

Volume 6 :: 2019

Each edition of the newsletter highlights the initiatives of one of the three trauma centres in the GTA that make up the U of T Trauma Program. This newsletter focuses on St. Michael's Hospital.

THE U OF T TRAUMA PROGRAM
IS A COLLABORATIVE OF THE
DEPARTMENTS OF SURGERY OF
ST. MICHAEL'S HOSPITAL, SUNNYBROOK
HEALTH SCIENCES CENTRE, AND THE
HOSPITAL FOR SICK CHILDREN.
IT IS DESIGNED TO PROMOTE QUALITY
PATIENT CARE, EDUCATION, AND
RESEARCH ACROSS THREE SITES AND TO
INTEGRATE TRAUMA RELATED ACTIVITES
IN THE AREAS OF EDUCATION, QUALITY
AND RESEARCH.

Beyond Surviving, to Thriving at St. Michael's Hospital



My BeST Trauma Network support group

St. Michael's Hospital Trauma Service has created a peer support group for survivors of traumatic injury, such as a car crash, fall, gunshot wound or work-related injury. The support group, a first for a Canadian hospital, was started in April 2017 and continues to grow and remain a vital part of care for injured patients after their discharge from hospital. As patients adjust post injury to home or work they identify a need for supports not identified until after the acute care phase. Called My BeST (Beyond Surviving, to Thriving), the program is a network of survivors of physical trauma—including their families and caregivers—designed to support rebuilding their lives after serious injury.

Systems of care have evolved to create improvements in pre-hospital care and to ensure patients with most significant injuries are transported to Trauma Centres where teams of care providers are dedicated to managing and coordinating provision of care by multi-discipline subspecialties. With the advancement in medical and surgical treatments, critical care medicine and coordinated multi-discipline inpatient care there are increasing numbers of individuals that survive severe injury. Patients have follow up care arranged with their respective care providers, but this does not always reveal some of the challenges that survivors of traumatic injuries may experience as they work towards resuming life back at home, in the community or back at work. The success of 'surviving' a severe injury and being discharged from acute care does not always translate into successful adaptation back to a patient's frame of reference for what used to be their life prior to injury.

There is a growing recognition that long term outcomes, and particularly adverse long term outcomes for survivors of serious traumatic injury, are underappreciated. Organizations including The American College of Surgeons Committee on Trauma, the London UK Trauma System and the Trauma Association of Canada are recognizing the need to move beyond survival and discharge and also focusing on patients long term outcomes and how we ensure patients are thriving post discharge.

About 10-15 trauma survivors and loved ones attend monthly meetings. The curriculum is a mix of guest speakers and topic based discussions. The topics are frequently based on what members have identified as areas of need for additional knowledge or information – or a chance to discuss an issue in their recovery that has not been addressed elsewhere. A cache of resources (sleep hygiene, stress reduction, time management, etc.) has been created over time and is available for the group. The evening meetings have transformed into pot luck dinners which contributes to a relaxed format that is inviting for participants.



Getting the program started required almost a full year of working and planning with patient and clinical advisors before the first group meeting was held. It was all part of a carefully planned, thoughtful and intentional process. Monthly support group meetings are open to any interested participants who have sustained or been affected by traumatic physical injury. The program accepts individuals into the group that were treated at SMH as well as those treated elsewhere. As a testament to the programs significant value, it is also being used as a template and example for implementation at other Trauma Centres in Ontario.

One of the challenges of serious traumatic injury is that it takes patients by surprise; its a terrible thing to go through. This patient support program allows the St. Michael's Trauma Service to go beyond patients surviving to ensuring they thrive - and isn't that something we'd all want?

Welcome to our new Trauma Fellows



Lilly Jenkins completed her general surgical training in Sydney, Australia in 2016. She did a two year melanoma and surgical oncology fellowship prior to moving to Toronto for the year for the Trauma and ACS Fellowship. Lilly's research interests include surgical education, and she is currently close to completing her Masters of Education through Imperial College London. In her spare time, Lilly enjoys hiking and mountain climbing, however she is a little nervous for her first Canadian winter!

Josh Borsook received an honours degree in biochemistry from McGill University before attending the Sackler School of Medicine at Tel Aviv University for his medical education. He subsequently completed

his general surgery residency in Syracuse, NY, USA at SUNY Upstate Medical University, graduating in 2019. After graduation he returned home to Toronto to pursue a fellowship in Trauma and Acute Care Surgery at the University of Toronto. In his free time Josh enjoys reading, travelling and staying active.



Traumatic Injury: Bridging the gap between injury, acute care, and recovery

2020 Interdisciplinary Trauma Conference



We are pleased to invite you to participate in the 2020 Interdisciplinary Trauma Conference presented by University of Toronto, Department of Surgery in partnership with St. Michael's Hospital, Sick Kids Hospital and Sunnybrook Health Sciences Centre. This one day conference is being held Friday, June 12th, 2020 at the BMO Institute for Learning.

We anticipate attendance of over 250 health care personnel from across the province and beyond including nurses, physicians, allied health professionals, and first responders (police, fire, paramedics) involved in trauma programs or emergency care as well as public health and ministry of health policy makers.

Early Bird Registration Opens March 2nd! **traumaconference.ca**

St. Michael's Hospital Physicians Cycling for trauma survivors



In September 2019, four St Michael's Hospital (SMH) physicians (Alun Ackery, Samuel Vaillancourt, Joel Lockwood, and Raj Girdhari) rode 850 km through the Alps to raise funds and awareness for trauma survivors and the Trauma Survivors' Network. The Trauma Survivors Network is a peer support group developed to help trauma survivors develop the vital skills to manage their day-to-day challenges. While the physicians scaled the Alps, from Geneva to Nice, St. Michael's supporters back home in Toronto also rode in solidarity. They held a Toronto spin class, with health care professionals from both the emergency and trauma departments participating with friends of the SMH Foundation and even a trauma survivor. Through the efforts of these physicians and their supporters over \$12,500.00 was raised to support the peer group. Here's a video of the support message our spin class sent to our amazing team https://vimeo.com/366574590/a4252a0115

Sunnybrook Health Sciences Centre's New Rooftop Helipad

Following over a year of construction, Sunnybrook Health Sciences Centre's new rooftop helipad opened in November 2019.

Approximately 15% of the hospital's 2,000 annual trauma patients arrive by helicopter. Patients arrive directly from on-scene trauma or as transfers from over 80 referring hospitals across Ontario.

This new helipad will improve access to the hospital, including its trauma centre. Currently, air ambulances arrive ground-level and require transport by land ambulance from the helipad to the emergency department (~500 metres). With the rooftop helipad, the most critically ill and severely injured patients will gain valuable minutes in getting to life-saving care.

Features of the helipad include:

- A 75' x 75'platform
- Snow and moisture sensors / heating system
- 32 green perimeter lights and 8 flood lights
- Two oscillating fire suppressions nozzles
- A 5' safety net on all sides

The helipad project cost 13.5 million dollars, funded almost entirely by donors, primarily the Gelato Cup Golf Tournament and the Rudolph P. Bratty Family Foundation.



A ribbon-cutting ceremony was held on October 17th, 2019 and featured Mayor John Tory, hospital leadership, Ornge leadership, former patients, donors and others. For more information, visit: https://sunnybrook.ca/content/?page=rooftop-helipad

2019 AWARDS, PRESENTATIONS & ACCOMPLISHMENTS

Najma Ahmed (Trauma Surgeon, SMH)

Awards:

2020 Council Award from the Council of the College of Physicians and Surgeons of Ontario honouring outstanding Ontario physicians and recognizing a physicians' broad range of diverse roles and abilities.

2019 Fall Medical Humanities Grant from Postgraduate Medical Education and Continuing Medical Education for her work "Development and Implementation of a Toolkit for Physician-Led Advocacy to Promote System-Level Change: Using Firearm Injury Prevention as a Model".

David Gomez (Trauma Surgeon, SMH)

Grants:

A population-based study of emergency general surgery conditions in patients with solid organ transplants Canadian Institutes of Health Research. (\$126,225) Firearm related injury and death in Ontario. SMHA innovation funds. (\$16,930) *Publications:*

Geospatial, racial, and educational variation in firearm mortality risk: a comparative analysis of 2.5 million firearm deaths in the United States, Mexico, Brazil, and Colombia from 1990-2015. Lancet Public Health. Lancet Public Health. 2019 Jun

Optimizing Access and Configuration of Trauma Centre Care in New South Wales. Injury, 2019 May

Extra articular pelvic fractures with concomitant gastrointestinal injury caused by ballistic trauma are harbingers of infectious complications. J Emerg Med Trauma Surg Care. April 2019

Perforated Appendicitis in the setting of a massive ventral hernia, morbid obesity, and multiple severe comorbidities: Challenges in acute Management. Trauma Surg Acute Care Open. 2019 Jan

Matt Guttman (U of T General Surgery Resident)

Awards:

Institute of Health Policy, Management and Evaluation Research Day Award for winning oral presentation in the category of Hospital Performance & Gallie-Bateman Resident Research Award for the third place oral presentation at the annual Department of Surgery resident research competition - Fixation of traumatic spinal fractures within 24 hours reduces complications in the absence of neurologic injury: A retrospective cohort study from the American College of Surgeons TQIP database. May 2019

Presentations:

Oral presentation at The International Society of Orthopaedic Centers Annual Meeting, Malmo, Sweden - Fixation of traumatic spinal fractures within 24 hours reduces complications in the absence of neurologic injury: A retrospective cohort study from the American College of Surgeons TQIP database. May 2019 Poster presentation the 78th annual meeting of the American Association for the Surgery of Trauma - ECMO Use in TQIP Centres: Temporal Trends & Future Directions. Sep 2019

Avery Nathens (Surgeon-in-Chief, SHSC)

Award: The Sunnybrook Health Sciences Centre Leo Stevens Leadership Award

Joao Rezende-Neto (Trauma Surgeon, SMH)

<u>Invention:</u> Dr. Rezende has developed a tracheostomy device that can be used by one person, in less time, with fewer side effects (such as perforation of the esophagus). The process of acquiring regulatory approvals for sale in Canada and the U.S. has begun.

Homer Tien (Trauma Surgeon, SHSC)

Appointment: President and CEO of Ornge. December 2019.

Donald Redelmeier (Senior Scientist, SHSC)

Publications:

Traumatic brain injury as risk factor for problem gambling. Social Psychiatry and Psychiatric Epidemiology 2019

Gambling and subsequent road traffic injuries: a longitudinal cohort analysis. Journal of Addiction Medicine 2019

Pedestrian fatalities on Halloween in the United States. JAMA Pediatrics 2019 Postoperative delirium and duration of surgery in patients with hip fractures. JAMA Network 2019

Statins and the risk of dementia after a concussion. JAMA Neurology 2019 Life-threatening alcohol-related traffic crashes in adverse weather: a double-matched case-control analysis. BMJ Open 2019

Charles H. Tator (Neurosurgeon, TWH)

Presentations:

Blocking Repulsive Guidance Molecule A promotes repair after spinal cord injury. NeuroSpine, Toronto, June 2019.

Current State of Concussions. Rowan's Law Day Concussion Seminar, Ontario Equestrian Federation, Richmond Hill, Sept 2019.

Strengths and Challenges of PP158, Canada's First Province Wide School-Based Concussion Education and Management Guideline. Ontario Concussion Prevention Network (Teleconference) Oct 2019.

Concussion Update. 5th Annual Joint Seminar CICMA-CIAA-CDL, Toronto Oct 2019. Concussion Update: Recognition, Management and Prevention of Concussions is a Community Responsibility. Connecting Community Partners in Injury Prevention, the North Bay Parry Sound District Health Unit and the Nipissing-Canadore BscN Program, North Bay, Oct 2019.

What is Known and Unknown about Concussions. McMaster Association for Sports Concussions. McMaster University, Hamilton, Nov 2019.

7th Annual Concussion Research Symposium Advances in Concussion Research, including Concussion in Women and Girls. Toronto Western Hospital, Toronto, ON Nov 2, 2019:

Multimodal Brain Imaging Fusion Augments Blood Biomarkers for Post-Concussion Syndrome & Resting State Functional Connectivity as a Biomarker of Longitudinal Changes in Former Athletes with Multiple Concussions.

Assessment of the Ministry of Education's Concussion Policy Implementation: Successes and Challenges in Ontario Schools, 2014-2018.

Depression, Anxiety and Quality of Life in Postconcussion Syndrome.

(Poster Presentation) Bicycling-Related Concussions Leading to Postconcussion Syndrome in Adults.

(Poster Presentation) Body Checking in Youth Ice Hockey as a Mechanisms of Concussion and Post-Concussion Syndrome.

(Poster Presentation) Supernormal Cerebrovascular Reactivity Following Acute Concussion.

The Canadian Heroes I have Known. 26th Annual Hall of Fame Induction, Canadian Disability Hall of Fame, Toronto, Nov 2019.

Awards/Honours:

The Brain Canada Foundation and the Barbara Turnbull Foundation for Spinal Cord Research initiated a new award in the field of Brain Injury and Spinal Injury called the Turnbull-Tator Award in Spinal Cord Injury and Concussion Research. Pink Concussions Award at the Provincial Level for unending passion and group efforts to pass Rowan's Law in Ontario.

2019 U of T Visiting Professor in Trauma & Tile Lecturer

The U of T Trauma Program was honored to host an expert in hospital –based violence intervention programs – Dr. Rochelle Dicker. Dr. Dicker is Vice Chair for Surgical Critical Care and Professor of Surgery at UCLA-Geffen School of Medicine, and Chair of the NNHVIP (The National Network of Hospital-based Violence Intervention Programs) Advisory Board.

On June 7th, 2019 she delivered a timely U of T Department of Surgery Tile (named after the renowned orthopedic surgeon Dr. Marvin Tile) lecture on the topic 'Closing the Revolving Door of Violence: Addressing Social Determinants of Health Through Hospital-Based Violence Intervention'. Professor Dicker spoke on the definition of the social determinants of health and described a 'trauma-informed approach' to violence prevention. Dr. Dicker met with team members developing local hospital based violence intervention programs from St. Michael's Hospital and Sunnybrook and shared her expertise. It was a privilege to have her as our 2019 Visiting Professor in Trauma.



THE U OF T TRAUMA PROGRAM AIMS TO PROVIDE LEADERSHIP IN THE DELIVERY OF SPECIALIZED CARE TO SEVERELY INJURED PATIENTS, INJURY RELATED RESEARCH, AND EDUCATION AND INJURY PREVENTION. PROVIDE COORDINATED PATIENT-FOCUSED CARE RECOMMENDATIONS IN CLOSE COLLABORATION WITH EMS, REFERRING INSTITUTIONS, AND FACILITIES PROVIDING PRE AND POST-ACUTE CARE









