

NEUROSURGE

MONTHLY UPDATES FROM THE CHAIRMAN'S OFFICE UNIVERSITY OF TORONTO, DIVISION OF NEUROSURGERY

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FROM THE CHAIRMAN'S OFFICE

5th Annual Alan and Susan Hudson Lectureship

On November 7, Toronto Western Hospital hosted the 5th Annual Alan and Susan Hudson Lectureship. We were pleased to welcome this year's keynote speaker, Dr. Michael Apuzzo, Distinguished Adjunct Professor, Yale University School of Medicine. Dr. Apuzzo presented a highly unique and engaging lecture entitled "When Worlds Collide: Poseidon Meets Cushing", which paid homage to the Hudson's love of sailing. We thank Dr. Hudson (past Chairman of Neurosurgery, University of Toronto and past CEO, University Health Network) and Mrs. Hudson for enabling the establishment of this lecture, and Hudson Chair in Neurooncology Dr. Fred Gentili and Ms. Sandi Amaral for organizing a successful fifth iteration of this event.



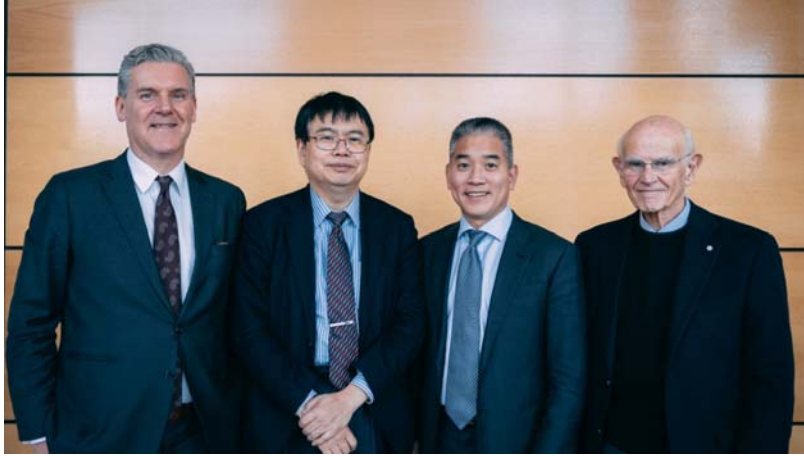
2019 Hudson Lectureship. (L-R) Dr. Andres Lozano, Dr. Alan Hudson, Mrs. Susan Hudson, Dr. Michael Apuzzo, Dr. Fred Gentili. Toronto, Nov. 7, 2019.



2019 Hudson Visiting Lecturer with Trainees. (Back row, L-R) Nebras Warsi, Kyle Juraschka, Spyros Karadimas, Han Yan, Anick Nater, Francois Mathieu, Armaan Malhotra, Husain Shakil, Hrishikesh Suresh, Karl Navacan. (Middle row, L-R) Ms. Sandi Amaral (Residency Program Administrator), Laureen Hachem, Justin Wang, Christopher Pasarikovski, Nardin Samuel, Ann Mansur, Vincent Ye. (Front row, L-R) Teresa Purzner, Shervin Taslimi, Dr. Michael Apuzzo, Deep Guha, Rabab Alsharani.

18th Annual Tator-Turnbull Symposium

On November 8, our Division held the 18th Annual Tator-Turnbull Spinal Cord Injury Symposium. The Tator-Turnbull Spinal Cord Injury Symposium is held each year to honour Dr. Charles Tator and Barbara Turnbull, who shared a special doctor-patient friendship. This symposium pays tribute to their enormous contribution, energy and drive in the area of spinal cord injury research and advocacy. Dr. Brian Kwon from the University of British Columbia was this year's Keynote Speaker and gave an excellent presentation titled "Bench to bedside and Back: Translational Research in Acute Spinal Cord Injury". The event also featured a special talk from Dr. Hideyuki Okano from Keio University (Japan) titled "Challenges Toward Clinical Trials for Spinal Cord Injury Using Stem Cells". In addition to a full day of talks, the 2019 Turnbull-Tator Award in Spinal Cord Injury and Concussion Research was presented to Brian Kwon during the event. Thank you to Dr. Michael Fehlings and his team for organizing another successful iteration of this event.



2019 Tator-Turnbull Symposium. (L-R) Drs. Michael Fehlings, Hideyuki Okano, Brian Kwon and Charles Tator. Toronto, Nov. 8, 2019. Photo credit: Twayne Pereira

Visiting Professor Dr. Walter Jean

On November 22, St. Michael's Hospital hosted Dr. Walter Jean, Professor of Neurosurgery and Director of Skull Base Surgery at George Washington University as a Visiting Professor at the Keenan Research Centre. He presented two enlightening lectures entitled "Global Brainsurgery Initiative: The Results of a Global Neurosurgery Experiment at One-Year" and "The Evolution of Pineal Surgery." We thank Dr. Julian Spears and his team for organizing this excellent event.



Dr. Walter Jean with Toronto Neurosurgery residents. (Back row, L-R) Jerry Ku, Armaan Malhotra, Jamie Purzner, Hrishikesh Suresh, Ann Mansur, Anick Nater, Shervin Taslimi, Husain Shakil, Deep Guha, Nebras Warsi, Spyros Karadimas. (Front row, L-R) Han Yan, Laureen Hachem, Dr. Walter Jean, Justin Wang, Nardin Samuel, Karl Navacan, and other attendees. Toronto, Nov. 22, 2019.

Michael Fehlings wins the 2019 Vilhelm Magnus Medal

On October 24th, Michael Fehlings was awarded the 2019 Vilhelm Magnus Medal in recognition of his contributions to the field of neurosurgery, in particular for his work on traumatic and non-traumatic forms of spinal cord injury. The medal was presented to Dr. Fehlings in Norway by the Norwegian Neurosurgical Society.



UoFT Brain Bank celebrates 5th Anniversary

Five years ago, Michael and Amira Dan established the Michael and Amira Dan Brain Tumour Bank Network – the largest initiative of its kind in the world. The Brain Bank stores samples and information allowing researchers to share information across the network. University of Toronto News wrote an article in celebration of the Brain Bank’s fifth anniversary. The piece can be accessed at:

<https://medicine.utoronto.ca/news/michael-and-amira-dan-brain-tumour-bank-network-marks-fifth-anniversary>



HONORS, GRANTS AND AWARDS

Andres Lozano was included on Web of Science Group’s list of the world’s most influential researchers for 2019, selected based on those who have been mostly frequently cited by their peers over the past decade. The list counts fewer than 0.1% of researchers across 21 fields – the distinction means that Dr. Lozano’s papers rank in the top 1% of publications in the category of Neuroscience and Behavior for the year.

Michael Fehlings received the 2019 Vilhelm Magnus Medal.

Michael Fehlings received a \$75,000 grant from the Cervical Spine Research Society for the work entitled “*Regeneration of Cervical Relay Circuits after Traumatic Spinal Cord Injury.*”

Trainees:



Jetan Badhiwala (PGY4; supervisor: Dr. Michael Fehlings) received the Best Operative Technique Award at the CNS in San Francisco for the work entitled “Early versus Late Surgical Decompression for Central Cord Syndrome: A Propensity Score-Matched Analysis.”



Newton Cho (PGY4; supervisor: Prof. Grégoire Courtine, EPFL, Geneva) received the Trainee Professional Development Award from the Society for Neuroscience.

Newton Cho (PGY4) was chosen to represent EPFL at the Global Young Scientists Summit 2020, taking place in January 2020 in Singapore.



Zamir Merali (PGY4; supervisor: Dr. Michael Fehlings) received the First Place Resident Fellow Award at the Cervical Spine Research Society (CSRS) 2019 Annual Meeting for the work entitled “A Deep Learning Model for Detection of Spinal Cord Compression in Magnetic Resonance Imaging Studies”.



Chris Pasarikovski (PGY4; supervisor: Dr. Victor Yang) received the Best Cerebrovascular Basic Science Award at the 2019 CNS Annual Meeting for the work entitled “Optical Coherence Tomography Imaging in Acute Ischemic Stroke: Preliminary Animal and Human Results.”



Jamie Wilson (Spine Fellow, Toronto Western Hospital) received a Cervical Spine Research Society Resident/Fellow Grant valued at \$15,000.

PUBLICATIONS

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VISITING PROFESSORSHIPS

Mojgan Hodaie was a Guest Speaker at the King's College London Neurosurgery Society's International Neurosurgery Conference. "Innovations in International Surgical Education - Learning, E-Learning and Micro-Learning." November 9, 2019. London, UK.

Mojgan Hodaie was a Course Instructor at the 2019 DBS International Academy. “Hardware Troubleshooting”. November 18- 22, 2019. Toronto, ON.

Suneil Kalia was a Course Instructor at the 2019 DBS International Academy. 1) “Targeting Procedures and Intra-operative Surgical Procedures (including wires tunnelling and frameless systems)” 2) “Surgical Adverse Event (risk factors and management)”. November 18- 22, 2019. Toronto, ON.

Gelareh Zadeh was a Keynote Speaker of the Annual Schatz Lecture at McMaster University’s Neurosciences Research Day. “Application of Methylation Signatures to Predict Outcome of Meningiomas.” November 1, 2019. Hamilton, Ontario.

Gelareh Zadeh, was an Invited Speaker at the Glasgow Neuro Conference at the Royal College of Physicians and Surgeons of Glasgow. “Application of Epigenetic Signatures to clinical care of Brain Tumor patients.” November 9, 2019. Glasgow, UK.

Gelareh Zadeh was the Course Coordinator for the Endoscopic Skull Base Surgery Course, Mount Sinai Hospital. November 15-16, 2019. Toronto, Ontario.

Gelareh Zadeh was an Invited Speaker at the Maitland Baldwin Memorial Lecture at the Queen’s University. “Application of Methylation Signatures to Predict Outcome of Meningiomas.” November 18, 2019. Kingston, Ontario.

Gelareh Zadeh was a Guest Speaker at the 38th Annual William Ersil Resident Research Day, Queen’s University. “Challenges and Opportunities of a Surgeon-Scientist.” November 18, 2019. Kingston, Ontario.

Gelareh Zadeh was Chair of the Sunrise Session at the 24th Annual Meeting of Society for Neuro-oncology (SNO). 1) “Clinical Trials in Meningiomas: Updates, ongoing and New Proposed Trials.” 2) She was also Moderator, “Concurrent Session 3A: Meningioma/Benign Tumors.” 3) She was Organizer and Chair of the Illumina Session, “Molecular Tumor Board.” 4) She was Chair of the Oxford University Press journal meeting for Neuro-oncology Advances. 5) “Chair and organizer of the International Consortium on Meningiomas.” November 23-4, 2019. Phoenix, Arizona.

Michael Fehlings was an Invited Speaker at the 18th Tator-Turnbull Spinal Cord Injury Symposium. “Regeneration of the Injured Spinal Cord. The Future is Now.” November 8, 2019. Toronto, Ontario.

Michael Fehlings was an Invited Speaker at the AMCICO Annual Congress of the Mexican Association of Spine Surgery. 1) “Prevention Management of Perioperative Neurological Complications in High Risk Spinal Surgery,” 2) “Degenerative Cervical Myelopathy. What is New? What is Hot?” 3) “Advances in Spinal Cord Injury – A Translational Update.” November 15-16, 2019. Cancun, Mexico.

Michael Fehlings was a Guest Lecturer at the Cervical Spine Research Society Annual Meeting. “Neck Pain Improvement after Operative Intervention in Patients with Degenerative Cervical Myelopathy: Results from an International Multicenter Ambispective Study of 664 Patients.” November 22, 2019. New York, NY, USA

Michael Fehlings was an Invited Speaker at the 14th German Spine Congress (DWG). 1) Keynote Speaker: “Biological Solutions in the Field of Spinal Cord Injury,” 2) “Machine learning, big data and artificial intelligence applications for cervical myelopathy or spine disease,” 3) “Digitization and Artificial Intelligence.” November 28-9, 2019. Munich, Germany.

Andres Lozano was a Visiting Professor at the University of California Los Angeles, Grand Rounds. 1) "Correcting Circuit Dysfunction in the Human Brain with Functional Neurosurgery"; 2) “The possible role of focused ultrasound in neurosurgery”. November 6, 2019. Los Angeles, California.

Andres Lozano was a Guest Faculty at the Boston Scientific Masters Debate. “Advance II Alzheimer Trial Update” November 12-13, 2019. Paris, France.

Andres Lozano was Course Director and Speaker at the 2019 DBS International Academy. 1) Breakout session: “Video of Live Surgery”; 2) “New Indications and the Future of DBS”. November 18- 22, 2019. Toronto, ON.

James Rutka was an Invited Speaker at the Wang Annual Meeting. 1) “Laser interstitial ablation of pediatric epileptic and brain tumour lesions,” 2) “How to write a scientific manuscript.” November 7-10, 2019. Shanghai, China.

Trainees:

Jetan Badhiwala was an Invited Speaker at the Annual Meeting of the Cervical Spine Research Society. 1) “Early Versus Late Surgical Decompression For Acute Spinal Cord Injury: A Pooled Analysis Of 1,548 Patients,” 2) “Early Versus Late Surgical Decompression For Central Cord Syndrome: A Propensity Score-Matched Analysis.” November 21-23, 2019. New York, NY.



IN THE MEDIA

Dr. Vitor Pereira (Division-affiliated Neuroscientist, Toronto Western Hospital) was featured by the CBC News about the first robot-assisted brain surgery performed on a live patient. The piece can be accessed at: <https://www.cbc.ca/news/canada/toronto/robotic-aneurysm-surgery-toronto-1.5348690>



PDFs OF THE MONTH

Diestro JDB, Spears J, Marotta TR. Developmental Venous Anomaly Inside a Glioblastoma. *JAMA Neurol.* 2019 Nov 11.

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UPCOMING MEETINGS

April 2020

American Association of Neurological Surgeons (AANS) 88th Annual Meeting. Boston, Massachusetts. Apr 25-29, 2020. <https://www.aans.org/Annual-Scientific-Meeting/2020>

May 2020

Society of Neurological Surgeons (SNS) 2020 Annual Meeting. Philadelphia, Pennsylvania. May 30-Jun 2, 2020. https://www.societyns.org/meeting_info.html

June 2020

Canadian Neurological Sciences Federation (CNSF) 55th Annual Congress. Banff, Alberta. Jun 7-10, 2020. <http://congress.cnsfederation.org/>

RESIDENTS' CORNER

The Department of Neurosurgery at Case Western Reserve University and University Hospitals in Cleveland, Ohio has a vacancy for a BE/BC spine-focused neurosurgeon. Contact Gabriel Smith, Clinical Director, at gabriel.smith@uhhospitals.org for more information and to apply.

Brain School Schedule & Events - thebrainschool.net

Dec 2019

Friday, December 6, 2019

Toronto Western Hospital, Main Auditorium, West Wing 2-401

0900-1200

Topic: Focused Ultrasound

- Ying Meng: FUS general concepts

- Ben Davidson: Clinical indications
- Nir Lipsman: Case Presentations

Friday, December 13, 2019

Toronto Western Hospital, West Wing 3-424

0900-1200

- Mojgan Hodaie: Pain
- Functional Block Exam
- Resident Meeting

RESIDENCY PROGRAM COMMITTEE MEETING

Monday, December 16, 2019, 7-8 a.m., TWH WW4-438 (library)

NEUROSURGERY CABINET MEETING

Monday, December 9, 2019, 6:30 p.m., venue T.B.A.