premraj</u> , Carmela Tartaglia, Charles Tator Title: Persisting Symptoms of Concussion Profiles Are Largely Similar in Younger vs Older Adults – A Retrospective Observational Study
20	<u>Jean-Michel Acquin</u> , Elizabeth Giguère-Lemieux, Julien Glaude-Roy, Jean-François Brunelle, Philippe Fait, Laurie-Ann Corbin-Berrigan Title: Changes in Self-Efficacy and Perceptual-Cognitive Performance Following Mild Traumatic Brain Injury in Varsity Athletes
21	<u>Laurianne Bouchard</u> , Maée Camara, Reka Sivasubramiyan, Louis De Beaumont, Eric Wagnac, Isabelle Pagé, Laurie-Ann Corbin-Berrigan Title: Big Hits, Stiff Necks? Cervical ROM Across a Football Season