

NEUROSURGE

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

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FROM THE CHAIRMAN'S OFFICE

Major NIH Funding Award



Abhaya Kulkarni was awarded a \$9.6 million USD, 7-year National Institutes of Health grant for the work entitled "Endoscopic versus Shunt Treatment of Hydrocephalus in Infants (ESTHI)," a multicentre randomized trial to compare ETV + choroid plexus cauterization to VP shunt in infant hydrocephalus. Dr. Kulkarni is Co-Principal Investigator with Toronto alumnus John Kestle, and the project is being conducted with the Hydrocephalus Clinical Research Network. Congratulations, Abhaya!

2019 Ryman Prize

On October 4th, Michael Fehlings was awarded the 2019 Ryman Prize in recognition of his career dedicated to helping older people suffering from debilitating spinal problems. Dr Fehlings was presented with the prize by the Right Honourable Jacinda Ardern, Prime Minister of New Zealand, at a special ceremony in Auckland, New Zealand. The Ryman Prize is an annual \$250,000 international award for the best work carried out anywhere in the world that has enhanced quality of life for older people. It is the richest prize of its kind in the world and is considered the Nobel Prize of older adult research.



2019 Ryman Prize Ceremony. Dr. Fehlings and the Right Honourable Jacinda Ardern, Prime Minister of New Zealand, at the Ryman Prize Ceremony in Auckland, New Zealand. Oct. 4, 2019.

Perfect Teaching Scores

Gelareh Zadeh received a perfect 5.0 RATE resident teaching score at University Health Network for the one-year period of 2017-2018. A number of our city-wide Faculty received perfect 5.0 Teacher Effectiveness Scores (TES) for the three-year period from 2015-2018 at the University of Toronto Department of Surgery. These include James Drake (in the category of Non-Department of Surgery trainees), Mojgan Hodaie (clinical fellows), Suneil Kalia (clinical fellows), Abhaya Kulkarni (Division of Neurosurgery trainees), Andres Lozano (clinical fellows) and Farhad Pirouzmand (clinical fellows). These teachers scored a 5.0 in all seven categories in the TES evaluation for the 3-year period. Congratulations to all of these outstanding teachers in our Faculty!



HONORS, GRANTS AND AWARDS

Michael Fehlings was appointed as a Conference Co-Chair for the 35th Annual North American Spine Society Meeting to be held in San Diego, CA in October 2020.

Mojgan Hodaie and Gelareh Zadeh were honoured by the Iranian Women's Association of Ontario for their contributions to Canadian society, at the Association's 30th Anniversary Gala in October 2019.

Gelareh Zadeh has been nominated the Member of the International Advisory Board of World Federation of Neuro-Oncology Societies (WFNOS 2021) meeting in Seoul, Korea.

Trainees:



Anick Nater (PGY5; PhD supervisor: Dr. Michael Fehlings) received a North American Spine Society (NASS) Resident/Fellow Award.



Stefano Priola (Vascular/Endovascular Clinical Fellow, 2019-20, Sunnybrook Hospital) has been appointed as Assistant Professor at the Northern Ontario School of Medicine in Sudbury. Stefano has been with our Division since 2016-17, when he was a Neurooncology Clinical Fellow at Toronto Western Hospital. He subsequently completed two years as a General Neurosurgery Clinical Fellow at Sunnybrook Hospital (2017-2019). He has been a very welcome and integral part of the neurosurgery service there. Please join me in wishing Stefano the very best when he begins the next phase of his career in Sudbury later in 2020.

Sarasa Tohyama and Peter Hung (graduate students, Hodaie lab), organized and presented at the Society for Neuroscience meeting, Pain Imaging and Perception nanosymposium, Chicago Oct 2019. Peter was also awarded a trainee professional development award by SNfN.

PUBLICATIONS

Almeida JP, Stephens CC, Eschbacher JM, Felicella MM, Yuen KCJ, White WL, Mooney MA, Bernat AL, Mete O, Zadeh G, Gentili F, Little AS. Clinical, pathologic, and imaging characteristics of pituitary null cell adenomas as defined according to the 2017 World Health Organization criteria: a case series from two pituitary centers. *Pituitary*. 2019 Oct;22(5):514-519.

Almeida JP, Sanchez MM, Karekezi C, Warsi N, Fernández-Gajardo R, Panwar J, Mansouri A, Suppiah S, Nassiri F, Nejad R, Kucharczyk W, Ridout R, Joaquim AF, Gentili F, Zadeh G. Pituitary Apoplexy: Results of Surgical and Conservative Management Clinical Series and Review of the Literature. *World Neurosurg*. 2019 Oct;130:e988-e999.

Asha MJ, Takami H, Velasquez C, Oswari S, Almeida JP, Zadeh G, Gentili F. Long-term outcomes of transsphenoidal surgery for management of growth hormone-secreting adenomas: single-center results. *J Neurosurg*. 2019 Oct 11:1-11.

Badhiwala JH, Karmur BS, Hachem LD, Wilson JRF, Jiang F, Jaja B, Nouri A, Witiw CD, Nassiri F, Fehlings MG, Wilson JR. The Effect of Older Age on the Perioperative Outcomes of Spinal Fusion Surgery in Patients With Lumbar Degenerative Disc Disease With Spondylolisthesis: A Propensity Score-Matched Analysis. *Neurosurgery*. 2019 Oct 23. pii: nyz444.

Bally JF, Rohani M, Ruiz-Lopez M, Paramanandam V, Munhoz RP, Hodaie M, Kalia SK, Lozano AM, Burkhard PR, Poncet A, Fasano A. Patient-adjusted deep-brain stimulation programming is time saving in dystonia patients. *J Neurol*. 2019 Oct;266(10):2423-2429.

Boutet A, Rashid T, Hancu I, Elias GJB, Gramer RM, Germann J, Dimarzio M, Li B, Paramanandam V, Prasad S, Ranjan M, Coblenz A, Gwun D, Chow CT, Maciel R, Soh D, Fiveland E, Hodaie M, Kalia SK, Fasano A, Kucharczyk W, Pilitsis J, Lozano AM. Functional MRI Safety and Artifacts during Deep Brain Stimulation: Experience in 102 Patients. *Radiology*. 2019 Oct;293(1):174-183.

Chang WS, Nakajima M, Ochi A, Widjaja E, Rutka JT, Yau I, Baba S, Otsubo H. Detection of epileptogenic focus using advanced dynamic statistical parametric mapping with magnetoencephalography in a patient with MRI-negative focal cortical dysplasia type IIB. *J Neurosurg Pediatr*. 2019 Oct 11:1-5.

Davidson B, Schoen N, Sedighim S, Haldenby R, Dalziel B, Breitbart S, Fehlings D, Milo-Manson G, Narayanan UG, Drake JM, Ibrahim GM. Intrathecal baclofen versus selective dorsal rhizotomy for children with cerebral palsy who are nonambulant: a systematic review. *J Neurosurg Pediatr.* 2019 Oct 18:1-9.

Davidson B, Meng Y, Giacobbe P, Hamani C, Lipsman N. Magnetic Resonance-Guided Focused Ultrasound for Psychiatric Disorders. *Clin Pharmacol Ther.* 2019 Oct;106(4):720-722.

Davies B, Mowforth O, Sadler I, Aarabi B, Kwon B, Kurpad S, Harrop JS, Wilson JR, Grossman R, Fehlings MG, Kotter M. Recovery priorities in degenerative cervical myelopathy: a cross-sectional survey of an international, online community of patients. *BMJ Open.* 2019 Oct 10;9(10):e031486.

Davies JC, Chan HHL, Yao CMKL, Cusimano MD, Irish JC, Lee JM. Quantitative Analysis of Surgical Working Space During Endoscopic Skull Base Surgery. *J Neurol Surg B Skull Base.* 2019 Oct;80(5):469-473.

Davis AL, Hochstadter E, Daya T, Kulkarni AV, Wales P, Stephens D, Schuh S. The Base Deficit, International Normalized Ratio, and Glasgow Coma Scale (BIG) Score, and Functional Outcome at Hospital Discharge in Children With Traumatic Brain Injury. *Pediatr Crit Care Med.* 2019 Oct;20(10):970-979.

Furlan JC, Craven BC, Fehlings MG. Is there any gender or age-related discrepancy in the waiting time for each step in the surgical management of acute traumatic cervical spinal cord injury? *J Spinal Cord Med.* 2019 Oct;42(sup1):233-241.

Furlan JC, Craven BC, Fehlings MG. Sex-related discrepancies in the epidemiology, injury characteristics and outcomes after acute spine trauma: A retrospective cohort study. *J Spinal Cord Med.* 2019 Oct;42(sup1):10-20.

Hachem LD, Mothe AJ, Tator CH. Unlocking the Paradoxical Endogenous Stem Cell Response after Spinal Cord Injury. *Stem Cells.* 2019 Oct 24.

Johnson KA, Fletcher PT, Servello D, Bona A, Porta M, Ostrem JL, Bardinet E, Welter ML, Lozano AM, Baldermann JC, Kuhn J, Huys D, Foltynie T, Hariz M, Joyce EM, Zrinzo L, Kefalopoulou Z, Zhang JG, Meng FG, Zhang C, Ling Z, Xu X, Yu X, Smeets AY, Ackermans L, Visser-Vandewalle V, Mogilner AY, Pourfar MH, Almeida L, Gunduz A, Hu W, Foote KD, Okun MS, Butson CR. Image-based analysis and long-term clinical outcomes of deep brain stimulation for Tourette syndrome: a multisite study. *J Neurol Neurosurg Psychiatry.* 2019 Oct;90(10):1078-1090.

Juraschka K, Taylor MD. Medulloblastoma in the age of molecular subgroups: a review. *J Neurosurg Pediatr.* 2019 Oct 1;24(4):353-363.

Kalsi-Ryan S, Chan C, Verrier M, Curt A, Fehlings M, Bolliger M, Velstra IM; GRASSP Cross Sectional Study Team; GRASSP Longitudinal Study Team. The graded redefined assessment of strength sensibility and prehension version 2 (GV2): Psychometric properties. *J Spinal Cord Med.* 2019 Oct;42(sup1):149-157.

Mansouri A, Boutet A, Elias G, Germann J, Yan H, Babu H, Lozano AM, Valiante T. Lesion network mapping analysis identifies potential cause of post-operative depression in a case of cingulate low-grade glioma. *World Neurosurg.* 2019 Oct 10.

Maslink C, Cheng K, Smith TR, Das S. Advanced Age Is Not a Universal Predictor of Poorer Outcome in Patients Undergoing Neurosurgery. *World Neurosurg.* 2019 Oct;130:e375-e382.

McDonald PJ, Lau C, McCall IC, Lipsman N, Illes J. Regulatory oversights for implantable neurodevices. *Lancet Neurol.* 2019 Oct;18(10):913.

Meng Y, MacIntosh BJ, Shirzadi Z, Kiss A, Bethune A, Heyn C, Mithani K, Hamani C, Black SE, Hynynen K, Lipsman N. Resting state functional connectivity changes after MR-guided focused ultrasound mediated blood-brain barrier opening in patients with Alzheimer's disease. *Neuroimage.* 2019 Oct 15;200:275-280.

Milosevic L, Dallapiazza RF, Munhoz RP, Kalia SK, Popovic MR, Hutchison WD. Case Studies in Neuroscience: Lack of inhibitory synaptic plasticity in the substantia nigra pars reticulata of a patient with lithium-induced tremor. *J Neurophysiol.* 2019 Oct 1;122(4):1367-1372.

Milosevic L, Kalia SK, Hodaie M, Lozano A, Popovic MR, Hutchison W. Subthalamic suppression defines therapeutic threshold of deep brain stimulation in Parkinson's disease. *J Neurol Neurosurg Psychiatry.* 2019 Oct;90(10):1105-1108.

Morin O, Chen WC, Nassiri F, Susko M, Magill ST, Vasudevan HN, Wu A, Vallières M, Gennatas ED, Valdes G, Pekmezci M, Alcaide-Leon P, Choudhury A, Interian Y, Mortezaei S, Turgutlu K, Bush NAO, Solberg TD, Braunstein SE, Sneed PK, Perry A, Zadeh G, McDermott MW, Villanueva-Meyer JE, Raleigh DR.; Integrated models incorporating radiologic and radiomic features predict meningioma grade, local failure, and overall survival. *Neurooncol Adv.* 2019 May-Dec;1(1):vdz011. doi: 10.1093/nooncol/vdz011. Epub 2019 Aug 28.

Nguyen TK, Sahgal A, Detsky J, Soliman H, Myrehaug S, Tseng CL, Husain ZA, Carty A, Das S, Yang V, Lee Y, Sarfehnia A, Chugh BP, Yeboah C, Ruschin M. Single-Fraction Stereotactic Radiosurgery Versus Hippocampal-Avoidance Whole Brain Radiation Therapy for Patients With 10 to 30 Brain Metastases: A Dosimetric Analysis. *Int J Radiat Oncol Biol Phys.* 2019 Oct 1;105(2):394-399.

Nouri A, Patel K, Evans H, Saleh M, Kotter MRN, Heary RF, Tessitore E, Fehlings MG, Cheng JS. Demographics, presentation and symptoms of patients with Klippel-Feil syndrome: analysis of a global patient-reported registry. *Eur Spine J.* 2019 Oct;28(10):2257-2265.

Ovenden CD, Almeida JP, Oswari S, Gentili F. Pituitary abscess following endoscopic endonasal drainage of a suprasellar arachnoid cyst: Case report and review of the literature. *J Clin Neurosci.* 2019 Oct;68:322-328.

Punchak M, Mbabazi Kabachelor E, Ogwal M, Nalule E, Nalwoga J, Ssenyonga P, Mugamba J, Rattani A, Dewan MC, Kulkarni AV, Schiff SJ, Warf B. The Incidence of Postoperative Seizures Following Treatment of Postinfectious Hydrocephalus in Ugandan Infants: A Post Hoc Comparison of Endoscopic Treatment vs Shunt Placement in a Randomized Controlled Trial. *Neurosurgery.* 2019 Oct 1;85(4):E714-E721.

Ruiz-Lopez M, Munhoz RP, Kalia SK, Zorzi G, Nardocci N, Fasano A. Status dystonicus induced by deep brain stimulation surgery. *Neurol Sci.* 2019 Oct 18.

Saunders S, Killackey T, Kurahashi A, Walsh C, Wentlandt K, Lovrics E, Scott M, Mahtani R, Bernstein M, Howard M, Tanuseputro P, Goldman R, Zimmermann C, Aslakson RA, Isenberg SR. Palliative Care Transitions From Acute Care to Community-Based Care-A Systematic Review. *J Pain Symptom Manage.* 2019 Oct;58(4):721-734.e1.

Sharif-Alhoseini M, Azadmanjir Z, Sadeghi-Naini M, Ghodsi Z, Naghdi K, Mohammadzadeh M, AzarHomayoun A, Zendehtdel K, Khormali M, Sadeghian F, Jazayeri SB, Sehat M, Pirnejad H, Benzel EC, O'Reilly G, Fehlings MG, Vaccaro AR, Rahimi-Movaghar V. National Spinal Cord Injury Registry of Iran (NSCIR-IR) - a critical appraisal of its strengths and weaknesses. *Chin J Traumatol.* 2019 Oct;22(5):300-303.

Shuai S, Suzuki H, Diaz-Navarro A, Nadeu F, Kumar SA, Gutierrez-Fernandez A, Delgado J, Pinyol M, López-Otín C, Puente XS, Taylor MD, Campo E, Stein LD. The U1 spliceosomal RNA is recurrently mutated in multiple cancers. *Nature.* 2019 Oct 9.

Suzuki H, Kumar SA, Shuai S, Diaz-Navarro A, Gutierrez-Fernandez A, De Antonellis P, Cavalli FMG, Juraschka K, Farooq H, Shibahara I, Vladioiu MC, Zhang J, Abey Bandara N,

Przelicki D, Skowron P, Gauer N, Luu B, Daniels C, Wu X, Forget A, Momin A, Wang J, Dong W, Kim SK, Grajkowska WA, Jouvet A, Fèvre-Montange M, Garrè ML, Rao AAN, Giannini C, Kros JM, French PJ, Jabado N, Ng HK, Poon WS, Eberhart CG, Pollack IF, Olson JM, Weiss WA, Kumabe T, López-Aguilar E, Lach B, Massimino M, Van Meir EG, Rubin JB, Vibhakar R, Chambless LB, Kijima N, Klekner A, Bognár L, Chan JA, Faria CC, Ragoussis J, Pfister SM, Goldenberg A, Wechsler-Reya RJ, Bailey SD, Garzia L, Morrissy AS, Marra MA, Huang X, Malkin D, Ayrault O, Ramaswamy V, Puente XS, Calarco JA, Stein L, Taylor MD. Recurrent non-coding U1-snRNA mutations drive cryptic splicing in Shh medulloblastoma. *Nature*. 2019 Oct 9.

Tetreault L, Lange SF, Chotai S, Kryshtalskyj MT, Martin AR, Ahuja CS, Wilson JR, Davies BM, Nouri A, Devin C, Fehlings MG. A systematic review of definitions for neurological complications and disease progression in patients treated surgically for degenerative cervical myelopathy. *Spine*. 2019;44(18):1318-1331.

Tsang DS, Sarhan N, Ramaswamy V, Nobre L, Yee R, Taylor MD, Hawkins C, Bartels U, Huang A, Tabori U, Hodgson DC, Bouffet E, Laperriere N. Re-irradiation for children with recurrent medulloblastoma in Toronto, Canada: a 20-year experience. *J Neurooncol*. 2019 Oct;145(1):107-114.

Velásquez C, Mansouri S, Gutiérrez O, Mamatjan Y, Mollinedo P, Karimi S, Singh O, Terán N, Martino J, Zadeh G, Fernández-Luna JL; Hypoxia Can Induce Migration of Glioblastoma Cells Through a Methylation-Dependent Control of ODZ1 Gene Expression. *Front Oncol*. 2019 Oct 10;9:1036. doi: 10.3389/fonc.2019.01036. eCollection 2019.

Voisin MR, Almeida JP, Perez-Ordóñez B, Zadeh G; Recurrent Undifferentiated Carcinoma of the Sella in a Patient with Lynch Syndrome. *World Neurosurg*. 2019 Sep 3;132:219-222.

Wilson JRF, Badhiwala JH, Jiang F, Wilson JR, Kopjar B, Vaccaro AR, Fehlings MG. The Impact of Older Age on Functional Recovery and Quality of Life Outcomes after Surgical Decompression for Degenerative Cervical Myelopathy: Results from an Ambispective, Propensity-Matched Analysis from the CSM-NA and CSM-I International, Multi-Center Studies. *J Clin Med*. 2019 Oct 17;8(10).

VISITING PROFESSORSHIPS

Sunit Das was an Invited Speaker at the Christopher Davidson Forum, Washington University. “Targeting innate resistance in glioblastoma.” September 28, 2019. St. Louis, Missouri.

James Rutka was an Guest Faculty at the 2019 RUNN Course. “Modeling human brain tumors in worms, flies and fish.” October 29, 2019. Woods Hole, Massachusetts.

Abhaya Kulkarni was an Invited Lecturer at the European Association of Neurosurgical Societies (EANS) meeting. "ETV Masterclass: Comparing shunt and ETV outcomes for infant hydrocephalus." September 2019. Dublin, Ireland.

Andres Lozano was an Invited Speaker at the VI Congress of the Spanish Society of Functional and Stereotactic Neurosurgery (SENFE). 1) “Controversies in the Medical-Surgical Treatment of Parkinson's Disease”; 2) “Where are we heading in functional Neurosurgery?” Bilbao, Spain. Oct 2-4, 2019.

Andres Lozano was a Guest Faculty at the Boston Scientific DBS Academy. “DBS for cerebellar type tremors: DBS or FUS” Oct 16-17, 2019. Porto, Portugal.

Andres Lozano was an Invited Speaker at the Organization for Human Brain Mapping (OHBM) Symposium, 2019 Clinical Neuro-Societies Congress. “Ablation and blood brain barrier therapy with focused ultrasound”. Lausanne, Switzerland, Oct. 25, 2019.

Andres Lozano was a Guest Faculty. 2019 Research Update in Neuroscience for Neurosurgeons (RUNN) Course. “Issues in Neurosurgical Clinical Research”. Wood’s Hole, Massachusetts. Oct 31, 2019.

Michael Fehlings was the Keynote Speaker at the Spinal Cord Injury Symposium, University of Auckland. “Translational advances in the pathophysiology and treatment of traumatic and non-traumatic spinal cord injury: From molecule to man.” October 4, 2019. Auckland, New Zealand.

Michael Fehlings was an Invited Speaker at the The Rick Hansen Institute-Expert Consensus Conference. October 15, 2019. Niagara Falls, Ontario.

Michael Fehlings was a Guest Speaker at the National Spinal Cord Injury Conference. “Stem Cells for Spinal Cord Injury: The Hype and the Hope.” October 17, 2019. Niagara Falls, Ontario.

Michael Fehlings was a Course Chair at the Congress of Neurological Surgeons. “Spine Trauma and Spinal Cord Injury Symposium.” Dr. Fehlings also participated in the Academy Emerging Investigator Mentoring Program. October 19, 2019. San Francisco, California.

Michael Fehlings was a Guest Lecturer at the Society for Neuroscience. “Therapeutic Interventions for Nervous System Injury.” October 22, 2019. Chicago, Illinois.

Michael Fehlings was the Keynote Speaker at the Norwegian Neurosurgical Society Meeting. “Spinal Future Prospects.” October 24, 2019. Oslo, Norway.

Gelareh Zadeh was an Invited Speaker and Course Moderator at the 2019 Congress of Neurological Surgeons (CNS) annual meeting. 1) “Controversies: A conservative approach to

Low Grade Gliomas”; 2) (Moderator) “Section on Tumors 2: Emerging Concepts in the Management of Brain Metastases”. San Francisco, California. Oct 22-23, 2019.

Residents:

Nardin Samuel was a Guest Speaker at the CNS 2019 Annual Meeting. “A multicellular model of medulloblastoma suggests a microenvironment-driven phenotype.” October 19-23, 2019. San Francisco, California.

IN THE MEDIA



James Drake comments on the utility of surgical robots in an article by the Globe and Mail. The piece can be accessed at: <https://www.theglobeandmail.com/investing/globe-advisor/advisor-news/article-is-taking-a-bet-on-surgical-robotics-a-no-brainer/>



Michael Fehlings was interviewed by CBC News on his win of the Ryman Prize. The piece can be accessed at: <https://www.cbc.ca/radio/asithappens/as-it-happens-friday-edition-1.5308978/i-feel-very-honoured-by-this-canadian-neurosurgeon-wins-ryman-prize-for-spinal-cord-research-1.5309288>

PDFs OF THE MONTH

Badhiwala JH, Karmur BS, Hachem LD, Wilson JRF, Jiang F, Jaja B, Nouri A, Witiw CD, Nassiri F, Fehlings MG, Wilson JR. The Effect of Older Age on the Perioperative Outcomes of Spinal Fusion Surgery in Patients With Lumbar Degenerative Disc Disease With Spondylolisthesis: A Propensity Score-Matched Analysis. *Neurosurgery*. 2019 Oct 23. pii: nyz444.

Hachem LD, Mothe AJ, Tator CH. Unlocking the Paradoxical Endogenous Stem Cell Response after Spinal Cord Injury. *Stem Cells*. 2019 Oct 24.

Meng Y, MacIntosh BJ, Shirzadi Z, Kiss A, Bethune A, Heyn C, Mithani K, Hamani C, Black SE, Hynynen K, Lipsman N. Resting state functional connectivity changes after MR-guided focused ultrasound mediated blood-brain barrier opening in patients with Alzheimer's disease. *Neuroimage*. 2019 Oct 15;200:275-280.

Suzuki H, Kumar SA, Shuai S, Diaz-Navarro A, Gutierrez-Fernandez A, De Antonellis P, Cavalli FMG, Juraschka K, Farooq H, Shibahara I, Vladioiu MC, Zhang J, Abeysundara N, Przelicki D, Skowron P, Gauer N, Luu B, Daniels C, Wu X, Forget A, Momin A, Wang J, Dong W, Kim SK, Grajkowska WA, Jouvet A, Fèvre-Montange M, Garrè ML, Rao AAN, Giannini C, Kros JM, French PJ, Jabado N, Ng HK, Poon WS, Eberhart CG, Pollack IF, Olson JM, Weiss WA, Kumabe T, López-Aguilar E, Lach B, Massimino M, Van Meir EG, Rubin JB, Vibhakar R, Chambless LB, Kijima N, Klekner A, Bognár L, Chan JA, Faria CC, Ragoussis J, Pfister SM, Goldenberg A, Wechsler-Reya RJ, Bailey SD, Garzia L, Morrissy AS, Marra MA, Huang X, Malkin D, Ayrault O, Ramaswamy V, Puente XS, Calarco JA, Stein L, Taylor MD. Recurrent non-coding U1-snRNA mutations drive cryptic splicing in Shh medulloblastoma. *Nature*. 2019 Oct 9.

Wilson JRF, Badhiwala JH, Jiang F, Wilson JR, Kopjar B, Vaccaro AR, Fehlings MG. The Impact of Older Age on Functional Recovery and Quality of Life Outcomes after Surgical Decompression for Degenerative Cervical Myelopathy: Results from an Ambispective, Propensity-Matched Analysis from the CSM-NA and CSM-I International, Multi-Center Studies. *J Clin Med*. 2019 Oct 17;8(10).

UPCOMING MEETINGS AND EVENTS

November 2019

5th Annual Alan and Susan Hudson Lectureship. Keynote speaker: Dr. Michael Apuzzo, Distinguished Adjunct Professor, Department of Neurosurgery, Yale University School of Medicine. “When Worlds Collide: Poseidon Meets Cushing”. Toronto Western Hospital, Main Auditorium, West Wing 2-401. Thursday, November 7, 2019. 8-9 a.m.

18th Annual Tator-Turnbull Spinal Cord Injury Symposium. Keynote Speaker: Dr. Brian K. Kwon, Professor, Department of Orthopaedics, University of British Columbia. “Bench to Bedside and Back: Translational Research in Acute Spinal Cord Injury.” BMO Conference & Education Centre, Toronto Western Hospital. Friday, November 8, 2019. 11am-5pm.

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**Employment Opportunity**

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**Nov- Dec 2019****Friday, November 1, 2019**

Toronto Western Hospital, West Wing 3-424
0900-1200

Topic: Movement Disorders & Epilepsy
Teaching Faculty: Dr. Suneil Kalia and Taufik Valiante

Thursday, November 7, 2019

Toronto Western Hospital, Main Auditorium, West Wing 2-401
0800-0900

5th Annual Alan and Susan Hudson Lectureship



Guest Lecturer

Professor Michael Apuzzo, Distinguished Adjunct Professor, Department of Neurosurgery, Yale University School of Medicine, New Haven, CT

“When Worlds Collide: Poseidon Meets Cushing”

Friday, November 8, 2019

0845-1045 Brain School - TWH, Main Auditorium, West Wing 2-401



Guest Lecturer

Professor Michael Apuzzo, Distinguished Adjunct Professor, Department of Neurosurgery, Yale University School of Medicine, New Haven, CT

“NEXT 2020”

BREAK

1100-1700: **18th Annual Charles Tator-Barbara Turnbull Lectureship Series in Spinal Cord Injury**, TWH, BMO Education & Conference Centre



Keynote Speaker

Dr. Brian Kwon, Professor, Department of Orthopaedics, University of British Columbia

Full program details to follow soon

November 15-16, 2019

Resident Course: Endoscopic Skull Base Surgery Course

Course Coordination: *Gelareh Zadeh / Joao Paulo Almeida*

Guest Faculty: *Dr. Pablo Recinos, Director of Skull Base Surgery, Cleveland Clinic*

November 15-16, 2019

Surgical Skills Centre, Mount Sinai Hospital, Level 2, Room 250 Wet Lab

0730-1700

REGISTRATION: Course is limited to 10 spots and offered on first come basis. Due to the hands-on component of the course, preference will be given to intermediate and senior level residents (PGY3+) and must sign up to attend both days. PGY1-2 & fellows also invited to attend if spots are available and/or may join for lectures and observe dissections if the 10 placements are filled. ***Sign-up by October 25th to sandi.amaral@uhn.ca***

Friday, November 22, 2019

Toronto Western Hospital, Fell Pavilion 6-103

0900-1200

Topic: Pain
Teaching Faculty: Dr. Mojgan Hodaie

Friday, November 29, 2019

Toronto Western Hospital, West Wing 3-424

0900-1200

Topic: Pain
Teaching Faculty: Dr. Mojgan Hodaie

Friday, December 6, 2019

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

0900-1200

Topic: Focused Ultrasound

Nir Lipsman: Introduction to Focused Ultrasound: Current and Emerging Applications
Nir Lipsman: Case Presentations

Friday, December 13, 2019

Toronto Western Hospital, West Wing 3-424

0900-1200

Open Session/Review/Exam

RESIDENCY PROGRAM COMMITTEE MEETING

Monday, November 18, 2019, 7-8 a.m., TWH WW4-438 (library)

NEUROSURGERY CABINET MEETING

Tuesday, November 19, 2019, 7-8 a.m., TWH WW4-438 (library)