

## WFNS2022 | PRE-CONGRESS COURSES

13/03/2022

### 07:30 - 09:40 PRE-CONGRESS COURSE Global Neuro Course - Neurotrauma I

**Room BC** **Moderators:** *Rubiano, Andrés*  
*Paiva, Wellingson*

7:30 - 08:00 Introduction and Objectives

*Andrew Reisner (United States)*

8:00 - 08:20 Global Neurotrauma MAP: Providers & Resources

*Andrés Rubiano (Colombia)*

8:20 - 08:40 Adult Prehospital Management of TBI: An Update

*Ernest Barthelemy (United States)*

8:40 - 09:00 Adult Emergency Management of TBI: An Update

*Wellingson Paiva (Brazil)*

9:00 - 09:20 Adult ICU Management of TBI: An update

*Gene Sung (United States)*

9:20 - 09:40 Adult Surgical Management of TBI: An Update

*Corrado Iaccarino (Italy)*

### 10:00 - 10:40 PRE-CONGRESS COURSE Global Neuro Course - Neurotrauma II

**Room BC** **Moderators:** *Rubiano, Andrés*  
*Paiva, Wellingson*

10:00 - 10:20 Pediatric Neurotrauma: ICU Management

*Anthony Figaji (South Africa)*

10:20 - 10:40 Pediatric Neurotrauma: Surgical Management

*P. David Adelson (United States)*

13/03/2022

**10:40 - 12:20 PRE-CONGRESS COURSE Global Neuro Course - Pannel Interactive case presentations****Room BC** Moderators: *Paiva, Wellington*  
*Rubiano, Andrés*

- 10:40 - 10:55 Case 1: Advanced Medical Management Neurotrauma - Presentation  
*Kiwon Lee (United States)*
- 11:00 - 11:15 Case 2: Complicated Surgical Case Neurotrauma - Presentation  
*Robson Luís Oliveira Amorim (Brazil)*
- 11:20 - 11:40 Protocols of Care in TBI  
*Tariq Khan (Pakistan)*
- 11:40 - 12:00 Advanced Management Protocols in TBI  
*Andrés Rubiano (Colombia)*
- 12:00 - 12:20 Final Remarks and Certification

**14:30 - 15:50 PRE-CONGRESS COURSE GLOBAL NEUROSURGERY - Session 1: Global Neurosurgery: State of Play****Room BC** Moderators: *Park, Kee*

- 14:30 - 14:35 Introduction and Objectives: Global Neurosurgery - State to play  
*Kee Park (Cambodia)*
- 14:35 - 14:50 Global Health Policy and Neurosurgery : Case of the NSOAPs  
*Walter Johnson (United States)*
- 14:50 - 15:05 Advocacy in Global Neurosurgery: The G4 Experience  
*Gail Rosseau (United States)*
- 15:05 - 15:20 Comprehensive Policy Approach to Spina Bifida  
*Ahmed Negida (United States)*
- 15:20 - 15:35 Prevention as a Global Neurosurgery Strategy: Case for Folic Acid Fortification  
*Jeffrey Blount (United States)*
- 15:35 - 15:50 Ethical Framework and Challenges in Global NSG  
*Stephen Honeybul (Australia)*

**16:05 - 16:45 PRE-CONGRESS COURSE GLOBAL NEUROSURGERY - Session 2: GNC 1.0 Global Action Plan Update****Room BC****Moderators:** Park, Kee

- 16:05 - 16:20 Global Neurosurgery Committee 1.0: Genesis and the GAP  
*Abdessamad El Ouahabi (Morocco)*
- 16:20 - 16:30 The Global Neurosurgery Committee: Progress Made Towards the Advance and Amplify Objective  
*Hodan Abdi (United States)*
- 16:30 - 16:40 The Global Neurosurgery Committee: Progress Made Towards the Align and Advocate Objective  
*Mohd Radzi Hamzah (Malaysia)*
- 16:40 - 16:45 The Global Neurosurgery Committee: Progress Made Towards the Assimilate Objective  
*Edward Ham (United States)*

**17:00 - 18:30 PRE-CONGRESS COURSE GLOBAL NEUROSURGERY - Session 3: GNC 2.0 Next Steps****Room BC****Moderators:** Park, Kee

- 17:00 - 17:10 Strategy for GNC 2.0  
*Kee Park (Cambodia)*
- 17:10 - 17:20 Importance of Coordination for Global Neurosurgery  
*Tariq Khan (Pakistan)*
- 17:20 - 17:30 Pediatric neuro-oncology- It takes a village  
*Frederick Boop (United States)*
- 17:30 - 17:40 Accelerating Neurosurgical Capacity Building in LMICs through Technology and Innovation  
*James Johnston (United States)*
- 17:40 - 17:50 Journal of Global Neurosurgery  
*Ignatius Esene (Cameroon)*
- 17:50 - 18:00 Neurosurgical workforce expansion strategies  
*Abdessamad El Ouahabi (Morocco)*
- 18:00 - 18:30 Discussion and closing remarks  
*Kee Park (Cambodia)*
- 18:00 - 18:30 Discussion and closing remarks  
*Najia El Abbadi (Morocco)*

**07:30 - 09:40 PRE-CONGRESS COURSE SKULL BASE - 2D Anatomy - Approaches - Surgery I****Room EF** Moderators: *Quinto Balanzar, Gerardo*

7:30 - 07:40 Opening

*Alvaro Campero (Argentina)*

7:40 - 07:55 Anatomy of the Sellar and Parasellar Region

*Victor Alcocer Barradas (Mexico)*

7:55 - 08:10 Anatomy of the Nasal Cavity and Sphenoid Sinus

*Igor Lima Maldonado (Brazil)*

8:10 - 08:25 Surgery of Pituitary Adenomas

*André Grotenhuis (Netherlands)*

8:25 - 08:40 Endoscopic Extended Trans-Sphenoidal Approach

*Juan Luis Gomez Amador (M)*

8:40 - 08:55 Endoscopic endonasal surgery for uncommon sellar and parasellar lesions

*Waleed A. Azab (Kuwait)*

8:55 - 09:10 Endoscopic Approaches to the Orbit

*Paul Gardner (United States)*

9:10 - 09:25 Anatomy of Anterior Fossa

*Victor Alcocer Barradas (Mexico)*

9:25 - 09:40 Surgery of Anterior Skull Base Tumors

*Victor Alcocer Barradas (Mexico)*

13/03/2022

**10:10 - 12:40 PRE-CONGRESS COURSE SKULL BASE - 2D Anatomy - Approaches - Surgery II****Room EF Moderators:** *Gomez Amador, Juan Luis  
Borba, Luis*

- 10:10 - 10:25 Anatomy of Middle Fossa  
*Alvaro Campero (Argentina)*
- 10:25 - 10:40 Anatomy of Sylvian Fissure and Basal Cisterns - Pterional Approach  
*Alvaro Campero (Argentina)*
- 10:40 - 10:55 Pterional Approach  
*Alvaro Campero (Argentina)*
- 10:55 - 11:10 Surgery of Craniopharyngioma  
*Luis Borba (Brazil)*
- 11:10 - 11:25 Surgery of Tuberculum Sellae Meningiomas  
*Gerardo Guinto Balanzar (Mexico)*
- 11:25 - 11:40 Surgery of Spheno-Orbital Meningioma  
*César Chong Loor (Ecuador)*
- 11:40 - 11:55 Anatomy of Cavernous Sinus  
*Antonio Bernardo (United States)*
- 11:55 - 12:10 Orbito-zygomatic Approach  
*Antonio Bernardo (United States)*

**14:00 - 16:00 PRE-CONGRESS COURSE SKULL BASE - 2D Anatomy - Approaches - Surgery III****Room EF Moderators:** *Gardner, Paul  
Arráez Sánchez, Miguel Angel*

- 14:00 - 14:15 Endoscopic Approach to Cavernous Sinus  
*Juan Luis Gomez Amador (M)*
- 14:15 - 14:35 Anatomy of Cerebellopontine Angle  
*Antonio Bernardo (United States)*
- 14:35 - 14:50 Retrosigmoid Approach  
*Victor Alcocer Barradas (Mexico)*
- 14:50 - 15:05 Surgery of Small Vestibular Schwannomas  
*Marcos Tatagiba (Germany)*
- 15:05 - 15:20 Surgery of Giant Vestibular Schwannomas  
*Ricardo Ramina (Brazil)*
- 15:20 - 15:35 Anatomy of Temporal Bone and Petroclival Region  
*Vladimir Benes (Czech Republic)*
- 15:35 - 15:50 Petrous Apex Approach  
*Miguel Angel Arráez Sánchez (Spain)*

**16:30 - 18:15 PRE-CONGRESS COURSE SKULL BASE - 2D Anatomy - Approaches - Surgery IV**

**Room EF** Moderators: *Tatagiba, Marcos*  
*Grotenhuis, André*

16:30 - 16:45 Petroclival Meningiomas: Posterior Transpetrosal Approach

*Luis Borba (Brazil)*

16:45 - 17:00 Anatomy of Foramen Magnum and Craniocervical Junction

*Roy Daniel (Switzerland)*

17:00 - 17:15 Far-Lateral Approach

*Antonio Bernardo (United States)*

17:15 - 17:30 Surgery of Foramen Magnum Meningiomas

*Jose Alberto Landeiro (Brazil)*

17:30 - 17:45 Surgery techniques for Chordomas

*Paul Gardner (United States)*

17:45 - 18:15 Discussion and Final Remarks

*Alvaro Campero (Argentina)*

**14:00 - 19:00 PRE-CONGRESS COURSE SKULLBASE ENDOSCOPY****Room G** Moderators: *Deopujari, Chandrashekhar*

- 14:00 - 14:15 Welcome and Introduction  
*Chandrashekhar Deopujari (India)*
- 14:15 - 15:00 Essential Anatomy for Endonasal Endoscopic Skull base Surgery  
*Pablo Gonzalez Lopez (Spain)*
- 15:00 - 16:00 Demonstration on models for Nasoseptal flap and approach to sagittal plane  
*Pablo Gonzalez Lopez (Spain)*
- 15:00 - 16:00 Demonstration on models for Nasoseptal flap and approach to sagittal plane  
*Javier Abarca Olivares (Spain)*
- 16:00 - 16:45 Nuances of pituitary surgery  
*Waleed A. Azab (Kuwait)*
- 16:45 - 17:30 Nuances of Approaches to Anterior Cranial Fossa Meningiomas  
*Henry Schroeder (Germany)*
- 17:30 - 18:15 Nuances of Craniopharyngioma surgery  
*Chandrashekhar Deopujari (India)*
- 18:15 - 18:45 Panel Discussion on Nuances of Skull base reconstruction  
*Chandrashekhar Deopujari (India)*
- 18:30 - 19:00 Discussion and Final Remarks  
*Chandrashekhar Deopujari (India)*
- 18:45 - 19:00 Final Remarks  
*Chandrashekhar Deopujari (India)*

**07:50 - 10:20 PRE-CONGRESS COURSE VASCULAR - Aneurysm**

**Room HI** **Moderators:** *Rangel-Castilla, Leonardo Lanzino, Giuseppe*

- 7:50 - 08:00 Opening  
*Giuseppe Lanzino (United States)*
- 8:00 - 08:20 Surgery for vertebrobasilar disease  
*Fady Charbel (United States)*
- 8:20 - 08:40 Endovascular Techniques for Basilar Aneurysms  
*Ali Alaraj (United States)*
- 8:40 - 09:00 Microsurgical Techniques for Large and Giant Aneurysms  
*Jacques Morcos (United States)*
- 8:50 - 09:10 Hybrid treatment of cerebral aneurysms - treating patients not aneurysms  
*Leonardo Rangel-Castilla (Mexico)*
- 9:00 - 09:20 Endovascular Techniques for Large and Giant Aneurysms  
*Nader Sourour (France)*
- 9:10 - 09:30 Endovascular Techniques for ACM Complex Aneurysms  
*Michel Piotin (France)*
- 9:30 - 09:50 Case Aneurysm Presentation  
*Jean Goncalves de Oliveira (Brazil)*

**10:50 - 12:10 PRE-CONGRESS COURSE VASCULAR - AVM**

**Room HI** **Moderators:** *de Oliveira, Jean Goncalves Morcos, Jacques*

- 10:50 - 11:10 Microsurgical Excision of Cerebral AVMs  
*Edgar Nathal Vera (Mexico)*
- 11:10 - 11:30 Cerebral AVM embolization - surgeons point of view  
*Leonardo Rangel-Castilla (Mexico)*
- 11:30 - 11:50 Transvenous Embolization Techniques in Brain AVMs  
*Michel Piotin (France)*
- 11:50 - 12:10 Case Brain AVM presentation  
*Edgar Nathal Vera (Mexico)*



13/03/2022

**14:00 - 16:00 PRE-CONGRESS COURSE VASCULAR - DAVF****Room HI** Moderators: *Lopes, Demetrius  
Sourour, Nader*

- 14:00 - 14:20 Microsurgical Excision Cranial Dural AVF  
*Fernando González Trujillo (United States)*
- 14:20 - 14:40 Endovascular Techniques for Cranial Dural AVF  
*Michel Piotin (France)*
- 14:40 - 15:00 Microsurgical Excision Spinal Dural AVF  
*Fernando González Trujillo (United States)*
- 15:00 - 15:20 Endovascular Techniques for Spinal Dural AVF  
*Nader Sourour (France)*
- 15:20 - 15:40 Case Spinal Dural AVF Presentation  
*Fernando González Trujillo (United States)*
- 15:20 - 16:00 Dural AVF Panel Discussion
- 15:40 - 16:00 Case Cranial Dural AVF Presentation  
*Giuseppe Lanzino (United States)*

**16:30 - 18:00 PRE-CONGRESS COURSE VASCULAR - Carotid****Room HI** Moderators: *Piotin, Michel  
González Trujillo, Fernando*

- 16:30 - 16:50 Asymptomatic carotid stenosis. How to approach  
*Ali Alaraj (United States)*
- 16:50 - 17:10 Thrombectomy Techniques for Large Vessel Occlusion  
*Demetrius Lopes (United States)*
- 17:10 - 17:30 Case Carotid Endarterectomy  
*Jacques Morcos (United States)*
- 17:10 - 17:30 Carotid Panel Discussion
- 17:30 - 17:50 Case Acute Stroke  
*Demetrius Lopes (United States)*
- 17:50 - 18:00 Final Remarks  
*Giuseppe Lanzino (United States)*

**07:50 - 09:45 PRE-CONGRESS COURSE PERIPHERAL NERVE SURGERY - I**

**Room J** **Moderators:** *Feroni, Luciano*  
*Socolovsky, Mariano*

- 7:50 - 08:00 Opening  
*Lukas Rasulic (Serbia)*
- 8:00 - 08:15 Transient Electronics to Enhance Nerve Regeneration  
*Wilson Ray (United States)*
- 8:15 - 08:30 Nerve Graft Avoidance and Repairing Nerves Under Tension  
*Justin Brown (United States)*
- 8:30 - 08:45 Facial Resuscitation Through the Masseter-Facial Transfer Technique  
*Marjeane Cristina Hockmuller (Brazil)*
- 8:45 - 09:00 High resolution nerve ultrasound in peripheral nerve surgery  
*Christian Heinen (Germany)*
- 9:00 - 09:15 DSN as an Additional Neurotizer for Better Elbow Stability and Elbow Flexion in Complete Brachial Plexus Palsy Patients  
*Lukas Rasulic (Serbia)*
- 9:15 - 09:30 Not Usually Considered Factors that Affect the Outcome in Brachial Plexus Injuries  
*Mariano Socolovsky (Argentina)*
- 9:30 - 09:45 Discussion

**10:15 - 12:45 PRE-CONGRESS COURSE PERIPHERAL NERVE SURGERY - II**

**Room J** **Moderators:** *Brown, Justin*  
*Guedes Correa, José Fernando*

- 10:15 - 10:30 Different strategies in complete brachial plexus injuries  
*Luciano Feroni (Brazil)*
- 10:30 - 10:45 Nerve transfer in Lower extremity  
*Allan Belzberg (United States)*
- 10:45 - 11:00 Brachial Plexus Injury in Children Outside the Neonatal Period  
*Ricardo De Amoreira Gepp (Brazil)*
- 11:00 - 11:15 Peripheral Nerve Injury in Children: Evaluation and Management  
*Holly Gilmer (United States)*
- 11:15 - 11:30 Nerve Transfers for Tetraplegia  
*Wilson Ray (United States)*
- 11:30 - 12:00 Discussion

**14:00 - 15:30 PRE-CONGRESS COURSE PERIPHERAL NERVE SURGERY - III**

**Room J** **Moderators:** *Isla, Alberto*  
*Belzberg, Allan*

- 14:00 - 14:15 Thoracic Outlet Syndrome  
*Mariano Socolovsky (Argentina)*
- 14:15 - 14:30 Results of Surgical Treatment for the Cubital Tunnel Syndrome Using the Subcutaneous Transposition and in Situ Decompression in a 20 Year Period (2001-2020) - More Than 1000 patients.  
*Ivan Humhej (Czech Republic)*
- 14:30 - 14:45 Endoscopic Carpal Tunnel Release-What is at the End of Tunnel  
*Amitendu Sekhar (India)*
- 14:45 - 15:00 Superior Cluneal Nerve Entrapment: Underestimated Cause of Low Back Pain  
*Radek Kaiser (Czech Republic)*
- 15:00 - 15:30 Discussion

**16:00 - 18:30 PRE-CONGRESS COURSE PERIPHERAL NERVE SURGERY - IV**

**Room J** **Moderators:** *Martinez, Fernando*  
*Humhej, Ivan*

- 16:00 - 16:15 Peripheral Nerve Tumors  
*Allan Belzberg (United States)*
- 16:15 - 16:30 Peripheral Nerve Tumors from a radiological point of view  
*Daniela Binaghi (Argentina)*
- 16:30 - 16:45 Surgical approach in Tumors Peripheral Nerve Surgery  
*Fernando Martinez (Uruguay)*
- 16:45 - 17:00 Intraneural Perineuriomas: Diagnosis, Natural History, and Management  
*Thomas Wilson (United States)*
- 17:00 - 17:15 Technical Aspect for the Resection of Intrapelvic sciatic PNST  
*Line Jacques (United States)*
- 17:15 - 17:30 Tumors of the Brachial Plexus  
*Alberto Isla (Spain)*
- 17:30 - 17:45 Management of Lumbosacral Plexus Tumors  
*José Fernando Guedes Correa (Brazil)*
- 17:45 - 18:00 Treatment of Neuromas: Current Techniques  
*Carlos Rodríguez (Mexico)*
- 18:00 - 18:30 Discussion and Final Remarks  
*Lukas Rasulic (Serbia)*
- 18:00 - 18:30 Discussion and Final Remarks  
*Mariano Socolovsky (Argentina)*

**08:00 - 09:45 PRE-CONGRESS COURSE PEDIATRIC: Hydrocephalus**

**Room K** **Moderators:** *Zuccaro, Graciela*  
*Elbabaa, Samer*

- 8:20 - 08:40 Hydrocephalus: Mechanical Complications, Avoidance and Management  
*Guirish Solanki (England)*
- 9:00 - 09:15 Neuroendoscopic Ventricular Lavage for Posthemorrhagic Hydrocephalus in Prematures  
*Ulrich W. Thomale (Germany)*
- 9:30 - 09:45 Discussion

**10:15 - 12:30 PRE-CONGRESS COURSE PEDIATRIC: Fetal Neurosurgery**

**Room K** **Moderators:** *Zanon Collange, Nelci*  
*Herrada Pineda, Tenoch*

- 10:15 - 10:30 Open Fetal MMC Repair: Experience at the Children's Hospital of Philadelphia  
*Gregory Heuer (United States)*
- 10:30 - 10:45 Patient Selection and Counseling for Fetal MMC Repair in Western Europe  
*Frank Van Calenbergh (Belgium)*
- 10:45 - 11:00 My Experience in Fetal Neurosurgery  
*Sergio Cavalheiro (Brazil)*
- 11:00 - 11:15 ETV Outcomes in the Fetal In-Utero Spina Bifida Surgery Population  
*Samer Elbabaa (United States)*
- 11:15 - 11:30 The Colombian Experience in Open Fetal Surgery for MMC  
*Carlos Jaime Yepes Sánchez (Colombia)*
- 11:30 - 11:45 Fetoscopic vs Open Repair for MMC: Systematic Review of the Past - How do We Proceed for the Future  
*Frank Van Calenbergh (Belgium)*
- 11:45 - 12:00 Neurosurgical Advocacy for folic acid fortification- no time for delays  
*Jeffrey Blount (United States)*
- 12:00 - 12:30 Discussion

**14:00 - 16:30 PRE-CONGRESS COURSE PEDIATRIC: Neuroendoscopic Surgery**

**Room K** **Moderators:** *Valenzuela Abasolo, Sergio Solanki, Guirish*

- 14:00 - 14:15 Endoscopic Third Ventriculostomy  
*Tenoch Herrada Pineda (Mexico)*
- 14:15 - 14:30 Endoscope-Assisted Microsurgical Techniques in Pediatric Brain Tumor and Skull Base Surgery  
*Samer Elbabaa (United States)*
- 14:30 - 14:45 Endoscopic Management of Craniopharyngioma  
*Charles Teo (Australia)*
- 14:45 - 15:00 Endoscopic Management of Multiloculated Hydrocephalus  
*Tenoch Herrada Pineda (Mexico)*
- 15:00 - 15:15 Endoscopic Management of Sylvian Fissure Arachnoid Cysts. Personal Experience  
*Sergio Valenzuela Abasolo (Chile)*
- 15:15 - 15:30 Endoscopic or Tubular Resection of Ventricular Tumors  
*George Jallo (United States)*
- 15:30 - 15:45 Endoscopic Management of Craniosynostosis  
*James Johnston (United States)*
- 15:45 - 16:00 Neuroendoscopy and Neuronavigation  
*Roberto Jaimovich (Argentina)*
- 16:00 - 16:30 Discussion and Final Remarks  
*Graciela Zuccaro (Argentina)*
- 16:00 - 16:30 Discussion and Final Remarks  
*Samer Elbabaa (United States)*

**07:50 - 10:00 PRE-CONGRESS COURSE ONCOLOGY - WFNS Neurology-Oncology Committee I**

**Room LM** **Moderators:** *García Colmena, Fernando  
Kirolos, Ramez*

- 7:50 - 08:00 Opening  
*Marcos Maldaun (Brazil)*
- 8:00 - 08:20 Clinical Evaluation of Neurooncology patients  
*Marcos Maldaun (Brazil)*
- 8:40 - 09:00 Functional anatomy application for glioma surgery  
*Marcos Maldaun (Brazil)*
- 9:00 - 09:20 Awake Mapping in Brain Tumor: Indications and Planning  
*Fernando García Colmena (Argentina)*
- 9:20 - 09:40 State of Art Therapies for Glioma  
*Clemens Dirven (Netherlands)*
- 9:40 - 10:00 Techniques to Improve Resection in Gliomas  
*Philippe Schucht (Switzerland)*

**10:30 - 12:30 PRE-CONGRESS COURSE ONCOLOGY - WFNS Neurology-Oncology Committee II**

**Room LM** **Moderators:** *Narita, Yoshitaka  
Maldaun, Marcos*

- 10:40 - 11:00 Ways to Predict and Minimize Morbidity in Meningioma Surgery at Different Locations  
*Ramez Kirolos (Singapore)*
- 11:00 - 11:20 Meningiomas - Surgical Challenges and New Insights from Neuropathology  
*Florian Alexander Ringel (Germany)*
- 11:20 - 11:40 The MDT Approach to Brain Metastases  
*Muhammad Shahzad Shamim (Pakistan)*
- 11:40 - 12:00 Augmented reality, Mix reality and Virtual reality in Brain tumors  
*Jose Valerio (United States)*
- 12:00 - 12:20 Discussion
- 12:20 - 12:30 Final Remarks  
*Marcos Maldaun (Brazil)*

**14:00 - 16:00 PRE-CONGRESS COURSE ONCOLOGY - Squad Fire SNOLA Section I**

**Room LM** **Moderators:** *Maldaun, Marcos*  
*Stummer, Walter*  
*Vargas Grau, Gabriel*

- 14:00 - 14:30 Is Awake Craniotomy for Insular Tumor Essential  
*Hugues Duffau (France)*
- 14:30 - 15:00 Is it feasible to perform supramarginal surgery?  
*Jose Valerio (United States)*
- 15:00 - 15:30 Is Radiosurgery Superior than Surgery for < 3cm Brain Metastasis ?  
*Eduardo Lovo (El Salvador)*
- 15:30 - 16:00 Is 5 ALA Superior than IMRI?  
*Walter Stummer (Germany)*

**07:50 - 09:20 PRE-CONGRESS COURSE NEUROANATOMY I - White matter Anatomy for epilepsy and intrinsic tumors**

**Room N** **Moderators:** *Benes, Vladimir*

- 7:50 - 08:00 Welcome and Introduction  
*Imad Kanaan (Jordan)*
- 7:50 - 08:00 Welcome and Introduction  
*Vladimir Benes (Czech Republic)*
- 8:00 - 08:12 White matter fiber & Disconnection techniques in epilepsy surgery  
*Roy Daniel (Switzerland)*
- 8:12 - 08:24 White matter tracts & Tractography: importance in glioma surgery  
*Fernando Martinez (Uruguay)*
- 8:24 - 08:36 Anatomy of the insula & surgical implications  
*TBD (TBD)*
- 8:36 - 08:48 Anatomy-guided resection of brainstem Ponto-mesencephalic tumors  
*Miguel Angel Arráez Sánchez (Spain)*
- 8:48 - 09:00 Telovelar Approach and Combination with CPA  
*Ekkehard Kasper (Canada)*
- 9:00 - 09:20 Discussion

**09:40 - 11:10 PRE-CONGRESS COURSE NEUROANATOMY II - Vascular Anatomy**

**Room N** **Moderators:** *Broggi, Giovanni*  
*Maldonado, Mr. Igor Lima*

- 9:40 - 09:52 Anatomical aspects of AVM surgery.  
*Vladimir Benes (Czech Republic)*
- 10:04 - 10:16 Paraclinoid Aneurysm  
*TBD (TBD)*
- 10:16 - 10:28 Anatomical Variations of Anterior Communicating Artery.  
*Victor Hugo Pérez Pérez (Mexico)*
- 10:28 - 10:40 Surgery for A-com. Aneurysms  
*Ramesh Nair (United Kingdom)*
- 10:40 - 10:52 The Maxillary Artery Surgical Anatomy  
*Jorge Alvernia (United States)*
- 10:52 - 11:10 Discussion

**11:30 - 13:00 PRE-CONGRESS COURSE NEUROANATOMY III - Skull Base Anatomy & Endoscopy**

**Room N** **Moderators:** *Kanaan, Imad*  
*Nair, Ramesh*

- 11:30 - 11:42 MIN. Trans eyebrow approach anatomy& surgery  
*Giovanni Broggi (Italy)*
- 11:42 - 11:54 Endoscopy anatomy of the Nasal Cavity and Sphenoid Sinus  
*Igor Lima Maldonado (Brazil)*
- 11:54 - 12:06 Endoscopic Anatomy of Ventricular System & Management of its Lesions  
*Henry Schroeder (Germany)*
- 12:06 - 12:18 Radiological Anatomy for Ventriculoscopic Procedures.  
*Ramez Kirillos (Singapore)*
- 12:18 - 12:30 Anatomy of Endoscopic Approach to the Pterygopalatine Fossa  
*Sanjeeva Jeyaretna (United Kingdom)*
- 12:30 - 12:42 Anatomy for retromastoid Approach & variant  
*Imad Kanaan (Jordan)*
- 12:42 - 13:00 Discussion and Final Remarks  
*Vladimir Benes (Czech Republic)*
- 12:42 - 13:00 Discussion and Final Remarks  
*Imad Kanaan (Jordan)*



**08:15 - 09:45 PRE-CONGRESS COURSE SPINE - A) Update on Minimally Invasive Spine Surgery**

**Room O** **Moderators:** *Zileli, Mehmet*  
*Osorio, Enrique*

- 8:30 - 08:45 Anatomic Basis for Lumbar Endoscopy  
*Salman Sharif (Pakistan)*
- 8:45 - 09:00 MIS Surgery for Spinal Tumors  
*Scott Robertson (United States)*
- 9:00 - 09:15 Philosophy of Minimally Invasive Spine Surgery  
*Marcos Masini (Brazil)*
- 9:15 - 09:45 Discussion

**10:15 - 12:00 PRE-CONGRESS COURSE SPINE - A) Update on Minimally Invasive Spine Surgery II**

**Room O** **Moderators:** *Zileli, Mehmet*  
*Osorio, Enrique*

- 10:15 - 10:30 MIS pedicle screw fixation  
*Mirza Pojskic (Germany)*
- 10:30 - 10:45 MIS Cervical Surgery  
*Joachim Oertel (Germany)*
- 10:45 - 11:00 MIS for Spine Tumors  
*Jose Antonio Soriano Sánchez (Mexico)*
- 11:00 - 11:15 MIS Deformity Surgery  
*Richard G Fessler (United States)*
- 11:15 - 11:30 MIS Robotics Surgery  
*Mirza Pojskic (Germany)*
- 11:30 - 11:45 Discussion

**13:00 - 14:45 PRE-CONGRESS COURSE SPINE - B) Update on Cervical Trauma and Spinal Cord Injury**

**Room O** **Moderators:** *Fornari, Maurizio*  
*Sharif, Salman*

- 13:00 - 13:15 Odontoid fractures  
*Mehmet Zileli (Turkey)*
- 13:15 - 13:30 Atlas and Craniocervical Junction Fractures  
*Oscar Alves (Portugal)*
- 13:45 - 14:00 Subaxial cervical fractures  
*Francesco Costa (Italy)*
- 14:00 - 14:15 Fractures with ankylosis  
*Mehmet Zileli (Turkey)*
- 14:15 - 14:45 Discussion
- 14:45 - 15:00 Hangman Fractures  
*Mehmet Zileli (Turkey)*

**14:45 - 17:00 PRE-CONGRESS COURSE SPINE - B) Update on Cervical Trauma and Spinal Cord Injury II**

**Room O** **Moderators:** *Fornari, Maurizio*  
*Sharif, Salman*

- 15:30 - 15:45 Spinal cord injury; Medical treatment  
*Mirza Pojskic (Germany)*
- 15:45 - 16:00 Spinal cord injury; Epidemiology and Prevention  
*Wilco Peul (Netherlands)*
- 15:45 - 17:00 Case Discussion (Lower Cervical Trauma)  
*Zan Chen (China)*
- 16:00 - 16:15 Spinal cord injury; Emergency care and clearance  
*Joachim Oertel (Germany)*
- 16:00 - 16:30 Discussion | Update on cervical trauma and spinal cord II
- 16:15 - 16:30 Facet dislocations and closed or open reduction  
*Francesco Costa (Italy)*
- 16:30 - 16:45 Case discussion (upper cervical trauma)  
*Aderehime Haidara ()*
- 16:45 - 17:00 Spinal cord injury; Rehabilitation and restoration  
*Enrique Osorio (Colombia)*

**07:50 - 10:00 PRE-CONGRESS COURSE EPILEPSY I**

**Room P** **Moderators:** *Zorro Guio, Oscar Rössler, Karl*

- 7:50 - 08:00 Opening  
*Mario Arturo Alonso Vanegas (Mexico)*
- 8:00 - 08:20 Extent of Resection: Should it Be Defined in Non-Lesional Epilepsies  
*Manuel Campos Puebla (Chile)*
- 8:20 - 08:40 Resection in Lesional Epilepsy on Eloquent Areas.  
*Nitin Tandon (United States)*
- 8:40 - 09:00 Lesional Extratemporal Epilepsies Near or in Eloquent Areas: Pre-resection Evaluation and Postoperative Seizure Outcomes  
*Karl Rössler (Austria)*
- 9:00 - 09:20 It's Not a Candidate for Resective Epilepsy Surgery, What Next Overview  
*Manuel Campos Puebla (Chile)*
- 9:20 - 09:40 Radiofrequency Thermocoagulation- SEEG Guided  
*Daniel Curry (United States)*
- 9:40 - 10:00 Robotic guided radio-frequency ablations for hypothalamic hamartomas  
*P Sarat Chandra (India)*

**10:30 - 12:40 PRE-CONGRESS COURSE EPILEPSY II**

**Room P** **Moderators:** *Campos Puebla, Manuel Gross, Robert*

- 10:30 - 10:50 Laser Ablation in Hypothalamic Hamartomas  
*Daniel Curry (United States)*
- 10:50 - 11:10 Disconnective Surgery for Intractable Epilepsy in Children with Structural Abnormalities  
*Mario Arturo Alonso Vanegas (Mexico)*
- 11:10 - 11:30 Minimally invasive techniques (LITT/RFTC) in epilepsy surgery vs conventional surgery  
*Nitin Tandon (United States)*
- 11:50 - 12:20 Surgical anatomy and approaches for amygdalohippampectomy  
*Mario Arturo Alonso Vanegas (Mexico)*
- 12:20 - 12:30 Discussion

**14:00 - 15:40 PRE-CONGRESS COURSE EPILEPSY III**

**Room P** **Moderators:** *Carrillo Ruiz, Mr. Jose Damian Fandiño, Jaime*

- 14:00 - 14:20 First neuromodulation, VNS or DBS Do We Have Evidence  
*Arthur Cukiert (B)*
- 14:20 - 14:40 Centromedian Stimulation (CM-Pf STIM) for Epilepsy  
*Jose Damian Carrillo Ruiz (Mexico)*
- 14:40 - 15:00 Deep Brain Stimulation (DBS) and Responsive Neuromodulation  
*Robert Gross (United States)*
- 15:00 - 15:20 A Clinical-based analysis of the ideal target inside ANT for drug-resistant epilepsy  
*Alexandre Campos (Portugal)*
- 15:20 - 15:40 SEEG-guided Thermocoagulation for Epilepsy using Radiofrequency and LITT  
*Robert Gross (United States)*

**16:00 - 18:30 PRE-CONGRESS COURSE EPILEPSY IV**

**Room P** **Moderators:** *Buitrago, Cesar Alonso Vanegas, Mario Arturo*

- 16:00 - 16:20 Extratemporal Lobe Epilepsy in Children: Localization and Outcomes After Surgery  
*James Rutka (Canada)*
- 16:20 - 16:40 Pediatric Epilepsy Surgery- a 20 year perspective  
*Jeffrey Blount (United States)*
- 16:40 - 17:00 Management of Epilepsy in Low Resources Environments: Role of Coming Approaches  
*Jaime Fandiño (Colombia)*
- 17:00 - 17:20 Endoscopic and radio-frequency techniques for hemispherotomy  
*P Sarat Chandra (India)*
- 17:20 - 17:40 Case Discussion  
*Mario Arturo Alonso Vanegas (Mexico)*
- 17:40 - 18:00 Case Discussion  
*Cesar Buitrago (Colombia)*
- 18:00 - 18:30 Final Remarks  
*Mario Arturo Alonso Vanegas (Mexico)*