



University of Toronto TRAUMA PROGRAM

Volume 4 :: 2017

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 The Hospital for Sick Children.

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 ACTIVITIES IN THE AREAS OF EDUCATION, QUALITY AND RESEARCH.

The Hospital for Sick Children Trauma Program

Article contributed by Dr. Suzanne Beno, Co-director of Trauma at Sick Children's Hospital



L to R: Dr. Suzanne Beno, Co-Director Trauma Program, Dr. Paul Wales, Co-Director Trauma Program, Dorothy McDowall, Trauma Patient Care Coordinator (HSC)

●●●● Trauma Clinical Director and Senior Manager

The Hospital for Sick Children is proud to announce and welcome both Ms. Linette Margallo into the role of Clinical Director for Trauma and Ms. Zahra Ismail as Senior Manager for the ED & Trauma Program. Linette has a long track record of commitment to the SickKids Trauma Program through her previous role as Senior Manager and Advance Nursing Practice Educator of the ED at SickKids, and we are thrilled to welcome Zahra and have her take on a new role overseeing trauma management in the ED. We look forward to their collaboration and enthusiasm in working to enhance our Trauma Program initiatives.

●●●● Quality Improvement in Pediatric Trauma

The SickKids Trauma Program in the last few years has been undertaking many Quality Improvement projects focusing on refining internal processes, which has combined nicely with the opening of our renovated Resuscitation/Trauma Room in June 2016. We have had a strategic focus on leadership and team dynamics, in addition to other crisis resource management skills and principles, through an active multidisciplinary hospital insitu team training simulation program specifically for trauma. Formal implementation and evaluation has occurred for protocols addressing Massive Hemorrhage, Airway Management, and Diagnostic Imaging. Future projects include incorporating tailored checklists into our trauma activations, and utilizing a standardized handover tool with pre-hospital providers.

●●●● Trauma Regionalization

Sick Kids is participating as one of three Lead Trauma Hospitals along with St. Michael's Hospital and Sunnybrook Health Sciences Centre in the Greater Toronto Area (GTA) Regional Trauma Network. Regional Trauma Networks (RTN) are being developed across Ontario utilizing a hub and spoke model amongst Lead Trauma Hospitals and the Regional hospitals and Community Partners within their catchment areas. Activities of the GTA RTN will include communication of best practices, expanding quality improvement and education initiatives, examination of transportation and referral practices in addition to addressing regional challenges as they arise. The goals of the RTN will support an effective, sustainable, and inclusive Ontario-wide regional trauma system of care from pre-injury to post-acute care, with an overall aim to reduce death and disability from major trauma.

In addition to Sick Kid's participation in the GTA RTN, it was determined there exists a specific need for an organized Pediatric Trauma System in Ontario. In partnership with the efforts of the Regional Trauma Networks being established across the province of Ontario, the Ontario Pediatric Lead Trauma Hospital Collaborative (PLTHC) was formed by the four Ontario centres that care for severely injured pediatric patients (Hamilton, London, Ottawa and Toronto). This collaborative aims to improve care, strengthen collaborations, augment education and research, and help prevent pediatric trauma to ultimately save lives and dollars associated with treatment and recovery.

●●●● Disaster Response

In light of recent and recurrent world events, SickKids has begun an intensive overhaul of its existing Code Orange policies and procedures, with our Trauma Program taking a leading role in collaborating locally, nationally and internationally to achieve a coordinated, efficient and effective response to mass casualty events. In 2016, Toronto hosted the World Disaster and Emergency Medicine Conference, and SickKids benefited from having personalized educational sessions from Dr. Jacob (Kobi) Peleg of Rambam Children's Hospital in Israel. This past October, SickKids staff attended the the U of T trauma conference featured Dr. Joey Ibrahim and Susan Ono from Orlando sharing their experience and valuable insights.

In November 2017, SickKids hosted a 3 day workshop dedicated to disaster readiness and Code Orange response, featuring a team of renowned experts in disaster management and trauma care from Israel (Dr. Miki Halberthal, Gila Hyams and Dr. Hany Bahouth), along with invited presentations from Montreal (Dr. Elene Khalil) and locally from Toronto (Dr. Laurie Mazurik).

●●●● Injury Prevention

SickKids is a strong leader in injury prevention through research, surveillance, education and advocacy. Recently, we have begun the process of centralizing injury prevention efforts within the hospital to combine the excellent efforts and contributions into one office. Our Trauma Program has been leading and collaborating on many projects such as the Toronto Helmet Initiative, and a formal environmental scan of the prevention activities occurring within the institution was undertaken this past summer as a first step towards achieving this aim. We hope, in addition to centralizing and collaborating both internally and externally, to house the information on our new trauma website (in progress) www.pediatrictrauma.ca. In addition, SickKids had the good fortune of hosting the 2016 University of Toronto Visiting Professor in Injury Prevention Symposium featuring Dr. Dennis Durbin from the Children's Hospital of Philadelphia, who addressed motor vehicle safety in children through his impressive and influential research and advocacy career.

Welcome to our Trauma Fellows

Markus Ziesmann completed a general surgery residency at the University of Manitoba in 2016 before moving to Toronto. He earned an MSC degree while in residency by validating a novel quantitative tool for measuring FAST ultrasound image quality, and has contributed to the development of the STARTT resuscitation course.

In 2016 he relocated to Toronto and is dual-enrolled in the Critical Care Medicine and Trauma and Acute Care Surgery fellowship streams. Markus and his wife Jennifer have two boys – Maxwell and Wilfrid – who love spending time in Toronto's parks, the Islands, and the Zoo.





Katherine McKendy was born and raised in Montreal, Quebec. After obtaining a Bachelor of Arts in English literature and Spanish at Middlebury College in Vermont in 2007, she returned to Montreal to pursue a career in medicine. She graduated from medical school at McGill University in 2011, and continued on there to complete her general surgery residency program. As a PGY-3, she enrolled in the Surgeon Scientist program funded by the prestigious Fonds de recherche en santé du Québec. During this time she completed a Masters of Education, as well as numerous research projects in the field of surgical education, with a focus on curriculum development and formative feedback.

Katherine completed her general surgery residency in 2017, and moved to Toronto to pursue a fellowship in Trauma and Acute care Surgery at the University of Toronto. When she finishes, she will be returning to Montreal to pursue another fellowship in Critical Care. In her spare time, she enjoys running, playing soccer and dancing Irish jigs.

2017 AWARDS, HONOURS & ACHIEVEMENTS

Najma Ahmed (SMH) is the recipient of the 2017 Award for Excellence in Postgraduate Medical Education in the category of Teaching Performance, Mentorship and Advocacy, which honours an individual who has demonstrated sustained commitment to postgraduate medical education.

Najma Ahmed has accepted the position of Vice-Chair of Education in the Department of Surgery, UofT effective January 1st 2017.

Najma Ahmed was promoted from Associate to Full Professor in the Department of Surgery at the University of Toronto.

Jenn Bowler (SHSC, Social Worker) and **Miranda Lamb** (SHSC, RN, Clinical Care Leader) in the Trauma, Emergency & Critical Care Program each won a 2017 Schulich Award which recognizes clinical excellence and honour the clinical work of individuals who demonstrate in their daily work the values of Sunnybrook Health Sciences Centre.

Fred Brenneman (SHSC) has accepted the position of General Surgery Program Director for the University of Toronto as of July 1st 2017.

Marc Jeschke (SHSC) received a Catalyst Grant by the Canadian Institutes of Health Research (CIHR) for his work entitled "Glucose control in burned patients: a multi-centre phase III prospective RCT".

Janna Di Pinto (SHSC, Social Worker, Trauma) was a nominee for the OBIA Hospital Social Worker of the year award.

Chung Ho Leung (SCH) was awarded the Runner-up Trainee Oral Presentation Award for this talk on "Feasibility of remote ischemic conditioning in posttraumatic hemorrhagic shock patients: a phase II randomized controlled trial at the Trauma Association of Canada Annual Scientific Meeting.

Stephanie Mason (Surgeon-Scientist Program) won the 1st Place, Clinical Research in the ACS Trauma resident paper competition for "Self-harm emergencies after major burn injury: A population based analysis".

Lorraine Tremblay (SHSC) has been appointed as President, Trauma Association of Canada for 2018-20. Her appointment as President is a recognition of her contributions to trauma care in Canada over the course of her career.

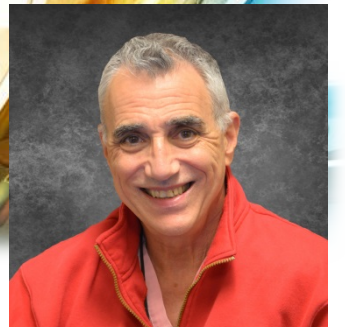
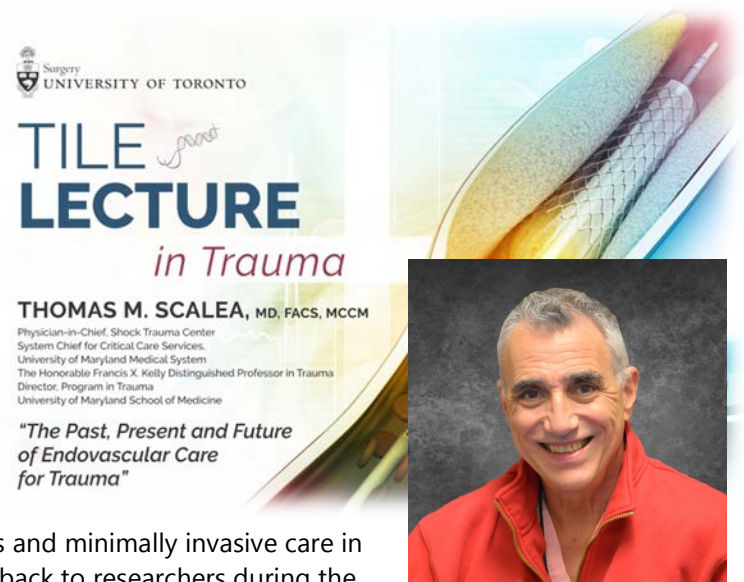
James Byrne (Surgeon-Scientist Program) was awarded best oral presentation at Gallie Day for his research entitled "The Relationship Between EMS Response Time and Prehospital Death from Motor Vehicle Crashes: Rural-urban disparities and implications for trauma system improvement" (Supervisors: A. Nathens/P. Karanicolas)

2017 Visiting Professors' & Events Wrap Up

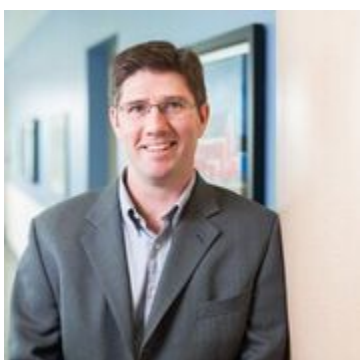
U of T Visiting Professor in Trauma & Tile Lecturer

The U of T Trauma Program was honored to host a globally recognized pioneer in advancing the field of shock and injury care - Dr. Thomas Scalea. He is the Physician-in-Chief at the R Adams Cowley Shock Trauma Center at the University of Maryland, the only freestanding trauma hospital in America. He was the first medical school endowed Professor of Trauma, when he was appointed the Honorable Senator Francis X. Kelly Distinguished Professor in Trauma Surgery. Dr. Scalea is also the System Chief for Critical Care Services at the University of Maryland Medical System.

On June 2nd, 2017 he delivered the U of T Department of Surgery Tile (named after the renowned orthopedic surgeon Dr. Marvin Tile) lecture on the topic of 'The past, present and future of endovascular care for Trauma' to a packed house. He emphasized the value of emerging technologies and minimally invasive care in trauma and shared research findings on REBOA indicating it's future potential. He then provided feedback to researchers during the annual UofT Trauma Program Research Symposium which covered topics such as clinical pathways for concussion, fibrinolysis, and self harm after burn injury. Dr. Scalea also participated in a City-Wide Journal Club exploring two recent high impact papers. All in attendance at these events appreciated learning from Dr. Scalea's expertise and it was a privilege to have him as our 2017 Visiting Professor in Trauma.



Visiting Professor in Injury Prevention



The University of Toronto Trauma Program, in conjunction with the Dr. Tom Pashby Sports Safety Foundation, hosted the annual Visiting Professor in Injury Prevention Symposium on March 28th, 2017 at the Li Ka Shing Knowledge Institute at St. Michael's Hospital.

Dr. Bob Pashby opened the event with a touching portrayal of his father, Dr. Tom Pashby's dedication to preventing injuries in ice hockey by mandating helmets and faceguards. Next Dr. Charles Tator spoke on the latest in concussion research. Dr. Brent Hagel, from the University of Calgary, was this year's Visiting Professor and spoke on the important topic of "Preventing Sport and Recreation Injuries in Children and Adolescents". Dr. Hagel is an Associate Professor in the Departments of Paediatrics and Community Health Sciences in the Cumming School of Medicine and Adjunct Professor in Kinesiology at the University of Calgary. He is the Department of Paediatrics Lead for Research Capacity Development and the Section Head of the Research Methods Team. The program continued with Dr. Bernard Lawless speaking on provincial injury prevention initiatives and Dr. Sarah Richmond, Liraz Fridman, and Dr. Angela Colantonio speaking on their research in injury prevention.

Interdisciplinary Trauma Conference

October 27th 2017 marked the 5th 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. Over 200 health care personnel including trauma expert nurses, allied health professionals, and first responders involved in trauma programs or emergency care from across the province attended.

This year's conference focused on Violence Close to Home; Intentional injuries in vulnerable populations. Our keynote speakers, Dr. Joseph Ibrahim and Ms. Susan Ono shared their experience caring for the victims of the Orlando Pulse Nightclub shooting one of the deadliest mass shootings in US history. The full spectrum of population health was explored beginning with an excellent talk from Dr. Emma Cory speaking on Suspected Child Abuse and Neglect, followed by Dr. Mark Sinyor discussing Youth Suicide and rounding out the age spectrum Dr. Camilla Wong gave an excellent case based presentation on Elder Abuse. Other important topics covered included the role of the police and other first responders at the scene and in the trauma bay, domestic violence, workplace violence, outcomes in burn patients, and homelessness and social determinants of health. Dr. Avery Nathens closed the conference with a focus on challenging decisions in trauma care.

Stop the Bleed – Save a Life



Sunnybrook is the first hospital in Canada to provide Stop the Bleed training, which is an initiative of the American College of Surgeons and the Hartford Consensus, which was designed to increase the survivability after a mass casualty event.

Massive bleeding from any cause, but particularly from an active shooter or explosive event where a response is delayed can result in death. Similar to how the general public learns and performs CPR, the public must learn proper bleeding control techniques, including how to use their hands, dressings, and tourniquets. Victims can quickly die from uncontrolled bleeding, within five to 10 minutes. By providing civilian bystanders the skills and basic tools to stop uncontrolled bleeding in an emergency situation, lives would be saved.

SAVE A LIFE

Led by Dr Avery Nathens, Medical Director of Trauma and Surgeon In-Chief, and Sharon Ramagnano Manager, Trauma Services at Sunnybrook Health Sciences Centre, they were able to receive instructor certification in Chicago in May 2017 along with 2 other members of the trauma team; Will Thomas-Boaz, Clinical Educator Emergency and Dr. Bourke Tillmann, Trauma Team Leader and ICU intensivist. They have now trained a total of 29 instructors that consists of Surgeons, Physicians, Nurses and EMS providers and they have developed a program to provide provider-training courses to the general public.

In August 2017 the group taught their first provider class to Toronto City Hall Special Events Staff and on Nov 20th 2017 they were able to train 160 Metrolinx staff at Sunnybrook Health Sciences Centre. They are actively communicating with other Toronto large venues to offer training to staff that may become first responders in the event of an incident. They have also started routine monthly courses on site at Sunnybrook. The Sunnybrook team will be offering an instructor class during the upcoming TAC conference in Toronto in Feb 2018. For more information about Stop the Bleed, please see www.bleedingcontrol.org

If you are interested in a provider course at Sunnybrook please see www.sunnybrook.ca/stopthebleed or contact the program at stopthebleed@sunnybrook.ca



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



St. Michael's



SickKids

