

CCC Accomplishments 2010-2022

1. Publications, Book Chapters, Presentations, Awards

Publications in Scientific Peer-Review Journals

1. Moore, M., Tator, CH. Concussion Safety Law Should be Enacted in all Canadian Provinces and Territories. *The Canadian Journal of Neurological Sciences* (2022). [https:// doi:10.1017/cjn.2022.12](https://doi.org/10.1017/cjn.2022.12)
2. Tator, CH., Blanchet, V., Ma, J. Persisting Concussion Symptoms from Bodychecking: Unrecognized Toll in Boys' Ice Hockey. *The Canadian Journal of Neurological Sciences* (2022), 1–9
[doi:10.1017/cjn.2022.289](https://doi.org/10.1017/cjn.2022.289)
3. Mylabathula ,M., Macarthur,C., Guttmann, A., Colantonio, A., Tator, CH. Development of a concussion public policy on prevention, management and education for schools using expert consensus, *Inj Prev*: first published as 10.1136/injuryprev-2021-044395 on 4 May 2022
4. Vasilevskaya A, Taghdiri F, Multani N, Ozzoude M, Tarazi A, Khodadadi M, Wennberg R, Rusjan P, Houle S, Green R, Colella B, Blennow K, Zetterberg H, Karikari T, Mikulis D, Hazrati LN, Kovacs GG, Davis KD, Tator C, Tartaglia MC. (2022). Investigating the use of plasma pTau181 in retired contact sports athletes. *J. of Neurology*. June: 1, 2022
5. Gumus, M., Mack, M. L., Green, R., Khodadadi, M., Wennberg, R., Crawley, A., Colella, B., Tarazi, A., Mikulis, D. J., Tator, C. H., & Tartaglia, M. C. Brain connectivity changes in post-concussion syndrome as the neural substrate of a heterogeneous syndrome. *Brain Connectivity*. Feb 14, 2022.
<https://doi.org/10.1089/brain.2021.0127>.
6. Sihag, S., Naze, S., Taghdiri, F., Gumus, M., Tator, C., Green, R., Colella, B., Blennow, K., Zetterberg, H., Dominguez, L. G., Wennberg, R., Mikulis, D. J., Tartaglia, M. C., & Kozloski, J. R. Functional brain activity constrained by structural connectivity reveals cohort-specific features for serum neurofilament light chain. *Communications Medicine*. 17 Jan 2022. <https://doi.org/10.1038/s43856-021-00065-5> .
7. Gumus, M., Santos, A., Tartaglia,MC. Diffusion and functional MRI findings and their relationship to behaviour in postconcussion syndrome: a scoping review. *J Neurol Neurosurg Psychiatry*. 2021 Dec
[https://doi: 10.1136/jnnp-2021-326604](https://doi.org/10.1136/jnnp-2021-326604).¹
8. Varriano B, Sulway S, Wetmore C, Dillon W, Misquitta K, Multani N, Anor C, Martinez M, Cacchione E, Rutka J, Tartaglia MC. Prevalence of Cognitive and Vestibular Impairment in Seniors Experiencing Falls. *Can J Neurol Sci*. 2021 Mar;48(2):245-252.
9. Schwab N, Wennberg R, Grenier K, Tartaglia MC, Tator CH, Hazrati LN. No association between career duration and position played in elite football or hockey and presence of chronic traumatic encephalopathy at autopsy: a case series. *J Neurology*, Accepted in December 2020.

10. Rauen K, Späni CB, Tartaglia MC, Ferretti MT, Reichelt L, Probst P, Schäpers B, Müller F, Jahn K, Plesnila N. Quality of life after traumatic brain injury: a cross-sectional analysis uncovers age- and sex-related differences over the adult life span. *Geroscience*. 2020 Oct 17. [https://doi: 10.1007/s11357-020-00273-2](https://doi.org/10.1007/s11357-020-00273-2).
11. Shafi R, Poublanc J, Venkatraghavan L, Crawley AP, Sobczyk O, McKetton L, Bayley M, Chandra T, Foster E, Ruttan L, Comper P, Tartaglia MC, Tator CH, Duffin J, Mutch WA, Fisher J, Mikulis DJ. A Promising Subject-Level Classification Model for Acute Concussion Based on Cerebrovascular Reactivity Metrics. *Journal of Neurotrauma*, 23 Oct 2020. <https://doi.org/10.1089/neu.2020.7272>
12. Doroszkiewicz C, Gold D, Green R, Tartaglia MC, Ma J, Tator CH. Anxiety, Depression, and Quality of Life: A Long-Term Follow-up Study of Patients with Persisting Concussion Symptoms. *J Neurotrauma* , September 2020. <https://doi: 10.1089/neu.2020.7313>
13. Koerte IK, Esopenko C, Hinds SR, Shenton ME, Bonke E, Bazarian JJ, Bickart KC, Bigler ED, Bouix S, Buckley TA, Choe MC, Echlin PS, Gill J, Giza CC, Hayes J, Hodges CB, Irimia A, Johnson PK, Kenney K, Levin HS, Lin A, Lindsey HM, Lipton M, Max JE, Mayer AR, Meier TB, Merchant-Borna K, Merkley T, Mills BD, Newsome MR, Porfido T, Stephens JA, Tartaglia MC, Ware AL, Zafonte RD, Zeineh MM, Thompson PM, Tate DF, Dennis EL, Wilde EA, Baron D. The ENIGMA Sports Injury Working Group - an International Collaboration to Further our Understanding of Sports-Related Brain Injury. *Brain Imaging and Behavior*. July 27,2020. <https://doi: 10.1007/s11682-020-00370-y>
14. Sihag S, Naze S, Taghdiri F, Tator CH, Wennberg R, Mikulis D, Green R, Colella B, Tartaglia MC, Kozloski JR. Multimodal Dynamic Brain Connectivity Analysis Based on Graph Signal Processing for Former Athletes With History of Multiple Concussions. *IEEE Transactions on Signal and Information processing Over Networks*, VOL. 6, March 2020 . <https://doi: 10.1109/TSIPN.2020.2982765>
15. Panwar J, Hsu CC , Tator CH, Mikulis D. Magnetic Resonance Imaging Criteria for Post- Concussion Syndrome: A Study of 127 Post-Concussion Syndrome Patients. *J Neurotrauma*. 37:1190–1196. May 15, 2020 .<https://doi: 10.1089/neu.2019.6809>
16. Taghdiri F, Multani N, Ozzoude M, Tarazi A, Khodadadi M, Wennberg R, Mikulis D, Green R, Colella B, Davis KD, Blennow K, Zetterberg H, Tator C, Tartaglia MC. Neurofilament-Light in Former Athletes: A Potential Biomarker of Neurodegeneration and Progression. *Eur J Neurol*. 2020 Apr 13. <https://doi: 10.1111/ene.14251> [Epub ahead of print]
17. Moore C, Baharikhooob P, Khodadadi M, Tator CH. Bicycling-Related Concussions Leading to Postconcussion Syndrome in Adults. Accepted for publication in the *BMJ Open Sport & Exercise Medicine*, 2020
18. Santos A, Walsh H, Ansari N, Ferreira A, Tartaglia MC. Post-Concussion Syndrome and Sleep Apnea: A Retrospective Study. *J. Clin. Med*. March, 2020, 9(3), 691; <https://doi.org/10.3390/jcm9030691>
19. Vasilevskaya A, Taghdiri F, Burke C, Tarazi A, Naeimi A, Khodadadi M, Goswami R, Sato C, Grinberg M, Moreno D, Wennberg R, Mikulis D, Green R, Colella B, Davis KD, Rusjan P, Houle S, Tator CH, Tartaglia MC. Interaction of APOE4 alleles and PET tau imaging in former contact sport athletes. *NeuroImage: Clinical*.2020 <https://doi.org/10.1016/j.nicl.2020.102212>
20. Schwab N, Grenier K, Hazrati LN. DNA repair deficiency and senescence in concussed professional athletes involved in contact sports. 2019. *Acta Neuropathologica Communications*-Accepted
21. Iverson G, Gardner AJ, Shultz SR, Solomon GS, McCrory P, Zafonte R, Perry G, Hazrati LN, Keene CD, Castellani RJ (2019) Chronic traumatic encephalopathy neuropathology might not be inexorably progressive or unique to repetitive neurotrauma. *Brain* (Accepted- to be published in December issue)
22. Terpstra AR, Vasquez B, Colella B, Tartaglia MC, Tator C, Mikulis DJ, Davis KD, Wennberg R and Green RE. Comprehensive neuropsychiatric and cognitive characterization of retired professional football players offers new treatment directions for people with a history of multiple concussions. *Front Neurol*. 2019 Aug 7;10:712. <https://doi: 10.3389/fneur.2019.00712>
23. Taghdiri F, Multani N, Tarazi A, Naeimi A, Khodadadi M, Esopenko C, Green R, Colella B, Wennberg R, Mikulis D, Davis K, Goswami R, Tator CH, Levine B, Tartaglia MC. Elevated Cerebrospinal Fluid Total Tau in Former

- Professional Athletes with Multiple Concussions. *Neurology*. 2019 Jun 4;92(23):e2717-e2726. [https://doi:10.1212/WNL.0000000000007608](https://doi.org/10.1212/WNL.0000000000007608). Epub 2019 May 8.
24. Tator C, Starkes J, Dolansky G, Quet J, Michaud J, Vassilyadi M. Fatal Second Impact Syndrome in Rowan Stringer, A 17-Year-Old Rugby Player. *Can J Neurol Sci*. 2019 Apr 4:1-4. [Epub ahead of print]. [https://doi:10.1017/cjn.2019.14](https://doi.org/10.1017/cjn.2019.14)
 25. Tator C, Starkes J, Dolansky G, Quet J, Michaud J, Vassilyadi M. Rowan's Rugby Fatality Prompts Canada's First Concussion Legislation. *Can J Neurol Sci*. 2019 Apr 4:1-3. [Epub ahead of print]. [https://doi:10.1017/cjn.2019.15](https://doi.org/10.1017/cjn.2019.15)
 26. Schwab N, Tator C, Hazrati LN. DNA damage as a marker of brain damage in individuals with history of concussions. *Lab Invest*. Feb 13, 2019 [Epub ahead of print] [https://doi:10.1038/s41374-019-0199-8](https://doi.org/10.1038/s41374-019-0199-8)
 27. Mathieu F, Ellis M, Tator CH. Concussion Education in Canadian Medical Schools: A 5 Year Follow-up Survey. *BMC Med Educ*. 18(1):316, 2018.
 28. Schwab N, Hazrati LN. Assessing the Limitations and Biases in the Current Understanding of Chronic Traumatic Encephalopathy. *J Alzheimer's Dis*. 64(4):1067-1076, 2018. <https://doi.org/10.3233/JAD-180373>
 29. Van Ommeren R, Hazrati LN. Pathological assessment of chronic traumatic encephalopathy-Review of concepts and methodology. *Academic Forensic Pathology*. 8(3): 555-564, 2018. <https://doi.org/10.1177/1925362118797729>
 30. Mansur A, Hauer TM, Hussain MW, Alatwi MK, Tarazi A, Khodadadi M, Tator CH. A Nonliquid Crystal Display Screen Computer for Treatment of Photosensitivity and Computer Screen Intolerance in Post-Concussion Syndrome. *J Neurotrauma*. 35(16):1886-1894, 2018. <https://doi.org/10.1089/neu.2017.5539>
 31. Varriano B, Tomlinson G, Tarazi A, Wennberg R, Tator CH, Tartaglia MC. Age, Gender and Mechanism of Injury Interactions in Post-Concussion Syndrome. *Can J Neurol Sci*. 45(6):636-642, 2018. <http://dx.doi.org/10.1017/cjn.2018.322>
 32. Wennberg R, Hiploylee C, Tai P, Tator CH. Is concussion a risk factor for epilepsy? *Can J Neurol Sci*. 45(3):275-282, 2018. <https://doi.org/10.1017/cjn.2017.300>
 33. Misquitta K, Dadar D, Tarazi A, Hussain MW, Alatwi MK, Ebraheem A, Multani N, Khodadadi M, Goswami R, Wennberg R, Tator CH, Green RE, Colella B, Davis KD, Mikulis DJ, Grinberg M, Sato C, Rogaeva E, Tartaglia MC. The relationship between brain atrophy and cognitive-behavioural symptoms in retired Canadian football players with multiple concussions. *Neuroimage Clin*. 19:551-558, 2018. <https://doi.org/10.1016/j.nicl.2018.05.014>
 34. Tarazi, A, Tator CH, Wennberg R, Ebraheem A, Green RE, Colella B, Saverino C, Khodadadi M, Misquitta K, Tartaglia MC. Motor function in former professional football players with history of multiple concussions. *J Neurotrauma*. 35(8):1003-1007, 2018. <https://doi.org/10.1089/neu.2017.5290>
 35. Taghdiri F, Chung J, Irwin S, Multani N, Tarazi A, Ebraheem A, Khodadadi, M, Goswami R, Wennberg R, Mikulis DJ, Green RE, Davis KD, Tator CH, Eizenman M, Tartaglia, MC. Decreased Number of Self-Paced Saccades in Post-Concussion Syndrome Associated with Higher Symptom Burden and Reduced White Matter Integrity. *J Neurotrauma*. 35(5):719-729, 2018. <https://doi.org/10.1089/neu.2017.5274>
 36. Chung J, Taghdiri F, Irwin S, Multani N, Tarazi A, Ebraheem A, Khodadadi, M, Goswami R, Wennberg R, Davis KD, Mikulis DJ, Green R, Tator CH, Tartaglia MC, Eizenman M. Visual scanning behaviour during a visual search task: An objective indicator of white matter integrity in patients with postconcussion syndrome. 2017 IEEE 30th International Symposium on Computer-Based Medical Systems (CBMS), Thessaloniki, Greece, pp.648-653, 2017. <https://doi.org/10.1109/CBMS.2017.84>
 37. Gao A F, Ramsay R, Twose R, Rogaeva E, Tator CH, Hazrati LN. Chronic Traumatic Encephalopathy-like Neuropathological Findings Without a History of Trauma. *Int J Pathol Clin Res*. 3:050, 2017. <http://doi.org/10.23937/2469-5807/1510050>
 38. Taghdiri F, Varriano B, Tartaglia MC. Assessment of Oculomotor Function in Patients with Post-Concussion Syndrome: A Systematic Review *J Head Trauma Rehabil*. 32(5):E55-E67, 2017. <https://doi.org/10.1097/HTR.000000000000286>
 39. Hiploylee C, Dufort P, Davis H, Wennberg R, Tartaglia, MC, Mikulis D, Hazrati LN, Tator CH Longitudinal Study of Postconcussion Syndrome: Not Everyone Recovers. *J Neurotrauma*. 34(8):1511-1523, 2017.

<https://doi.org/10.1089/neu.2016.4677>

40. Multani N, Goswami R, Khodadadi M, Ebraheem A, Davis KD, Tator CH, Wennberg R, Mikulis, DJ, Ezerins L, Tartaglia MC. The association between white-matter tract abnormalities, and neuropsychiatric and cognitive symptoms in retired professional football players with multiple concussions. *J Neurol*. 263(7):1332-41, 2016. <https://doi.org/10.1007/s00415-016-8141-0>
41. Hiploylee C, Wennberg R, Tator CH. The financial toll of career-ending concussions in professional hockey. *Concussion*. 1(4):CNC20, 2016. <https://doi.org/10.2217/cnc-2016-0008>
42. Tarazi A, Tator CH, Tartaglia MC. Chronic Traumatic Encephalopathy and Movement Disorders: Update. *Curr Neurol Neurosci Rep*. 16(5):46, 2016. <https://doi.org/10.1007/s11910-016-0648-3>
43. Tator CH, Davis HS, Dufort P, Tartaglia MC., Davis KD, Ebraheem A., Hiploylee, C. Postconcussion syndrome: demographics and predictors in 221 patients. *J Neurosurg*. 125(5):1206-1216, 2016. <https://doi.org/10.3171/2015.6.JNS15664>
44. Ellis MJ, Wennberg R. Convulsions in a 17-year-old boy after a head injury; sustained while playing hockey. *CMAJ*. 188(6):443-5, 2016. <https://doi.org/10.1503/cmaj.150124>
45. Goswami R, Dufort P, Tartaglia MC, Green RE, Crawley A, Tator CH, Wennberg R, Mikulis DJ, Keightley M, Davis KD. Frontotemporal correlates of impulsivity and machine learning in retired professional athletes with a history of multiple concussions. *Brain Struct Funct*. 221(4):1911-25, 2016. <https://doi.org/10.1007/s00429-015-1012-0>
46. Burke MJ, Fralick, M, Nejatbakhsh N, Tartaglia MC, Tator CH. In search of evidence-based treatment for concussion: characteristics of current clinical trials. *Brain Inj*. 29(3):300-5, 2015. <https://doi.org/10.3109/02699052.2014.974673>
47. Tator CH, Davis H. The postconcussion syndrome in sports and recreation: clinical features and demography in 138 athletes. *Neurosurgery*. 75 Suppl 4:S106-12, 2014. <https://doi.org/10.1227/NEU.0000000000000484>
48. Tator, C.H. Chronic traumatic encephalopathy. How serious a sports problem is it? *Br J Sports Med*. 48(2):81-3, 2014. <https://doi.org/10.1136/bjsports-2013-093040>
49. Tartaglia MC, Hazrati LN, Davis KD, Green RE, Wennberg, R, Mikulis, DJ, Ezerins L, Keightley M, Tator CH. Chronic traumatic encephalopathy and other neurodegenerative proteinopathies. *Front Hum Neurosci*. 8:30, 2014. <https://doi.org/10.3389/fnhum.2014.00030>
50. Ellis MJ, Figley, CR, Mutch WL, Massiocotte E, Mikulis DJ, Essig M, Tator CH. Neuroimaging in sport-related concussion management: Current status and future direction Neuroimaging in SRC: Current status and future directions. *Curr Res Concussion Vol 1 No 1 Winter 2014*. <https://www.researchgate.net/publication/272620462>
51. Tator, C.H. Concussions and their consequences: current diagnosis, management and prevention. *CMAJ*. 85(11):975-9, 2013. <https://doi.org/10.1503/cmaj.120039>
52. Hazrati LN, Tartaglia MC, Diamandis P, Davis KD, Green RE, Wennberg R, Wong JC, Ezerins L, Tator CH. Absence of chronic traumatic encephalopathy in retired football players with multiple concussions and neurological symptomatology. *Front Hum Neurosci*. 7:222, 2013. <https://doi.org/10.3389/fnhum.2013.00222>

Book Chapters

1. Vasilevskaya A, Tartaglia MC. Neuropsychiatric Symptoms of Post-concussion Syndrome (PCS) and Chronic Traumatic Encephalopathy (CTE). In: [Topics of Cognitive Rehabilitation in the TBI Post-Hospital Phase](#). (Anghinah R, Paiva W, Battistella LR, Amorim R, Eds) Springer, Switzerland pp. 87-94, 2018.
2. Green R, Tator. When the Effects of Concussions Endure: What Are Some of the Longer Term Consequences? In: [Sports Concussions A Complete Guide to Recovery and Management](#). (Eds. Gagnon I, Ptitto A) Chapter 16 pp 315-327, CRC Press. Taylor & Frances Group, Boca Raton, FL, 2018.
3. S. Chaychi, E Valera, MC Tartaglia. Sex and Gender Differences in Mild Traumatic Brain Injury/ Concussion.
4. E Moro, G Arrabia, MC Tartaglia, MT Ferretti. Sex and Gender Differences in Neurological Disease.

TRAINEE PRESENTATIONS

Indira Garcia Cordero

1. Brain structural and functional imaging in mTBI with biomarkers of neurodegeneration. 9th Annual Concussion Research Symposium, April 30, 2022.(virtual event).
2. Examining brain structural and functional changes in mTBI with biomarkers of neurodegeneration. Alzheimer's Association International Conference. Jul 2022. San Diego, California, United States.

Anna Vasilevskaya

1. Tau-PET in retired contact sport athletes. Alzheimer's Association International Conference. Jul 2022 San Diego, California, United States.
2. Tau-PET in retired contact sport athletes. 9th Annual Concussion Research Symposium, April 30, 2022 (virtual event).

Vishaal Sumra

1. High-resolution post-mortem MRI visualizes fine WM-GM details and hypointensities in areas of tau pathology in PSP and CTE patients. Tau Meeting 2022, (virtual event).

Olivia Scott

1. M. Bubna, O. Scott, E. Boyko, V. Kristman, C. Hunt, J.Gargaro, M. Khodadadi, C. Tartaglia Characterizing Acute Versus Chronic Concussion Patients' Profiles in Ontario 9th Annual Concussion Research Symposium, April 30, 2022 (virtual event).
2. O. Scott, U. Muhammad, B Elkin, M. Khodadadi, E Prentice. CH. Tator. Analysis of Patients with Persisting Concussion Symptoms Caused by Motor Vehicle Collisions with Respect to Vehicle Safety Systems 2000-2020. 2022 Canadian Injury Prevention Conference, Vancouver Nov, 2022

Presentations

A. Platform

1. Green R. (Feb 26, 2021). Treatment of Persisting Concussion-Related Mental Health Disorders by Teletherapy. The CCC 8th Annual Concussion Symposium: Biomarkers, Prevention and Treatment of Concussion. Toronto, ON.
2. Hazrati LN. (Feb 26, 2021). Update on Pathological Findings in the Brain after Repetitive Concussions. The CCC 8th Annual Concussion Symposium: Biomarkers, Prevention and Treatment of Concussion. Toronto, ON.
3. Mikulis D. (Feb 26, 2021). Recent Research into the Imaging of Concussion and Persisting Symptoms of Concussion. The CCC 8th Annual Concussion Symposium: Biomarkers, Prevention and Treatment of Concussion. Toronto, ON.
4. Tartaglia C. (Feb 26, 2021).Update on Biomarkers for CTE. The CCC 8th Annual Concussion Symposium: Biomarkers, Prevention and Treatment of Concussion. Toronto, ON.
5. Tator CH & Mylabathula S. (Feb 26, 2021).Research into Canada's First School-based Concussion Curriculum. The CCC 8th Annual Concussion Symposium: Biomarkers, Prevention and Treatment of Concussion. Toronto, ON.
6. Tator CH. Overview of Concussions. (Nov 19, 2020). Concussion Update for Legal Practitioners, Insurers, Judges, and Clinicians: Keeping Your Case Moving Forward in a Virtual Environment. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.

7. Tartaglia MC, Green R. COVID-19 and Concussions. (Nov 19, 2020). Concussion Update for Legal Practitioners, Insurers, Judges, and Clinicians: Keeping Your Case Moving Forward in a Virtual Environment. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
8. Doroszkiewicz C, Tator CH. Depression, Anxiety, and Quality of Life in Postconcussion Syndrome. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
9. Schwab N, Hazrati LN. Cellular Senescence as the Pathophysiological Mechanism of Brain Dysfunction after Mild Traumatic Brain Injury. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
10. Kozloski JR, Sihag S, Naze S, Taghdiri F, Tator CH, Wennberg R, Mikulis D, Green R, Colella B, Tartaglia MC. Multimodal Brain Imaging Fusion Augments Blood Biomarkers for Post-concussion Syndrome. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
11. Mikulis D. Cerebrovascular Dysfunction after Concussion. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
12. Vasilevskaya A, Taghdiri F, Burke CS, Tarazi A, Naeimi SA, Khodadadi M, Goswami R, Wennberg R, Mikulis D, Green R, Colella B, Davis K, Tator CH, Tartaglia MC. Resting State Functional Connectivity as a Biomarker of Longitudinal Changes in Former Athletes with Multiple Concussions. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
13. Wennberg R, Potts A, El-Rahimy Y, Bayley M, Comper P, Zumsteg D, Shampur N, Garcia Dominguez L. Cortical Sensory Processing Deficits Measured by Magnetoencephalography after Acute Concussion. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
14. Mylabathula S, Tator CH. Assessment of The Ministry of Education's Concussion Policy Implementation: Successes and Challenges in Ontario Schools, 2014-18. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
15. Gumus M, Mack M, Green R, Tartaglia MC. Precision-Medicine in Post-Concussion Syndrome by Relating Subject Specific Structural-Functional Connectomes and Neuropsychological Measures. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
16. Anssari N, Tarazi A, Gold D, Tartaglia MC. Is a measure of dual-task performance better able to screen for cognitive impairment than the MoCA? . (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
17. Tator CH. Overview of Concussions. (Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
18. Wennberg R. Concussions: To Whom and Where? (Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
19. Mikulis D J, Tartaglia MC. Imaging and Biomarkers of the Concussion Spectrum of Disorders. (Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
20. Green RE, Ruttan L. Utility and Limitations of Neuropsychological Assessments for Persisting Concussion Symptoms. (Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.

21. Tator CH, Sniderman A, Tartaglia MC. Treatment for the Concussion Spectrum of Disorders: Fact and Fiction. (Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
22. Tator CH. Practice, Policies, and Guidelines for Concussion Management.(Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
23. Hazrati, LN. The Neuropathology of Concussions and Their Consequences. (Dec 6, 2018). Concussion Symposium for Lawyers, Insurers, Judges, and Clinicians. CCC Symposium in Partnership with the Law Society of Ontario. Toronto, ON.
24. Boulanger E, Tator CH. (May 2018). Longitudinal Study of 834 Concussed Patients to Highlight Factors that Contribute to the Development of Postconcussion Syndrome (PCS). The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
25. Vasilevskaya A, Taghdiri F, Burke C, Tarazi, A, Naeimi, SA, Khodadadi M, Goswami, R, Wennberg R, Mikulis DJ, Green RE, Colella B, Davis KD, Rusjan P, Houle S, Tator CH, Tartaglia MC. (May 2018). AV1451 Positron Emission Tomography (PET) Tau as a Potential Biomarker in Professional Athletes with Possible Chronic Traumatic Encephalopathy. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
26. Taghdiri F, Chung J, Multani N, Tarazi A, Naeimi SA, Khodadadi M, Wennberg R., Mikulis DJ, Green RE, Colella B, Davis KD, Tator CH, Eizenman M, Tartaglia MC. (May 2018). A Novel Visual Task as an Indicator of White Matter Integrity and Cortical Thickness in Retired Professional Athletes with Multiple Concussions. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
27. Schwab N, Hazrati LN. (May 2018). Mild Traumatic Brain Injury leads to Sustained DNA Damage and Acquisition of Senescence-Associated Secretory Phenotype by Astrocytes. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
28. Mylabathula S, Tator CH. (May 2018). Development of Best Practices Consensus for Concussion Policy in the School Context. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
29. Budisin B, Miguel-James JL, Saverino C, Kwan D., Meusel L, Panoso M, Changoor A, Tibbles, A, Robertson A, Colella B, Tartaglia MC, Tator CH, Green RE (May 2018). Remotely Delivered Cognitive Behaviour Therapy for Treatment of Mood Disturbance in People with Persisting Symptoms of Concussion. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
30. Shafi R, Crawley AP, Tartaglia MC, Tator CH, Green RE, Mikulis DJ, Colantonio A. (May 2018). Sex-Specific Alterations of the Salience and Fronto-Parietal Networks in Individuals with Post-Concussion Symptoms - Resting-State Functional Connectivity of Large- Scale Networks. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
31. Taghdiri F, Multani N, Goswami R, Tarazi A, Naeimi SA, Khodadadi M, Oliva L, Levesque L, Esopenko C, Wennberg R, Mikulis DJ, Green RE, Colella B, Davis KD, Levine B, Tator CH, Tartaglia MC (May 2018). Cerebrospinal Fluid Biomarkers in Professional Athletes with Multiple Concussions. The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto. ON.
32. Hazrati LN. (May 2018). The Spectrum of Neuropathological Changes in Athletes with History of Repeated Concussions: Are We Chasing the Wrong Lesion? - The CCC 6th Annual Concussion Research Symposium: Concussions: Cumulative, Persisting and Progressive Consequences. Toronto, ON.
33. Tartaglia MC. In search of biomarkers for chronic traumatic encephalopathy. March 2018 Rotman Research Institute Conference - Traumatic Brain Injury and Concussion. Toronto, ON.
34. Tator CH. (Sept 2017) Treatment of Postconcussion Syndrome in Women and Girls. The CCC First Concussion in Women and Girl Symposium, Toronto, ON.
35. Mylabathula S, Mylabathula S. (Sept 2017). Concussion Policy and KT: Considerations for Women and Girls. The CCC First Concussion in Women and Girls Symposium. Toronto, ON.

36. Varriano BM, Tartaglia MC. (Sept 2017). How does age, gender and mechanism of injury interact in concussion patients. The CCC First Concussion in Women and Girls Symposium. Toronto. ON.
37. Colantonio A. (Sept 2017). Sex, Gender and Concussions in Vulnerable Populations. The CCC First Concussion in Women and Girls Symposium. Toronto, ON.
38. Taghdiri F, Chung J, Irwin S, Multani N, Tarazi A, Ebraheem A, Khodadadi M, Goswami, R., Wennberg R, Davis K, Mikulis D, Green R, Tator C, Eizenman M, Tartaglia MC. (April 2017) Oculomotor Function and White Matter Integrity in Patients with Post-Concussion Syndrome. The American Academy of Neurology 69th Annual Meeting, Boston, MA.
39. Mikulis DJ (April 2017). Neurovascular Consequences of Traumatic Brain Injury. Traumatic Brain Imaging: Whom, How, When. Course of the 2017 ISMRM Annual Meeting in Honolulu, Hawaii.
40. Wiseman-Hakes C, Tartaglia MC, Hussein MW, Tator CH, Sharma B, Green RE. (April 2017). Sleep in Retired Professional Athletes with History of Multiple Concussions. Conference symposium presentation: Sleep in Elite Athletes: Current Research and Clinical Insights: at Canadian Sleep Society, Calgary Alta.
41. Green RE, Terpstra A, Colella B, Tartaglia MC, Tator CH. (Jan 2017). Neuropsychiatric and Cognitive Treatment Targets in Retired CFL Players. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders Toronto, ON.
42. Colantonio A. (Jan 2017). Integrating Sex and Gender in Concussion Research for Better Science and Practice. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders Toronto, ON.
43. Taghdiri F, Chung J, Irwin S, Multani N, Tarazi A, Ebraheem A, Khodadadi M, Goswami R, Wennberg R, Davis KD, Mikulis DJ., Green RE, Tator CH, Eizenman M, Tartaglia, MC. (Jan 2017). Self-Paced Saccadic Eye Movements and White Matter Integrity in Patients with Post-Concussion Syndrome. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
44. Burke C, Rusjan P, Misquitta K, Tarazi A, Hussain MW, Al-Atwi M, Houle S, Wilson A, Khodadadi M, Green RE, Collella B, Tator CH, Tartaglia MC (Jan 2017). Tau PET Imaging in Retired Canadian Football League Players Using [18F] AV-1451. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
45. Hazrati LN. (Jan 2017) Chronic Traumatic Encephalopathy-Like Neuropathological Findings without History of Trauma. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders Toronto, ON.
46. Taghdiri F, Chung J, Irwin S, Multani N, Tarazi A, Ebraheem A, Khodadadi M, Goswami R, Wennberg R, Davis KD, Mikulis, DJ, Green RE, Tator CH, Eizenman M, Tartaglia MC. (Jan 2017). Self-Paced Saccadic Eye Movements and White Matter Integrity in Patients with Post-Concussion Syndrome. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
47. Burke CH, Rusjan P, Misquitta K, Tarazi A, Hussain MW, Atwi MK, Houle S, Wilson A, Khodadadi M, Green RE, Collella B, Tator CH, Tartaglia MC. (Jan 2017). Tau PET Imaging in Retired Canadian Football League Players Using [18F] AV-1451. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
48. Hazrati LN. (Jan 2017).Chronic Traumatic Encephalopathy-Like Neuropathological Findings without a History of Trauma. The CCC Fifth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
49. Hazrati LN. (2016) Uncovering the Neurochemistry of Chronic Traumatic Encephalopathy (CTE). Provincial-Wide Behavioural Neurology Rounds – Baycrest- Toronto, Ontario. (February 2016) - Invited speaker
50. Hazrati LN. (2016) An update on chronic traumatic encephalopathy. 2nd University of Ottawa Forensic conference. Ottawa, ON - Invited speaker
51. Hazrati LN. Invited speaker (2016) Tackling concussion beyond Hollywood. Hospital for Sick Children. Pediatric Neurology ground Rounds. Toronto, ON.
52. Hazrati LN. Invited speaker (2016) Tackling concussion beyond Hollywood. University of Minnesota Pathology ground Rounds. Minnesota, Minneapolis, USA.
53. Hazrati LN. Invited speaker (2016) Neuropathology of concussion. University of Toronto Neuropathology residency training program, Academic half day.

54. Tarazi A, Ebraheem A, Khodadadi M, Tator CH, Wennberg R, Tartaglia MC. (2016, Jan). Motor Deficits in Former CFL Players with Multiple Concussions. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
55. Terpstra A, Colella B. Green RE, (2016.Jan). Characterizing Retired CFL Players with a History of Multiple Concussions: An Update. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
56. Misquitta K, Chung J, Eizenman M , Ebraheem A , Tarazi A , Multani N, Khodadadi M, Goswami R, Wennberg R, Tator CH, Green RE, Colella B, Mikulis DJ, Tartaglia MC. (2016. Jan). Regional Brain Volumes Correlate with Behavioural Symptoms in Individuals with Post-Concussion Syndrome. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
57. Mikulis DJ, Dufort P, Crawley A.P, Tator CH. (2016, Jan). How often are Abnormalities Detected on Conventional MR Imaging in Patients with the Clinical Diagnosis of Concussion? The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
58. Wennberg R, El-Rahimy Y, Shampur N, Dominguez, LG (2016, Jan). MEG in the Diagnosis and Prognosis of Concussion. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
59. Tator, C.H. (Jan 2016). Canadian Concussion Centre: Progress Report. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
60. Hazrati, LN (Jan 2016) Let's Chat Deeply about Hockey: Uncovering the Neurochemistry of CTE. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
61. Dufort, P. (Jan 2016) Application of Deep Learning to the Detection of White Matter Damage in Diffusion Weighted Imaging of Concussion Patients. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders Toronto, ON.
62. Saverino C, Colella B, Ruttan L, Lombardi S, Miguel-James L, Meusel L-A, Green RE (Jan 2016). Developing interventions to mitigate symptoms and prevent deterioration in retired CFL players. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
63. Davis KD. (Sep 2015) Multiple Concussions in Professional Athletes: Brain Imaging and Behavioral Findings. A brave New World 2015 Conference. Toronto, ON.
64. Lombardi S, Saverino C. (Apr 2015). Multiple concussions in professional athletes: Characterization of symptoms and benefits of intervention. Psychology Rounds, Baycrest Geriatric Centre, Toronto, ON.
65. Wennberg R, Hiploylee C, Tator CH. Concussions, Convulsions, Seizures and Epilepsy: Are There Any Connections. Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
66. Terpstra A, Green RE. (Jan 2015) Cognitive and Neuropsychiatric Characterization of Retired Professional Football Players with a History of Multiple Concussions. Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
67. Tator CH, Davis H (Jan 2015) Clinical Features of Postconcussion Syndrome. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
68. Multani N, Tartaglia MC. (Jan 2015) White Matter Changes in Retired Football Players with Multiple Concussions. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
69. Mikulis DJ (Jan 2015) The Challenges of Imaging a Concussion. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
70. Hiploylee C, Dufort P, Davis H, Tator CH. (Jan 2015) Recovery from Post-Concussion Syndrome. 2015 Traumatic Brain Injury Conference. Toronto, ON.
71. Hiploylee C, Wennberg R, Tator CH. (Jan 2015) Financial Implications of Career-Ending Concussions and Postconcussion Syndrome in the Professional Hockey Player. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.

72. Hiploylee C, Dufort P, Davis H, Tator CH. (Jan 2015) Follow-up Study of Recovery from Postconcussion Syndrome. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
73. Hazrati LN (Jan 2015) Neuropathology of Concussion-Update. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, Ontario.
74. Green RE, Ruttan L, Lombardi S, Colella B, Meusel, L, Miguel-James L. (Jan 2015) Treating the consequences of Multiple Concussions in Retired Professional Athletes. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
75. Dufort P. (Jan 2015). Concussion and White Matter Damage: Insights from Machine Learning and Other Advanced Analyses. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
76. Davis KD, Dufort P (Jan 2015) Applying Machine Learning Classifiers to Discriminate Concussed Athletes From Non-Concussed Subjects Based on Diffusion Tensor Imaging. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
77. Ebraheem A, Colella B, Green, RE, Goswami R, Tator, CH, Tartaglia MC. (Jan 2015) Investigating the Role of Vascular Disease and White Matter Hyperintensities on MRI in Former Canadian Football Players. University Health Network-Canadian Sports Concussion Project. Third Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
78. Wennberg R. (Jan 2014). The MEG Project Plans. University Health Network-Canadian Sports Concussion Project .2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
79. Seyone CH (Jan 2014) Psychiatric Aspects of the Concussion Syndromes. University Health Network-Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
80. Tator CH, Davis H. (Jan 2014) Postconcussion Syndrome in Athletes. University Health Network-Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
81. Tartaglia, M.C. (Jan 2014). Initial Clinical Neurological Findings from the CFL study. University Health Network, Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
82. Murphy K (Jan 2014). PET scanning for CTE. University Health Network Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
83. Mikulis DJ, Dufort P. (Jan 2014) Initial MRI Findings from OBI and TWH Studies. University Health Network-Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
84. Hazrati, LZ. (Jan 2014) The Presence/ Absence of CTE at Autopsy. University Health Network Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders, Toronto, ON.
85. Green, R.E. (Jan 2014) Initial Neuropsychological Findings in the Canadian Football League Study. University Health Network-Canadian Sports Concussion Project .2nd Annual Symposium: Research on the Concussion Spectrum of Disorders, Toronto, ON.
86. Ezerins L. (Jan 2014). The Importance of Concussion Studies of CFL Retired Players. University Health Network Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
87. Davis KD, Goswami R (Jan 2014) Initial MRI Finding from the CFL Study. University Health Network Canadian Sports Concussion Project. 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
88. Tator, C.H. (Nov 2012) Clinical Manifestation of Concussion. University Health Network-Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto, ON.
89. Tartaglia MC (Nov 2012) Clinical Manifestation on CTE. University Health Network-Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto, ON.

90. Mikulis DJ. (Nov 2012) Imaging of CTE. Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto, ON.
91. Keightley, M. (Nov 2012) Concussion in Children and Youth. University Health Network-Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto, ON.
92. Hazrati LN. (Nov 2012) Neuropathological Manifestation of CTE. Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto, ON.
93. Green RE. (Nov 2012) Neuropsychological Testing of CTE. University Health Network-Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto, ON.
94. Davis KD (Nov 2012) Imaging of Concussion. University Health Network-Canadian Sports Concussion Project. First Annual Symposium: Concussion and CTE Latest Research Developments. Toronto ON.

B. Poster Presentations

1. Moore C, Baharikhooob P, Khodadadi M, Tator CH. Bicycling-Related Concussions Leading to Postconcussion Syndrome in Adults. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
2. Blanchet V, Moore C, Prentice E, Tator CH. Body Checking in Youth Ice Hockey as a Mechanism of Concussion and Post-Concussion Syndrome. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
3. Santos A, Walsh H, Anssari N, Ferreira I, Tartaglia MC. Post-Concussion Syndrome and Sleep Abnormalities: A Retrospective Study. (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
4. Shafi R, Poublanc J, Wang R, kneepkens S, Venkatraghavan L, Crawley AP, Sobczyk O, Mcketton L, Tator CH, Duffin J, Mutch A, Fisher J, Mikulis DJ. Supernormal Cerebrovascular Reactivity Following Acute Concussion. . (Nov 2, 2019). The CCC 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls. Toronto, ON.
5. Mansur A, Hauer, TM, Hussain M, Al-atwi MK, Tarazi A, Khodadadi M, Ross C, Harding C, Tator CH. (July 2017) The Feasibility of Non-LCD Screen Technology as a Computer-Interface for Patients with Postconcussion Syndrome Including Computer Intolerance: a Pilot Study. Sports Concussion Conference. Jacksonville, FL.
6. Wennberg R, El-Rahimy Y, Shampur N, Dominguez, LG. (2016) Post-concussion abnormalities in the M60 somatosensory evoked field recorded by magnetoencephalography. Berlin, Germany.
7. Mylabathula S, Tator CH (Jan 2017). A Preliminary View of Current Concussion Policy in Ontario School Boards. The CCC Fourth Annual Symposium: Research on the Concussion. Spectrum of Disorders. Toronto, ON.
8. Hazrati LN (June 2016) Inflammatory pathways in CTE - an animal model. Laurence E. Becker Symposium.
9. Taghdiri F, Irwin, S, Multani N, Tarazi, A, Ebraheem A, Chung J, Khodadadi M, Goswami R, Wennberg R, Green RE, Mikulis D, Tator CH, Eizenman M, Tartaglia MC. Eye movement and white matter integrity in patients with post-concussion syndrome. 5th international consensus conference on concussion in sport" Berlin, Germany, October 2016.
10. Misquitta K, Dadar M, Tarazi A, Ebraheem A, Multani N, Khodadadi M, Goswami R, Wennberg R, Tator CH, Green RE, Colella B, Davis D, Mikulis D, Crawley A, Collins DL, Tartaglia MC. (July 2016) Reduction in hippocampal volume is associated with age and memory deficits in retired professional football players, AAI Conference, Toronto, ON.
11. Taghdiri F, Irwin S, Multani N, Eizenman M, Tarazi A, Ebraheem A, Chung J, Khodadadi M, Goswami R, Wennberg R, Green RE, Mikulis D, Tator CH, Tartaglia MC (June 2016) Eye movement assessment and diffusion tensor imaging in patients with post- concussion syndrome, The Canadian Neurological Science Federation (CNSF) Conference, Quebec City, Quebec.

12. Taghdiri F, Irwin SL, Multani N, Eizenman M, Tarazi A, Ebraheem A, Chung J, Khodadadi M, Goswami R, Wennberg R, Green R, Mikulis D, Tator CH, Tartaglia MC. (2016) Eye Movement assessment and Diffusion Tensor Imaging in patients with Post-Concussion Syndrome. The Hospital for Sick Children Pediatric Research Day, Toronto, ON.
13. Burke C, Tarazi A, Rusjan P, Misquitta KS, Houle, S, Wilson A, Khodadadi M, Green RE, Collela, B, Multani M, Tator CH, Tartaglia MC. (Jan 2016) Using [18F] T807 PET to image tau in former Canadian Football League players. The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
14. Varriano B, Tator CH, Tarazi A, Ebraheem A, Tartaglia MC. (Jan 2016) The impact of age and gender on mechanism of concussion: a retrospective cohort study. The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
15. Ozzoude M, Misquitta K, Faubert J, Ebraheem A, Tarazi A, Multani N, Khodadadi M, Goswami R, Wennberg R, Tator CH, Green RE, Colella B, Mikulis D, Tartaglia MC. (Jan 2016) Neuroanatomical Correlates of Visual Working Memory and Visual Attention as Measured by Perceptual-Cognitive Task in Post-Concussion Syndrome. The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
16. Mylabathula S, Tator CH. (Jan 2016) An Examination of Policy Addressing Student Concussion in the Context of Best Practices for Prevention, Recognition, and Management of Concussions. The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
17. Mansur A, Hauer T, Tator CH. (Jan 2016) The feasibility of non-LCD screen technology as a computer-interface for patients with postconcussion syndrome: a pilot study. The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
18. Gasser A, Haggart A, Tator CH. (Jan 2016) Does the Mechanism of Injury Affect Symptom Prevalence in Postconcussion Syndrome Patients? The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto ON.
19. Shafi R, Crawley AP, Tartaglia MC, Tator CH, Colantonio A, Mikulis DJ. (Jan 2016) Resting-State Functional Connectivity In Adults With Post-Concussion Symptoms Compared to Non-Concussion Controls: Preliminary Findings. The CCC Fourth Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
20. Gao AF, Karimi S, Hazrati LN. (June 2015) P2X7receptors in a murine model of mild traumatic brain Injury, American Association of Neuropathologists Denver, Colorado.
21. Gao AF, Karimi S, Hazrati LN. (June 2015) A Case of Chronic Traumatic Encephalomyelopathy Without Trauma, ANNP Meeting, Denver, Colorado.
22. Gao AF, Karimi S, Hazrati LN. (June 2015) The role of ATP and P2RX7 in the development of chronic traumatic encephalopathy, ANNP Meeting, Denver, Colorado.
23. Hiploylee C, Dufort P, Davis H, Tator CH. (Jan 2015). Recovery from Post-Concussion Syndrome. 3rd Annual Symposium: Research on the Concussion Spectrum of Disorders. Toronto, ON.
24. Hiploylee C, Dufort P, Davis H, Tator CJ. (Jan 2015). Recovery from Post-Concussion Syndrome. 2015 Traumatic Brain Injury Conference. Toronto, ON.
25. Hiploylee C, Dufort P, Davis H, Tator CH. (Feb 2015) Recovery from Postconcussion Syndrome. Annual Meeting of the International Neuropsychological Society in Denver, Colorado.
26. Tator CH, Davis H. (June 2014) Post-Concussion Syndrome is a Major Problem for many Athletes. Canadian Academy of Sport and Exercise Medicine. Quebec City, Quebec.
27. Lombardi S, Hazrati LN, Colella B, Davis KD, Green RE, Tator CH, Wennberg R. (Jan 2014) Multiple concussions and Chronic Traumatic Encephalopathy: Critical questions to be answered. Toronto Rehabilitation Institute's 2014 Traumatic Brain Injury Annual Conference, Toronto, ON.
28. Lombardi S, Colella B, Ruttan L, Meusel L-A, Miguel-James L, Tator CH, Green RE. (Dec 2015) Offsetting the Enduring Symptoms of TBI: Face-to-Face and Internet-Based Group Therapies. Toronto Rehab Research Day, Toronto Rehabilitation Institute, Toronto, ON.
29. Irwin S, Eizenman M, Ebraheem A, Chung J, Multani N, Khodadadi M, Goswami R, Wennberg R, Tator CH, Green RE, Mikulis, DJ, Tartaglia MC. (July 2014) Alteration in Superior Longitudinal Fasciculus integrity correlates with

Neuropsychiatric functioning in those with Post Concussive Syndrome. American Academy of Neurology: The Sports Concussion Conference, Chicago, IL.

30. Goswami R, Tartaglia MC, Green RE, Tator CH, Wennberg R, Hazrati LN. (March 2014) Altered structural organization of the uncinate fasciculus and impulsive behavior correlates in retired professional athletes with a history of concussions. Tenth World Congress on Brain Injury in San Francisco, CA.
31. Dufort P, Goswami R, Tartaglia MC, Green RE, Crawley A, Tator CH, Wennberg R, Mikulis DJ, Keightley M, Davis KD. (Nov 2014) Machine learning classifiers discriminate concussed athletes from non-concussed subjects based on diffusion tensor imaging metrics of the uncinate fasciculus. The Society for Neuroscience Meeting in Washington, DC.
32. Burke MJ, Fralick M, Nejatbakhsh N, Tartaglia MC, Tator CH. (July 2014) Toward evidence-based treatment of concussion? Characteristics of current clinical trials. American Academy of Neurology, Sports Concussion Conference. Chicago, IL.

Research Grants to CCC Principal Investigators and Major Donation Support

1. **Major Donation Support through UHN Foundation:** \$10 million being collected to date for concussion research. This includes the Marion and Gerry Soloway Chair in concussion held by Dr. Carmela Tartaglia. Recent major donations have been received from the Soloway family, the Fidani Family (Orlando Foundation), and from Mitchell Goldhar.
2. **Transport Canada:** \$ 75,000 Grant for Prospective Analysis of Concussion and Persisting Concussion Symptoms Caused by Motor Vehicle Collisions (MVC) with Respect to Vehicle Safety Systems, 2000–2020. Dr. Charles Tator
3. **Workplace Safety and Insurance Board (WSIB):** \$399,981.32 Grant for Development of a Persisting Concussion Symptoms (PCS) Risk Stratification Tool and Evaluation of the Effectiveness of an Enhanced WSIB Multidisciplinary Individualized Treatment Program to Enhance Return to Work and Recovery. [November 2020- October 2023]- Dr. Charles Tator and Dr. Carmela Tartaglia
4. **Laborers International Union of North America -LIUNA (Ontario Council):** \$250,000 Grant to Expand on-line Patient Education and Support Workshop [September 2020- August 2023]-Dr. Charles Tator and Toronto General and Western Hospital Foundation
5. **Donner Canadian Foundation:** \$84,020 Grant for Canadian Concussion Centre research. [September 2020]- Dr. Charles Tator and Toronto General and Western Hospital Foundation
6. **Marion and Gerald Soloway Donation:** \$500,000 to Expand the Canadian Concussion Centre. [September 2020- August 2025]- Dr. Charles Tator
7. **Weston Foundation:** \$ 150,000 grant for Tau Ligand for the Diagnosis of Chronic Traumatic Encephalopathy in Retired CFL Athletes Study. [July 2, 2014- June 31, 2018]-Dr. Carmela Tartaglia
8. **Ministry of Education:** \$49,938.00 for Concussion in Students and Policy Project. [August 10, 2016- September 2018]- Swapna Mylabathula and Dr. Charles Tator
9. **Physician's Service Incorporated Foundation (PSI):** \$170,000 Grant for Post-Concussion Syndrome in Professional Athletes: A Multidisciplinary Study. [August 2011- January 2014]- Dr. Richard Wennberg and Dr. Charles Tator
10. **Ontario Brain Institute (OBI):** \$100,000 grant for Pilot Project on Imaging of Concussion: Multisite Study-[April 2012- December 2014]-Dr. Charles Tator

11. **Canadian Institutes of Health Research (CIHR):** \$1,065,728 Grant for NeuroCare as an Innovation in Intervention: A Neurophysiological Approach to Determine Readiness for Return to Activity in association with Holland-Bloorview Kids Rehabilitation Hospital [October 2013- March 2019]-Dr. Karen Davis
12. **MSH-UHN AMO Innovation Fund:** \$183,361.69 for Mapping blood flow control in concussed subjects: Diagnostic and prognostic advantages. [March 2017- March 31, 2019]-Dr. David Mikulis
13. **Canadian Institutes of Health Research (CIHR).** \$ 8000 concussion in Women and Girl conference. [2017-2018]- Swapna Mylabathula, Charles Tator, Carmela Tartaglia
14. **Ontario Brain Institute (OBI):** \$ 8000 - The feasibility of E-Paper as a computer-interface for patients with post-concussion syndrome: a pilot study. [April 6, 2016- April 31, 2018]-Dr. Charles Tator
15. **Centre for Aging & Brain Health Innovation (CABHI), Researcher-Clinician Partnership Program:** \$372,000. Scalable training and web-based application package for offsetting hippocampal neurodegeneration using Google Streetview –Dr. Robin Green
16. **Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery grant:** \$125,000 Understanding and improving hippocampal neuroplasticity through allocentric spatial navigation training- Dr. Robin Green
17. **Canadian Institutes of Health Research (CIHR):** \$1,067,178 (Canadian dollar). long-term effects of mild traumatic brain injury through premature cellular senescence- 2019/9 - 2024/8 –Dr. Lili-Naz Hazrati
18. **National Institutes of Health (NIH) (USA); National Institute of Neurological Disorders and Stroke (NINDS); National Institute on Aging (NIA):** \$250,000 (United States dollar). Neuropathological Assessment of TBI-related Neurodegeneration and Neurocognitive Decline - Center Without Walls (NATBI CWOW). Dr. Lili-Naz Hazrati

Awards

1. Carmela Tartaglia: the William Goldie Prize and and Travel Award in Research from the University of Toronto's Department of Medicine, 2022
2. Charles Tator: Order of Hockey in Canada, 2020
3. Karen Davis: Fellows, The Royal Society of Canada, 2020
4. Robin Green: Canada Research Chair (Tier 2) in Traumatic Brain Injury, 2015, Canadian Institutes for Health Research and Brain Injury Canada, Dr. Jane Gillett Research Award, 2018
5. Karen Davis: Fellow, Canadian Academy of Health Sciences, 2018
6. Carmela Tartaglia: Marion and Gerald Soloway Chair in Brain Injury and Concussion Research, University of Toronto, 2017
7. Charles Tator: Officer, Order of Canada, 2017
8. Charles Tator: Canada's Sports Hall of Fame, 2017
9. Samantha Irwin: The Richard Day Prize in Neurology, at University of Toronto, May 8, 2015

Funds Donated to CCC for Research via the Toronto General and Western Hospital Foundation

Since its inception, approximately \$5 million dollars have been donated to the CCC for research

2. Concussion Symposiums

Every year since 2012 the CCC Organized the Annual conference and last one scheduled for April 2023.

| Year | Title | Sponsors |
|-------------------|--|--|
| 2022- May 19 | Concussion Update for Legal Practitioners, Insurers, Judges, and Clinicians | In partnership with the Law Society of Ontario |
| 2022-April 30 | 9 th Annual Concussion Research Symposium: | Ontario Brain Institute- OBI National Hockey League-NHL National Hockey League Players' Association -NHLPA |
| 2022- April 29 | Public Forum: Concussions in the Home and Workplace, including Falls and Interpersonal Violence: Prevention and Treatment | Hockey Canada Canadian Football League Alumni Association-CFLAA |
| 2021- February 26 | 8th Annual Concussion Research Symposium: Biomarkers, Prevention and Treatment of Concussion-Virtual | Ontario Brain Institute- OBI National Hockey League-NHL National Hockey League Players' Association -NHLPA |
| 2021- February 25 | Public Forum: Concussion Treatment | Canadian Football League Alumni Association-CFLAA Personal Injury Alliance-PIA Law |
| 2020- November 19 | Concussion Update for Legal Practitioners, Insurers, Judges, and Clinicians: Keeping Your Case Moving Forward in a Virtual Environment- In partnership with Law Society of Ontario | This program is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada and approved by The Michener Institute of Education – CPD Accreditation Office- It is also approved by Law Society of Ontario for continuing education for lawyers. |
| 2019- November 1 | Public Forum: Mental Health and Concussion | Ontario Brain Institute- OBI National Hockey League-NHL Ontario Neurotrauma Foundation- ONF |
| 2019- November 2 | 7th Annual Concussion Research Symposium: Advances in Concussion research, Including Concussion in Women and Girls | National Hockey League Players' Association -NHLPA Canadian Football League Alumni Association-CFLAA |
| 2018-December 6 | Concussion Symposium for Lawyers, insurers, judges, and clinicians in partnership with Law Society of Ontario | Personal Injury Alliance-PIA Law CBI Health Group |
| 2018- May 11 | Public Forum: The Consequences of Concussions Dedicated to the Families who have suffered the Consequences of Concussion | Ontario Brain Institute- OBI National Hockey League-NHL Ontario Neurotrauma Foundation- ONF |
| 2018 – May 12 | | National Hockey League Players' Association -NHLPA |

| | | |
|-------------------|--|--|
| | 6th Annual Concussion Research. Concussions: Cumulative, Persisting and Progressive Consequences | Canadian Football League Alumni Association-CFLAA |
| 2017-September 23 | Concussion in Women and Girls | Canadian Institutes of Health Research-CIHR OBI TorQuest Holding Inc. Management Service Women's Brain Health The BLG Foundation USport & 4 individuals donations |
| 2017- January 21 | 5th Annual Concussion Symposium: Research on the Concussion Spectrum of Disorders | OBI , ONF, CFL, NHL, NHLPA, CFLAA and Hockey Canada |
| 2016- January 23 | 4th Annual Concussion Symposium: Research on the Concussion Spectrum of Disorders | NHLPA, NHL, CFL, CFLAA, OBI and Dr. Tom Pashby Sports Safety Fund. |
| 2015- January 17 | Third Annual Symposium: Research on the Concussion Spectrum of Disorders | NHL, NHLPA, CFL, CFLAA, OBI, Dr. Tom Pashby Sports Safety Fund and Hockey Canada |
| 2014- January 11 | 2nd Annual Symposium: Research on the Concussion Spectrum of Disorders | NHL, NHLPA, CFL, CFLAA, OBI, Dr. Tom Pashby Sports Safety Fund and Hockey Canada |
| 2012- November 10 | Concussions and CTE – Latest Research Developments | Endorsement: OBI, ONF |

5. **Prolonged Symptoms of Single and Multiple Concussions: Education and Support Workshops for Patients, Relatives, Friends, Caregivers and Health Care Professionals**

These workshops launched by the Canadian Concussion Centre in 2014 and have been held as quarterly workshops hosted at the Toronto Western Hospital (TWH). These free, 2-night workshops (each two hours long) were developed by members of the Canadian Concussion Centre, Toronto Western Hospital (TWH) and the Cognitive Neurorehabilitation Sciences Lab at the Toronto Rehabilitation Institute. The Labourers International Union of North American (LiUNA) has continued to be the principal sponsor our Education and Support Workshops for concussed individuals with persistent symptoms. In 2020, because of the COVID-19 pandemic the CCC has launched virtual online workshops in May 2020 to support patients and their families during the pandemic. The aim is to expand these virtual workshops in 2021 with a focus on treatment of concussions and their consequences. Links to these recorded webinars can be found at:

<https://www.uhn.ca/Krembil/Canadian-Concussion-Centre/Education#WebinarSeries>

6. **Managing Persistent Post-Concussion Symptoms Handbook**

At the concussion clinics of the Canadian Concussion Centre, beginning in 2019, we have been able to give our patients an outstanding handbook containing extensive information about how to manage their persisting symptoms. This handbook was created by the staff of the Centre with input from other experts, and took more than a year to complete. The handbook “Managing Persistent Post-Concussion Symptoms” is now being

distributed free to the patients at the concussion clinics and concussion workshops, and carries a note on the first page that this was made possible as a result of the support received from LIUNA.

Updated in November 17, 2022