

13th Annual Ottawa Neurosurgery Review Course Schedule
8th - 15th February, 2025
Course Location – The Marconi Centre – 1026 Baseline Road, Ottawa

Saturday February 8th

07:00 – 07:40	Registration and Breakfast	
07:40 – 08:00	Introductory Remarks Q&A	Dr Safraz Mohammed Dr. Charles Agbi Dr. Fahad Alkherayf
08:00 – 08:40	Minimally Invasive Approaches in Spine Surgery: General Principles <ul style="list-style-type: none"> Describe the indications and contraindications for minimally invasive techniques in spinal surgery Discuss the role of technology in minimally invasive spine surgery Be able to describe the planning and placement of thoracolumbar pedicle screws using minimally invasive techniques 	Dr. Safraz Mohammed
08:50 – 09:30	Pineal Tumours <ul style="list-style-type: none"> Recognize different pathologies affecting the pineal region Identify the different diagnostic approaches for pineal tumours Discusses different surgical approaches to pineal region 	Dr. Fahad Alkherayf
09:40 – 10:20	Epidemiology, Genetics, Molecular Biology of Intracranial Aneurysms. Management of Unruptured Intracranial Aneurysms. <ul style="list-style-type: none"> List three genetic syndromes associated with the development of brain aneurysms List three molecules involved in the pathogenesis of aneurysms List three histological features of aneurysm formation Name three aneurysm features that can influence risk of rupture 	Dr. Alim Mitha
10:20 - 10:30	BREAK	
10:30 – 11:10	Surgical Management of Ruptured Intracranial Aneurysms <ul style="list-style-type: none"> To describe the rationale for the treatment of ruptured and unruptured aneurysms Select the appropriate therapeutic strategy(ies) for the treatment of an aneurysm To describe the risks associated with the treatment and therapeutic measures to minimize such risks Describe the rationale for a multidisciplinary approach to the management of aneurysms 	Dr. Alim Mitha
11:10- 11:50	Chordomas and Chondrosarcomas: Current Management <ul style="list-style-type: none"> Describe the pathological differences between chordomas and chondrosarcomas Describe the role of multi-disciplinary care in the treatment of chordomas and chondrosarcomas Discuss the oncologic surgical principles for resection of chordomas and chondrosarcomas List and describe options for surgical management of skull base chordomas and chondrosarcomas 	Dr. Idara Edem
11:50- 12:30	Functional neurosurgery <ul style="list-style-type: none"> Anatomy & Physiology of the Basal Ganglia, Limbic System and Cerebellum To illustrate and draw anatomy of the limbic system including connections of hippocampal formation, Papez circuit, amygdala; and their role in memory, emotion & neurosurgery 	Dr. Zelma Kiss
12:30-13:40	LUNCH	

13:40- 15:00	HOT SEAT Sessions <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Alim Mitha
15:00 –15:20	BREAK	
15:20 – 16:00	Endovascular Treatment Options for Ruptured Intracranial Aneurysms <ul style="list-style-type: none"> Discuss the scientific basis for choosing treatment options for ruptured aneurysms List three different endovascular techniques for ruptured aneurysms Discuss commonly used adjuvant techniques for dealing with complex aneurysms Describe a grading system for measuring treatment outcomes and the implications 	Dr. Gwynedd Pickett
16:00 – 16:40	Pathophysiology, Diagnosis and Management of Cerebral Vasospasm Following this lecture, learners will be able to: <ul style="list-style-type: none"> Select and correctly interpret appropriate investigations in the management of delayed neurological deterioration post-SAH. List risk factors for cerebral vasospasm and describe epidemiology and outcomes. Describe current understanding of pathophysiology of vasospasm post-SAH. Choose appropriate therapy for management of cerebral vasospasm. 	Dr. Gwynedd Pickett
16:40 – 17:30	Vestibular and other schwannomas, Glomus tumors. What you should know <ul style="list-style-type: none"> Describe the epidemiology and molecular biology of vestibular schwannomas and glomus tumours (including latest thinking) Enumerate the preop investigations and treatment options for these lesions Describe the surgical approaches to the treatment of these lesions and their outcomes 	Dr Galareh Zadeh
17:30- 17:40	BREAK	
17:40 – 18:20	Case Presentations <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Galareh Zadeh

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Sunday February 9th

07:20 – 08:00	Breakfast	
08:00 – 08:40	Pathology of Non-Glial Tumours of the CNS <ul style="list-style-type: none"> Recognize the key macroscopical and histological features of the most frequent extra-axial tumor, peripheral nervous system tumors and pituitary tumors. Identify the key morphological elements supporting the WHO classification and grading of the entities presented 	Dr. Gerard Jansen
08:40 – 09:20	Pathology of Intrinsic Primary Tumours of the CNS <ul style="list-style-type: none"> Discuss the new integrated diagnosis in use for Astrocytic and Oligodendroglial tumours. To be able to identify the role ATRX, and IDH mutation results play in classification of gliomas 	Dr. Gerard Jansen
09:20 – 09:30	Pathology – Spot diagnosis <ul style="list-style-type: none"> Identify the imaging and pathological findings of common neurosurgical cases. 	Dr. Gerard Jansen
09:40 – 10:20	Surgery for Malignant Primary Brain Tumours <ul style="list-style-type: none"> Describe dynamics of glial tumour growths and infiltration, and the role of surgery in negating these phenomenon's To better define the role of surgery in assisting adjuvant treatment and impacting clinical surrogates in relation to molecular subtyping Identify the role and impact of technological advancements in assisting gross total resection, and their impact on clinical surrogates. 	Dr. David Fortin
10:20 -10:30	BREAK	
10:30 – 11:10	Craniopharyngiomas <ul style="list-style-type: none"> Be able to describe the embryology and epidemiology of craniopharyngioma List the common symptoms and signs, and imaging features List the surgical approaches and be able to describe the details of two (2) common approaches Discuss the prognosis and outcome of this condition 	Dr. Fahad AlKherayf
11:10- 11:50	Imaging Techniques for Intra-Axial Brain Tumours <ul style="list-style-type: none"> Review advanced imaging techniques for intra-axial tumours Brief primer on MRI sequences Recognize imaging patterns of CNS neoplasms and mimicking diseases Recognize the radiological features of radiation necrosis and tumor recurrence 	Dr. Thanh Nguyen
11:50- 12:20	Imaging Techniques for Extra-Axial Brain Tumours <ul style="list-style-type: none"> Review advanced imaging techniques for extra-axial tumours Be able to identify different extra-axial tumours on radiological images 	Dr. Thanh Nguyen
12:20-12:30	Imaging – Spot diagnosis cases <ul style="list-style-type: none"> Identify the imaging and pathological findings of common neurosurgical cases. 	Dr. Thanh Nguyen
12:30-13:40	LUNCH	

13:40- 15:00	HOT SEAT SESSION <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. David Fortin/Dr. Joe Megyesi
15:00 –15:20	BREAK	
15:20 – 16:00	Case Presentations <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Paul Kongkham
16:00 – 16:40	Management Options for Low Grade Gliomas: What's New? <ul style="list-style-type: none"> Be able to explain the pathology and basic molecular biology of low- grade gliomas and what distinguishes them from high grade gliomas. Be able to describe the typical presentation of patients with low grade glioma. Be able to interpret the neuro-imaging of patients with low grade glioma. Be able to discuss the controversies surrounding the management of patients with a low- grade glioma including the early surgery approach versus the watchful waiting approach. 	Dr. Joe Megyesi
16:40 – 17:30	Brain Metastases <ul style="list-style-type: none"> Enumerate the currently available treatment options for metastatic brain tumours Discuss the relative advantages and disadvantages of each treatment option/combination Discuss the available evidence supporting currently employed the treatment option Discuss the current guidelines for treatment of these lesions 	Dr Paul Kongkham
17:40 – 18:20	Spinal Cord and Peripheral Nerve Tumours <ul style="list-style-type: none"> Demonstrate competency in the classification, imaging characteristics, surgical extirpation and differential diagnosis of intramedullary spinal cord tumors Demonstrate competency in the classification, imaging characteristics, surgical removal of peripheral nerve sheath tumors Develop a standardized protocol for answering neurosurgical oral board questions 	Dr. Dr. Allan Levi

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Monday February 10th

07:20 – 08:00	Breakfast	
08:00 – 08:40	Imaging of Spine and Spinal Tumors <ul style="list-style-type: none"> • Review the key imaging features of common and infrequent intramedullary tumors. • Discuss the role of conventional and advanced imaging techniques in the diagnosis and management of these tumors • Assess the most common intradural – extramedullary tumors 	Dr. Vered Tsehmaister-Abitbul
08:40 – 09:20	Imaging of the Spine II - Neoplastic	Dr Nader Zakhari
09:20 – 09:30	Spine Imaging Spot diagnosis <ul style="list-style-type: none"> • Identify the imaging and pathological findings of common neurosurgical cases. 	Dr Nader Zakhari
09:40 – 10:20	Movement Disorders: Pathophysiology and Surgical Management with DBS <ul style="list-style-type: none"> • List the pathological and molecular differences between neurodegenerative diseases including movement disorders, motor neuron disorders and cognitive disorders • Explain the importance of non-motor features of Parkinson's Disease and provide examples of each • Review the targets for neuromodulation (eg. DBS) in the basal ganglia for the treatment of movement disorders Describe the technical steps and surgical nuances of DBS 	Dr. Suneil Kalia
10:20 - 10:30	BREAK	
10:30 – 11:10	Classification and Management of lumbar Spondylolisthesis <ul style="list-style-type: none"> • Classification of lumbar spondylolisthesis in relation to treatment options and outcomes. • Decision making in the management of thoracolumbar injuries • Enumerate treatment options • Describe the elements of surgical treatment 	Dr Carlo Santaguida
11:10- 11:50	Vascular/Cranial Surgical Case Presentations	Dr. Max Findlay
11:50- 12:20	Lecture on exam preparation, the written exam, OSCE	Dr. Max Findlay
12:20 – 12:30	Resident Perspective – Exam Prep	Dr. Alick Wang
12:30-13:40	LUNCH	
13:40- 15:00	HOT SEAT SESSION <ul style="list-style-type: none"> • Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Carlo Santaguida/Dr. Max Findlay
15:00 –15:20	BREAK	
15:20 – 16:00	Subaxial Cervical Spine Injuries <ul style="list-style-type: none"> • Be able to accurately diagnose subaxial cervical spine injuries. • Recognize importance and use of different classification systems for subaxial cervical spine injuries • Select appropriate management options for subaxial cervical spine injuries 	Dr. Daipayan Guha

16:00 – 16:40	O-C1-C2 <ul style="list-style-type: none"> • To be able to identify the various types of C1/C2 injuries and describe the management options for each type • Identify common pitfalls in the written and oral exams and how to avoid them, using clinical examples 	Dr. Eugene Wai
16:40 – 17:30	Carotid Endarterectomy: What You Should Know <ul style="list-style-type: none"> • To be able to list the clinical indications for extracranial carotid artery reconstruction. • Be able to discuss the importance of timing of carotid artery reconstruction • Be able to describe the current Canadian Guidelines regarding carotid artery reconstruction 	Dr. Howard J Lesiuk
17:30- 17:40	BREAK	
17:40 – 18:20	Stereotactic Radiosurgery Primer for Neurosurgeons <ul style="list-style-type: none"> • Define the concept of stereotactic radiosurgery • Explain basic radiobiology principles related to radiosurgery • Identify the role of radiosurgery in the management of common neurosurgical conditions: <ol style="list-style-type: none"> 1. brain metastases 2. meningiomas 3. vestibular schwannomas 4. AVMs 5. Trigeminal neuralgia 	Dr. Amit Persad

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Tuesday February 11th

07:20 – 08:00	Breakfast	
08:00 – 08:40	Neuroanesthesia <ul style="list-style-type: none"> • Be able to decide the technique of anesthesia for brain mapping procedures and those requiring intraoperative neurophysiological monitoring. • Be able to discuss the options available for postoperative pain management. • List the common anaesthetic agents utilized in neurosurgery and their indications and relative merits 	Dr. Adele Budiansky
08:50 – 09:30	Pituitary tumors: The Endocrinologist’s Perspective on Diagnosis and Management <ul style="list-style-type: none"> • To identify the clinical and laboratory findings important in the initial work-up and follow-up of patients with pituitary adenomas Interactive Case-based Seminar	Dr. Heather Lochnan
09:40 – 10:20	Cranial Meningiomas I <ul style="list-style-type: none"> • Be able to identify the key anatomical structures in the management of cranial meningiomas • Be able to decide which surgical approach is optimal for the presenting lesion • Be able to express the safety measure to undertake for surgical procedures in meningioma surgery 	Dr. Kesh Reddy
10:20 -10:30	BREAK	
10:30 – 11:10	Skull Base and Posterior Fossa Meningiomas <ul style="list-style-type: none"> • Be able to identify the key anatomical structures in the posterior cranial fossa and along the anterior and middle skull base • Be able to decide which surgical approach is optimal for the presenting lesion • Be able to express the safety measure to undertake for surgical procedures in the posterior cranial fossa 	Dr. Kesh Reddy
11:10- 11:50	Surgical Management of Pituitary Tumours/ Sellar/Suprasellar Lesions <ul style="list-style-type: none"> • Identify the indications for surgery in pituitary tumours • Enumerate the surgical options and their rationales • Describe the transnasal endoscopic removal of pituitary lesions • Discuss the outcomes including challenges and complications 	Dr. Charles Agbi
11:50-12:30	<ul style="list-style-type: none"> • Cranial Nerves: Review I & II • Describe the central connections of cranial nerves, I, III, IV, V & VI • Discuss the clinical aspects of the neurophysiology • Discuss the surgical significance of their course and distribution • List surgical lesions associated with these nerves 	Dr. Charles Agbi
12:30-13:40	LUNCH	
13:40- 15:00	HOT SEAT SESSION <ul style="list-style-type: none"> • Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Kesh Reddy/ Dr. Fahad Alkherayf

15:00 –15:20	BREAK	
15:20 – 16:00	Spontaneous Intracerebral Haemorrhage: What’s New <ul style="list-style-type: none"> • Describe the pathophysiology of hematoma expansion, hemodynamics & hemostasis • List and discuss the indications for ICH surgery • List the steps utilized in preventing complications of ICH 	Dr. Dar Dowlatshahi
16:00 – 16:40	Radiotherapy for CNS Tumours – Current Concepts <ul style="list-style-type: none"> • discuss when radiation therapy is indicated for various benign and malignant tumors • describe radiation therapy approaches for malignant gliomas • define the current radiation therapy techniques • list the indications of stereotactic radiation/radiosurgery 	Dr. Vimoj Nair
16:40 – 17:30	Chemotherapy for CNS Tumours – Current Concepts <ul style="list-style-type: none"> • Attendees will be able to apply existing literature to decisions about systemic therapy for patients with primary brain tumours. 	Dr. Garth Nicholas
17:30- 18:00	BREAK	
18:00	Resident Social - Dinner	

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Wednesday February 12th

07:20 – 08:00	Breakfast	
08:00 – 08:40	Case Presentations I – Cranial and Spinal Angiogram anatomy (normal and pathological) with Cases <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Lissa Peeling
08:50 – 09:30	Case Presentations II – Cranial and Spinal Angiogram anatomy (normal and pathological) with Cases <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Lissa Peeling
09:40 – 10:20	Vascular Malformations of the Brain and Spinal Cord: AVM's and DAVF's I <ul style="list-style-type: none"> Discuss the epidemiology and clinical features of AVM's Describe the surgical treatments of a ruptured AVM Describe the classification and treatment options for AVM's 	Dr. Julian Spears
10:20 - 10:30	BREAK	
10:30 – 11:10	Vascular Malformations of the Brain and Spinal Cord: AVM's and DAVF's II <ul style="list-style-type: none"> Discuss the epidemiology and clinical features of AVM's Describe the surgical treatments of a ruptured AVM Describe the classification and treatment options for AVM's 	Dr. Julian Spears
11:10 – 11:50	Intraoperative Neurophysiological Monitoring I <ul style="list-style-type: none"> Describe intraoperative neurophysiological monitoring ((IONM) techniques and their usefulness. Describe neurophysiological mapping techniques and their usefulness. Describe the limitations of IONM and neurophysiological mapping 	Dr. Susan Morris
11:50 – 12:30	Intraoperative Neurophysiological Monitoring II <ul style="list-style-type: none"> Compare and contrast the strengths, weaknesses and overall usefulness of the two primary modalities used in intraoperative neurophysiological monitoring (IONM): 1. Somatosensory Evoked Potentials (SSEPs) and 2. Transcranial Motor Evoked Potentials (TcMEPs). Compare and contrast TcMEPs and D-wave potentials with specific reference to spinal cord tumour resection surgery. Choose the intraoperative neurophysiological <i>monitoring</i> and/or <i>mapping</i> modalities you would employ during the below listed procedures and clearly state the rationale for your choice(s): Spine deformity correction 	Dr. Susan Morris
12:30 – 13:40	LUNCH	
13:40 – 14:20	Neuromodulation for Pain At the end of this session, participants should be able to <ul style="list-style-type: none"> Describe and draw the pain pathways, Discuss the role of surgery in pain modulation List the currently available techniques for pain modulation including their indications and limitation Discuss the physiological basis for the common pain modulation techniques utilized by neurosurgeons 	Dr. Alan Chalil

14:20 – 15:00	Critical Care Management of TBI: What Should We Measure, When and Why <ul style="list-style-type: none"> • Describe the patient population that may benefit from monitoring • Demonstrate the physiologic processes we can measure • Review the role and key measures of monitoring in ICU management of TBI <ul style="list-style-type: none"> ○ ICP monitoring ○ CPP • Cerebrovascular Autoregulation.. 	Dr. Shane English
15:00 – 15:20	BREAK	
15:20 – 16:40	HOT SEAT SESSION <ul style="list-style-type: none"> • Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Safraz Mohammed and Dr. Charles Agbi
16:40 – 17:30	Stroke Update: Acute Medical and Interventional Neuroradiology Management <ul style="list-style-type: none"> • Examine a case study of a stroke patient and determine treatment options. • Relate the importance of neurological examination in hyperacute stroke management. 	Dr. Robert Fahed
17:40 – 18:20	Case Presentations <ul style="list-style-type: none"> • Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Jessica Rabski

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Thursday February 13th

07:20 – 08:00	Breakfast	
08:00 – 08:40	Spinal Biomechanics, Decision Making and surgical Options in Degenerative Spine Disease <ul style="list-style-type: none"> Define the concept of spinal stability and sagittal balance Describe “pelvic parameters” in clinical practice Describe surgical techniques for correcting deformity 	Dr. Sean Christie
08:50 – 09:30	Cervical Spondylosis: Diagnosis and Management <ul style="list-style-type: none"> Define cervical spondylotic myelopathy, including anatomical changes and pathophysiology Describe the indications for surgery Describe surgical options and provide relative indications for each 	Dr Sean Christie
09:40 – 10:20	Surgery for Epilepsy: What You Should Know <ul style="list-style-type: none"> Explain indications for the surgical treatment of epilepsy Review surgical anatomy relevant to temporal lobe epilepsy Know the definition of medically refractory epilepsy Review basic work-up of epilepsy patients, including neuropsychology evaluations 	Dr. David Clarke
10:20 -10:30	BREAK	
10:30 – 11:10	Epilepsy Case Discussions <ul style="list-style-type: none"> To understand the social and personal impact of uncontrolled epilepsy To be able to identify a good candidate for surgical treatment of their epilepsy. To know the common surgical options for investigation and treatment of medically refractory epilepsy 	Dr. David Clarke
11:10- 11:50	Management of Peripheral Nerve Entrapment Peripheral Nerve Entrapment Syndrome <ul style="list-style-type: none"> Have a basic understanding of and be able to describe the clinical features and pathophysiology of non-surgical peripheral nerve and muscle diseases involved in the differential diagnosis of neurosurgical conditions or requiring nerve and/or muscle biopsy. Describe the pathology and pathophysiology of peripheral nerve 	Dr Suganth Suppiah
11:50- 12:30	Management of Peripheral Nerve Injuries <ul style="list-style-type: none"> Describe the pathophysiology of peripheral nerve injuries Classify these injuries Describe the causes, clinical features and epidemiology Discuss a logical approach to their management 	Dr. Line Jacques / Dr Andrew Jack
12:30-13:40	LUNCH	
13:40- 15:00	HOT SEAT SESSION <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Line Jacques / Dr Andrew Jack
15:00 –15:20	BREAK	
15:20- 16:00	Case discussions – Peripheral nerve tumors, approaches, work up and management <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Line Jacques / Dr Andrew Jack

16:00 – 16:40	Classification and Management of Thoracolumbar Injuries <ul style="list-style-type: none"> • Practical classification of thoracolumbar injuries in relation to treatment options and outcomes • Decision making in the management of thoracolumbar injuries • Enumerate treatment options • Describe the elements of surgical treatment. 	Dr. Scott Paquette
16:40 – 17:30	Pediatric Brain Tumors I <ul style="list-style-type: none"> • Discuss the presenting signs of a brain tumor- different childhood age groups; diagnostic workup • Identify/ classify more common brain tumors found in children; develop an appropriate Dx for a newly presenting pediatric brain tumor-WHO Classification has been updated in 2016 • Describe differences between adults and children in terms of types of tumors and planning surgery <p>Feel Confident at the Royal College Exam, if you get a question</p>	Dr. Ziyad Makoshi
17:30- 17:40	BREAK	
17:40 – 18:20	Pediatric Brain Tumors II Case based presentation <ul style="list-style-type: none"> • Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Ziyad Makoshi

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Friday February 14th

07:20 – 08:00	Breakfast	
08:00 – 08:40	Spinal Cord Injury: Clinical considerations <ul style="list-style-type: none"> Recall the cornerstones for the treatment of acute spinal cord injury Explain the evidence behind therapeutic strategies for spinal cord injury Outline priorities of spinal cord injury in the emergency setting 	Dr. John Hurlbert
08:50 – 09:30	The Visual Pathways I <ul style="list-style-type: none"> Describe the anatomy of the visual pathways including the main connections Describe the main clinical conditions associated with dysfunction in the visual pathways Discuss illustrative cases with visual pathway conditions 	Dr. Vivek Patel
09:40 – 10:20	The Visual Pathways II <ul style="list-style-type: none"> Describe the anatomy of the visual pathways including the main connections Describe the main clinical conditions associated with dysfunction in the visual pathways Discuss illustrative cases with visual pathway conditions 	Dr. Vivek Patel
10:20 -10:30	BREAK	
10:30 – 11:10	Childhood Hydrocephalus: Contemporary Management Objectives: <ul style="list-style-type: none"> At the end of the presentation, participants will be able to Apply pathophysiological principles to determine the appropriate options for the management of hydrocephalus in the pediatric age group Utilize the results of clinical trials and registries to guide decision making Recognize the various clinical presentation of treatment failure 	Dr. Femi Ajani
11:10- 11:50	Spinal Dysraphism and Tethered Cord Syndrome <ol style="list-style-type: none"> To recognize and identify the following pediatric spine malformations Spinal Dysraphism Tethered Cord Syndrome Split Cord Syndrome To explain the surgical management for the above. 	Dr. Albert Tu
11:50- 12:30	Case discussions <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Femi Ajani/Dr. Albert Tu
12:30-13:40	LUNCH	
13:40- 15:00	HOT SEAT SESSION <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr. Albert Tu/Dr. Blake Yarascavitch
15:00 –15:20	BREAK	
15:20 – 16:00	Case Presentations – Pediatric Spine and Other cases <ul style="list-style-type: none"> Describe and explain the diagnosis, investigation, and management of common neurosurgical cases 	Dr Blake Yarascavitch

16:00 – 16:40	Craniosynostosis and Craniofacial Anomalies <ul style="list-style-type: none"> • Be able to list the main categories of craniosynostosis • Be able to list the common syndromic types of congenital craniofacial anomalies and their distinguishing features • Be able to discuss timing and surgical decision making in the management of craniofacial anomalies and craniosynostosis • Be able to describe an operation for craniosynostosis 	Dr. David McAuley
16:40 – 17:30	Chiari malformation and syringomyelia <ul style="list-style-type: none"> • Describe the definition and classification of “Chiari Malformations” • Describe Syringomyelia • Explain the association of Chiari I malformation and Syringomyelia and the pathophysiological theories explaining this. • Choose appropriate therapy of Chiari I malformation with or without syringomyelia 	Dr. Jay Riva-Cambrin
17:30- 17:40	BREAK	
17:40 – 18:20	Pediatric Functional Neurosurgery <ul style="list-style-type: none"> • Describe the definition, classification and management of Epilepsy • Explain the pathophysiology of Spasticity and management principles • Describe modalities of pain management in children 	Dr. Jay Riva-Cambrin
18:20	Closing remarks and wrap up	Dr. Fahad Alkherayf Dr. Charles Agbi Dr Safraz Mohammed