

## WFNS2022 | SCIENTIFIC PROGRAM

15/03/2022

### 07:00 - 10:10 III World Forum for the Political and Socioeconomic Development of Neurosurgery I

#### Room A

**Moderators:** *Masini, Marcos*  
*Arnautovic, Kenan*  
*Osorio, Enrique*

- South Cone Society of Neurological Surgeons  
*Gueider Salas Ferrufino (Bolivia)*
- European Association of Neurosurgical Societies (EANS)  
*Andreas Demetriades (United Kingdom)*
- Caribbean Association of Neurological Surgeons (CANS)  
*Juan Vigo ()*
- American Association of Neurolog Surgeons (AANS)  
*Jacques Morcos (United States)*
- Association of Central American Societies of Neur (ASOCAN)  
*Leonardo Barrios (Panama)*
- The Society of Neurosurgeons of South Africa (SNSA)  
*Graham Fieggen (South Africa)*

7:00 - 07:05 Opening

*Enrique Osorio (Colombia)*

7:05 - 07:15 WFNS Education Committee Chairman

*Luis Borba (Brazil)*

7:15 - 07:25 WFNS Global Neurosurgery Committee Chairman

*Kee Park (Cambodia)*

7:25 - 07:35 Europe- Southeast Neurosurgical Society (SeENS)

*Lukas Rasulic (Serbia)*

7:35 - 07:45 Egyptian Society of Neurological Surgeons

*Nasser El Ghandour (Egypt)*

11:05 - 11:20 Conclusions / Closing remarks

*Marcos Masini (Brazil)*

11:20 - 11:30 Closing

*Nelson Oyesiku (United States)*

**07:00 - 08:30 STATE OF ART - Trauma I**

**Room BC** **Moderators:** *Figaji, Anthony*  
*Rubiano, Andrés*

- 7:00 - 07:15 Clinical Biomarkers in Traumatic Brain Injury: from Cell Injury to Recovery Pathways  
*Niklas Marklund (Sweden)*
- 7:15 - 07:30 Blood biomarkers in severe TBI in children  
*Andrew Reisner (United States)*
- 7:30 - 07:45 Mycrodialysis in Neurotrauma  
*Deepak Gupta (India)*
- 7:45 - 08:00 Advanced Multimodal Monitoring in Neurotrauma: Integrating Engineer with Medical Sciences  
*Gene Sung (United States)*
- 8:00 - 08:15 Oxygen Monitoring in Traumatic Brain Injury  
*Kiwon Lee (United States)*
- 8:15 - 08:30 Stem Cell Therapies in SCI: Does it Works?  
*Ann Parr (United States)*

**07:00 - 08:30 STATE OF ART - Functional II - Education I**

**Room G** **Moderators:** *Mora, Henin*  
*Arango, Mr. Pablo*

- 7:00 - 07:15 Ethic aspects in psychiatric neurosurgery  
*Fiacro Jiménez (Mexico)*
- 7:15 - 07:30 Transition from frame based to frameless stereotactic neurosurgical procedures: Lessons Learned  
*Fahd Derkaoui Hassani (Morocco)*
- 7:30 - 07:45 Neuroanatomy in movement disorder targets  
*Erich Fonoff (Brazil)*
- 7:45 - 08:15 Evolution of Functional Neurosurgery  
*Alim Louis Benabid (France)*

**07:00 - 08:30 STATE OF ART - Vascular II**

**Room HI** **Moderators:** *Revilla Pacheco, Francisco  
de Oliveira, Jean Goncalves*

- 7:00 - 07:15 Minimally Invasive Microsurgery for Cerebral Aneurysms  
*Michael Tymianski (Canada)*
- 7:15 - 07:30 Advanced surgery for Aneurysms: Myths and facts  
*Fady Charbel (United States)*
- 7:30 - 07:45 Bypass Techniques for Giant Aneurysms  
*Jacques Morcos (United States)*
- 7:45 - 08:00 Management of Intracranial Large and Giant Aneurysms. Surgery or Endovascular Treatment  
*Vladimir Benes (Czech Republic)*
- 8:00 - 08:15 Woven Endobridge (WEB) as Primary Treatment for Intracranial Aneurysms  
*Boris Pabon (Colombia)*
- 8:15 - 08:30 Avoidance and management of complications in endovascular surgery.  
*Leonardo Rangel-Castilla (Mexico)*

**07:00 - 09:30 STATE OF ART - Peripheral II**

**Room J** **Moderators:** *Socolovsky, Mariano*  
*Gepp, Ricardo De Amoreira*

- 7:00 - 07:15 Nerve Injury and Pain  
*Allan Belzberg (United States)*
- 7:15 - 07:30 Brachial plexus neurography: What can be known from imaging  
*Daniela Binaghi (Argentina)*
- 7:30 - 07:45 Traumatic Brachial Plexus - Where to Begin  
*Amitendu Sekhar (India)*
- 7:45 - 08:00 Surgical management of pediatric patients with peripheral nerve and plexus lesions caused by stray bullets  
*José Fernando Guedes Correa (Brazil)*
- 8:00 - 08:15 Pearls for Brachial Plexus Injury Reconstruction: Timing and Surgical Intervention  
*Lukas Rasulic (Serbia)*
- 8:15 - 08:30 Advance Imaging in Peripheral Nerve Surgery  
*Line Jacques (United States)*
- 8:30 - 08:45 Use of Thoracoscopy to Obtain a Long Graft of the Phrenic Nerve  
*Ricardo De Amoreira Gepp (Brazil)*
- 8:45 - 09:15 Discussion
- 9:15 - 09:30 Final Remarks  
*Mariano Socolovsky (Argentina)*
- 9:15 - 09:30 Final Remarks  
*Lukas Rasulic (Serbia)*

**07:00 - 08:30 STATE OF ART - Pediatric II**

**Room K** **Moderators:** *Muñoz, Erick*  
*Proctor, Mark*

- 7:00 - 07:15 Pediatric Posterior Fossa Ependymoma  
*James Rutka (Canada)*
- 7:15 - 07:30 Pediatric Gliomas  
*Frederick Boop (United States)*
- 7:30 - 07:45 Endoscopy in pediatric ventricular tumors  
*Tenoch Herrada Pineda (Mexico)*
- 7:45 - 08:00 Craniopharyngioma in Pediatric Age Group  
*Mohamed El Beltagy (Egypt)*
- 8:00 - 08:15 Understanding Congenital Craniovertebral Anomalies  
*Sandip Chatterjee (India)*
- 8:15 - 08:30 Spinal Lipoma: State of Art  
*Sergio Valenzuela Abasolo (Chile)*

**07:00 - 08:30 STATE OF ART - Oncology II**

**Room LM** **Moderators:** *García Colmena, Fernando*  
*Aguiar, Paulo Henrique*

- 7:00 - 07:15 Molecular Markers and immunotherapy for HGG  
*Gelareh Zadeh (Canada)*
- 7:15 - 07:30 Intraoperative Neuromonitoring in high grade glioma surgery.  
*Fernando García Colmena (Argentina)*
- 7:30 - 07:45 Is 5 ALA Essential for HGG Resection?  
*Walter Stummer (Germany)*
- 7:45 - 08:00 Advances in glioma surgery: the experience with florescent media and Coaxial Laser endoscopy  
*Giovanni Broggi (Italy)*
- 8:00 - 08:15 HGG: Is Tumor Treating Fields (TTF) New Standard of Care Treatment  
*Marcos Maldaun (Brazil)*
- 8:15 - 08:30 Behavioral and Personality Changes in Brain Tumor Patients. The Psychooncology Perspective  
*Maria Teresa Leao Tatagiba (Germany)*

**07:00 - 08:30 NEXT MILLENIUM II**

**Room N** **Moderators:** *Arráez Sánchez, Miguel Angel  
Tatagiba, Marcos*

- 7:00 - 07:15 Reducing the Cognitive footprint of Neurosurgery  
*Michael Sughrue (Australia)*
- 7:15 - 07:30 Neurosurgery in the Hybrid OR Environment  
*Amir Samii (Germany)*
- 7:30 - 07:45 Skull Base surgery in the next millennium  
*Ossama Al-mefty (United States)*
- 7:45 - 08:00 Treatment of Pituitary Tumors into the Future  
*Nelson Oyesiku (United States)*
- 8:00 - 08:15 Awake craniotomies for brain vascular lesions  
*Saleem I. Abdulrauf (United States)*
- 8:15 - 08:30 Discussion

**07:00 - 08:30 STATE OF ART - Spine II**

**Room O** **Moderators:** *Fessler, Richard G  
Meyer, Bernhard*

- 7:00 - 07:15 Instability, Updating the Concept: Clinical Focus for Neurosurgeons  
*Adrian Casey (United Kingdom)*
- 7:15 - 07:30 C1-C2 Instability in Patients with Rheumatoid Arthritis: Surgical Management  
*Paulo Pereira (Portugal)*
- 7:30 - 07:45 Management of degenerative cervical myelopathy  
*Michael Fehlings (Canada)*
- 7:45 - 08:00 Only-fixation' as surgical strategy for myelopathy and radiculopathy related to spinal degeneration and OPLL  
*Atul Goel (India)*
- 8:00 - 08:15 Lumbar Far Lateral Disc Herniation: Surgical Treatment  
*Vakis Papanastasiou (Cyprus)*
- 8:15 - 08:30 Sacroiliitis: Pain Management and Surgical Treatment  
*Carlos Javier Dominguez Alonso (Spain)*

**07:00 - 09:30 STATE OF ART - Epilepsy**

**Room P** **Moderators:** *Alonso Vanegas, Mario Arturo Daniel, Roy*

- 7:00 - 07:15 Surgical Anatomy of the Insula  
*Igor Lima Maldonado (Brazil)*
- 7:15 - 07:30 Temporal Lobe Epilepsy Surgery: More Selective, Better Outcomes  
*Mario Arturo Alonso Vanegas (Mexico)*
- 7:30 - 07:45 Is Insular Epilepsy Still a Challenge Approaches, Morbidity and Outcomes  
*Stephan Chabardes (France)*
- 7:45 - 08:00 Posterior quadrant epilepsy, diagnostic methods, surgical treatment possibilities and results  
*Cesar Buitrago (Colombia)*
- 8:00 - 08:15 Intractable multifocal epilepsy  
*Roy Daniel (Switzerland)*
- 8:15 - 08:30 Non-Invasive vs Invasive Protocol for Surgical Treatment of Focal Epilepsies  
*Karl Rössler (Austria)*
- 8:30 - 08:45 Invasive evaluation in epilepsy using SEEG (stereoelectroencephalography). Does the outcome change  
*Cesar Buitrago (Colombia)*
- 8:45 - 09:00 Endoscopic Corpus callosotomy with commissurotomy for severe LG syndrome  
*P Sarat Chandra (India)*
- 9:00 - 09:30 Discussion and Final Remarks  
*Mario Arturo Alonso Vanegas (Mexico)*

**08:40 - 10:10 CONTROVERSIES IN NEUROSURGERY - Trauma I**

**Room BC** **Moderators:** *Tsai, Eve Paiva, Wellingson*

- 8:40 - 08:55 Limitations of TBI Guidelines  
*Jack Jallo (United States)*
- 8:55 - 09:10 Policy Recommendations for Head and Spine Injury Care in LMIC's  
*Tariq Khan (Pakistan)*
- 9:10 - 09:25 Guidelines in Spinal Cord Injury: What is Missing and What is New  
*Asdrubal Falavigna (Brazil)*
- 9:25 - 09:40 Protocols of Care in Spinal Cord Injury: From Translational Science to Clinical Practice  
*Andreas Demetriades (United Kingdom)*
- 9:40 - 09:55 Protocols for sedation in neurotrauma care  
*Kiwon Lee (United States)*
- 9:55 - 10:10 Discussion

**08:40 - 10:10 CONTROVERSIES IN NEUROSURGERY - Functional II - Education I**

**Room G** **Moderators:** *Slavin, Konstantin*  
*De La Cruz Pabón, Jonathan Ricardo*

- 8:40 - 08:55 Aggressiveness or Violence as a disorder: Issue in Neurosurgery  
*Fiacro Jiménez (Mexico)*
- 8:55 - 09:10 Microrecording method for targeting hypothalamus for refractory aggressiveness  
*William D Hutchison (Canada)*
- 9:10 - 09:25 How to transform occasional DBS for OCD cases into clinical follow-up studies  
*Fiacro Jiménez (Mexico)*
- 9:25 - 09:40 Subcauded tractotomy in psychotic patients  
*Oswaldo Vilela (Brazil)*
- 9:40 - 09:55 Focus ultrasound ablation. How to start this service in a new center  
*Andrés Lozano (Canada)*
- 9:55 - 10:10 Discussion

**08:40 - 10:10 CONTROVERSIES IN NEUROSURGERY - Vascular II**

**Room HI** **Moderators:** *Moret, Jacques*  
*Charbel, Fady*

- 8:40 - 08:55 Paraclinoid Aneurysms. Endovascular Techniques as First Option  
*Giuseppe Lanzino (United States)*
- 8:55 - 09:10 Paraclinoid Aneurysms. Surgical Techniques as First Option  
*Jean Goncalves de Oliveira (Brazil)*
- 9:10 - 09:25 Complex Aneurysm: Endovascular Technique as First Option  
*Leonardo Rangel-Castilla (Mexico)*
- 9:25 - 09:40 Complex MCA Aneurysms: Surgical Techniques as First Option  
*Francisco Revilla Pacheco (Mexico)*



**08:40 - 10:10 CONTROVERSIES IN NEUROSURGERY - Pediatric II**

**Room K** **Moderators:** *Boop, Frederick*  
*El Ghandour, Nasser*

- 8:40 - 08:55 Prenatal Hydrocephalus: grading, classification, management  
*Ahmed Ammar (Saudi Arabia)*
- 8:55 - 09:10 Craniopharyngioma Surgical Treatment  
*Graciela Zuccaro (Argentina)*
- 9:10 - 09:25 Craniopharyngioma Complementary Treatment  
*Sergio Valenzuela Abasolo (Chile)*
- 9:25 - 09:40 Thalamic Glioma. How to approach  
*James Rutka (Canada)*
- 9:40 - 09:55 Brainstem/DPIG Biopsy Pros  
*Martina Messing-Juenger (Germany)*

**08:40 - 10:10 CONTROVERSIES IN NEUROSURGERY - Oncology II**

**Room LM** **Moderators:** *Broggi, Giovanni*  
*Duffau, Hugues*

- 8:40 - 09:10 Connectomics, traditional and non-traditional eloquent areas: What's below the tip of the iceberg  
*Alexis Morell (United States)*
- 8:55 - 09:10 The cortical organization of language. What are the clinical applications  
*Michael Sughrue (Australia)*
- 9:10 - 09:25 Giant Meningiomas Pre-Operative Embolization: Useful  
*Paulo Henrique Aguiar (Brazil)*
- 9:25 - 09:40 Pituitary Apoplexy. When to Operate  
*Imad Kanaan (Jordan)*
- 9:40 - 09:55 Neuronavigation in Neuro-Oncology: Is it Essential  
*Gabriel Vargas Grau (Colombia)*
- 9:55 - 10:10 Discussion

**08:40 - 10:10 WFNS SPINE COMMITTEE I**

**Room N** **Moderators:** *Zileli, Mehmet Sharif, Salman*

- 8:40 - 08:55 Natural course and epidemiology  
*Krishna Sharma (Nepal)*
- 8:55 - 09:10 Cervical Spondylotic Myelopathy: Value of Radiology and Electrophysiological Tests  
*Mehmet Zileli (Turkey)*
- 8:55 - 09:10 Value of radiology and electrophysiological tests  
*Mehmet Zileli (Turkey)*
- 9:10 - 09:25 Conservative or surgical treatment  
*Oscar Alves (Portugal)*
- 9:25 - 09:40 Evidence for Type of Surgeries  
*Salman Sharif (Pakistan)*
- 9:40 - 09:55 Outcome measures and clinical variables affecting outcomes  
*Francesco Costa (Italy)*

**08:40 - 10:25 CONTROVERSIES IN NEUROSURGERY - Spine II**

**Room O** **Moderators:** *Lafuente Baraza, Jesus Fehlings, Prof. Michael*

- 8:40 - 08:55 Cervical Spondylotic Myelopathy: Outcome Measures and Clinical Variables Affecting outcomes  
*Bong-Soo Kim (United States)*
- 8:55 - 09:10 Cervical Spondylotic Myelopathy: Radiological Variables Affecting Outcomes  
*Jutty Parthiban (India)*
- 9:10 - 09:25 Lumbar Spinal Stenosis: Decompression vs Decompression and Fusion  
*Carlos Javier Dominguez Alonso (Spain)*
- 9:25 - 09:40 Anterolateral approach to L4L5 and L5S1: Lateral or Anterior position, when and how  
*Pablo Vela (Colombia)*
- 9:40 - 09:55 Decompressive Surgery for Lumbar Spinal Stenosis  
*George Dohrmann (United States)*
- 9:55 - 10:10 Intradural Extramedullary Spinal Tumors: Open vs MIS Approach  
*Richard G Fessler (United States)*
- 10:10 - 10:25 Strategy of treatment of intramedullary spinal cord tumors. Lessons for the future on the experience of more than 1000 cases.  
*Nikolay Konovalov (Russian Federation)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - GL4 | Global Neurosurgery**

**Room BC** **Moderators:** *Fonseca, Marco*  
*El Abbadi, Prof. Najia*

- 10:40 - 10:50 Global Neurosurgery and the United Nations Healthcare-Related Sustainable Development Goals for 2030  
*Russell Andrews (United States)*
- 10:50 - 11:00 Resection of butterfly gliomas with maintenance of quality of life parameters  
*Michael Sughrue (Australia)*
- 11:00 - 11:10 Current Access and Quality of Neurosurgical Care in Ethiopia  
*Ernest Barthelemy (United States)*
- 11:10 - 11:20 Pediatrics Neurosurgery Practice in Ethiopia: A cross-sectional study  
*Hodan Abdi (United States)*
- 11:20 - 11:30 Educating the Next Generation of Global Neurosurgeons: Education for Medical Students Interested in Global Pediatric Neurosurgery  
*Sandi Lam (United States)*
- 11:30 - 11:40 Minimally Invasive Microsurgery for supratentorial tumors and aneurysms  
*Almir Dzurlic (Bosnia and Herzegovina)*
- 11:40 - 11:50 SOS CALL FOR THE NEXT GENERATIONS IN NEUROSURGERY  
*Nujerling Vargas (Japan)*
- 11:50 - 12:00 NEUROTRAUMA IN THE DOMINICAN REPUBLIC: PERSPECTIVE IN THE CONTEXT OF GLOBAL NEUROSURGERY  
*Franly Arismendy Vásquez Burgos (Dominican Republic)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - VA5 | Vascular****Room EF** Moderators: *Lopes, Demetrius*

- 10:40 - 10:50 Approach Selection Strategies for Repeat Resection of Cavernous Malformations: Cohort Study  
*Diego A. Devia (Colombia)*
- 10:50 - 11:00 Role of fluorescence dye in Neurosurgery  
*Shikhil Uppal (India)*
- 11:00 - 11:10 Cranial Keyhole Surgery: From Controversy to Standard Treatment  
*Asra Al Fauzi (Indonesia)*
- 11:10 - 11:20 An audit of Nimodipine prescribing in non-aneurysmal subarachnoid haemorrhages  
*John-paul Haugh (United Kingdom)*
- 11:20 - 11:30 Pairing flow between donor-receptor arteries by vectorial hemodynamic theoretical approximation in extra-intracranial cerebrovascular bypass comparative versus approximation through doppler ultrasound measure  
*Josué Alejandro Cervantes González (Mexico)*
- 11:30 - 11:40 TREATMENT OF INTRACRANIAL ANEURYSMS BY A HYBRID NEUROSURGEON IN COLOMBIA: A SERIE OF 165 ANEURYSMS  
*Cristhian Rincón Carreño (Colombia)*
- 11:50 - 12:00 Outcomes report of patients with non-traumatic subarachnoid hemorrhage treated by endovascular approach at a tertiary care center in the amazon rainforest  
*Daniel Gonçalves (Brazil)*
- 12:00 - 12:10 Cerebellar arteriovenous malformations: Hybrid management experience in a national reference center.  
*Óscar Medina-Carrillo (Mexico)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - VA6 | Vascular****Room G**

**Moderators:** *Polónia, Patrícia*  
*Mura, Jorge*  
*Feo, Oscar Hernando*

- 10:40 - 10:50 Multimodal therapy of brain AVM: prognostic value of grading scores  
*Juan E Basilio-Flores (Perú)*
- 10:50 - 11:00 Computational Intracerebral Haemorrhage Score - modification of ICH Score including quantitative CT appearance factors  
*Roger Krzyżewski (Poland)*
- 11:00 - 11:10 Endovascular treatment of carotid-ophthalmic aneurysm :A Long Term Follow up single institutional study  
*Nourou Dine Adeniran Bankole (Morocco)*
- 11:10 - 11:20 Intraparenchymal and intraventricular hemorrhage due to ruptured dural arteriovenous fistula  
*Mariano Montes De Oca Delgado (Mexico)*
- 11:20 - 11:30 Trans-venous embolization of CSF-venous fistula for treatment of spontaneous intracranial hypotension: clinical and radiological outcomes in forty consecutive cases  
*Nicholas Borg (United States)*
- 11:40 - 11:50 SRS VS. EMBOLIZATION FOR HIGH-GRADE AVM  
*Rebeca Perez-Alfayate (Spain)*
- 11:50 - 12:00 Spontaneous Resolution of Intracranial Vascular Lesions: A Single Institution Experience of Disappearing Aneurysm, AVMs and DAVFs  
*Kevin Agyemang (United Kingdom)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - SP03 | Spine**

**Room HI** **Moderators:** *Pereira, Paulo*  
*Berbeo, Miguel*  
*Baabor, Marcos*

- 10:40 - 10:50 Neuropathic Pain: A component to be considered when treating degenerative lumbar disease  
*Paulo Pereira (Portugal)*
- 10:50 - 11:00 Avoiding dysphagia in anterior cervical discectomy surgery  
*Fabio Torregrossa (Italy)*
- 11:00 - 11:10 Role of pedicle screw augmentation in decreasing the reoperations rate following posterior lumbar interbody fusion.  
*Pablo Mendivil (Argentina)*
- 11:10 - 11:20 GIANT CERVICAL EPENDIMOMA, AN INFREQUENT PRESENTATION. REPORT OF TWO CASES  
*Luis Jaime Saavedra Ramírez (Perú)*
- 11:20 - 11:30 Intraoperative Complications of Anterior Lumbar Interbody Fusion (Alif): A Five-Year Experience Of A Group Of Spine Surgeons Performing Their Own Approaches  
*Diego A. Devia (Colombia)*
- 11:30 - 11:40 How effective and safe is minimally invasive oblique lumbar interbody fusion in patients with degenerative lumbar disease  
*Paulo Pereira (Portugal)*
- 11:40 - 11:50 Effectiveness of 6 surgical approaches for minimally invasive lumbar interbody fusion: 1-year follow-up results from a global study  
*Paulo Pereira (Portugal)*
- 11:50 - 12:00 Comparison of surgical vs Intradiscal Ozone Treatment of Sciatica due to Lumbar Disc Herniation with Special Reference to COVID-19 Pandemic  
*Qurrat Ain (Pakistan)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - SP04 | Spine****Room J**

**Moderators:** *Díaz, Roberto*  
*Sharif, Salman*  
*Vazquez Soto, Pedro*

- 10:40 - 10:50 'Only spinal fixation' as surgical treatment of cervical myelopathy related to ossified posterior longitudinal ligament. A review of 57 cases  
*Atul Goel (India)*
- 10:50 - 11:00 Greater trochanteric pain syndrome in spine surgery - the role of timely diagnosis  
*Arkadiy Kazmin (Russian Federation)*
- 11:00 - 11:10 CLINICAL IMPROVEMENT OF PAIN IN PATIENTS WITH VERTEBRAL FRACTURES TREATED WITH VERTEBROPLASTY AT THE "20 DE NOVIEMBRE" NATIONAL MEDICAL CENTER, MEXICO CITY  
*Alberto Ramírez R. (Mexico)*
- 11:10 - 11:20 Intraoperative three-dimensional computerized tomography (O-arm) guided navigation system for the posterior spinal fixation: experience in colombia.  
*Carlos Alfredo Pimentel Bernal (Dominican Republic)*
- 11:20 - 11:30 Anterior Decompression for Rare case of Aracnoidal Anterior Cervical Cyst  
*Dunia Patricia Quiroga Angulo (Colombia)*
- 11:30 - 11:40 Providing an automated method for detection of unstable burst fractures of the lumbar spine based on FCM in infrared images  
*Fatemeh Valipoori Goodarzi (Iran)*
- 11:40 - 11:50 Unilateral full-Endoscopic versus tubular approach in lumbar spinal stenosis.  
*Angela Carrascosa Granada (Spain)*
- 11:50 - 12:00 En bloc resection of grade II intramedullary ependymomas is associated with superior Gross Total Resection (GTR) rates and functional outcome at 3 months  
*Vincent Healy (Ireland)*
- 12:00 - 12:10 Effectiveness and Safety of Continuous Infusion Regional Anesthesia Pumps for Pain after Thoracopelvic Fusion Surgeries for Persistent Spinal Pain Syndrome  
*Mohamed Soliman (Egypt)*
- 12:10 - 12:20 Perioperative Outcomes and Predictive Factors of Anterior Lumbar Interbody Fusions based on American Society of Anesthesiologist Physical Status Score: a multicenter, retrospective cohort study  
*Mohamed Soliman (Egypt)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - OC05 | Oncology****Room K**

**Moderators:** *Foroglou, Nikos*  
*Lovo, Eduardo*  
*Maloof Cuse, Dieb*

- 10:40 - 10:50 Immunological aspects of intratumoral chemotherapy and immunotherapy in murine glioma models  
*Julio Alberto Enríquez Pérez (Sweden)*
- 10:50 - 11:00 Use of 5-ALA Fluorescence-Guided Resection in a Diffuse Astrocytoma, IDH-Wildtype: Case Report  
*Sebastian A. Ochoa Guzman (Ecuador)*
- 11:00 - 11:10 Two-stage total resection of extensive uncommonly located pleomorphic xanthoastrocytoma - case description and treatment strategy  
*Zygmunt Siedlecki (Poland)*
- 11:10 - 11:20 Awake Craniotomy in a middle-income country. Challenges and technical nuances.  
*Alvino De Leon (Panama)*
- 11:20 - 11:30 Characterization of Progesterone Receptor Expression in Intracranial Meningiomas of Patients Treated in a High-Complexity Hospital in Bogota, Colombia  
*Jose Luis Chaves (Colombia)*
- 11:30 - 11:40 Postoperative migration of motor activity in Low-grade Glioma resection: a systematic review  
*Rhuann Pontes Santos Silva (Brazil)*
- 11:40 - 11:50 Impact of Extent of Resection on Functional Outcomes in Patients with Diffuse Low Grade Glioma: Systematic Review and Meta-Analysis  
*Mustafa El Sheikh (United Kingdom)*



**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - OC06 | Oncology**

**Room LM** **Moderators:** *Becerra, Antonio*  
*Maldaun, Marcos*

- 10:40 - 10:50 A Meta-Analysis of Overall Survivability and Post-Operative Deficit Development after Surgical Resection Versus Biopsy in Butterfly Glioblastoma Patients  
*Mohamed Soliman (Egypt)*
- 10:50 - 11:00 Stereotactic Radiosurgery for Recurrent Glioblastoma Multiforme: A Retrospective Multi-Institutional Experience  
*Alejandra Moreira (El Salvador)*
- 11:00 - 11:10 Glioblastoma, strategies of treatment at Hermanos Ameijeiras hospital  
*Peggys Cruz Pérez (Cuba)*
- 11:10 - 11:20 Endoscopic approach through a brain port in patients with deep lying tumor  
*Peggys Cruz Pérez (Cuba)*
- 11:20 - 11:30 'En-masse' tumor resection strategy for low grade gliomas arising from short arcuate fibers  
*Atul Goel (India)*
- 11:30 - 11:40 Intracerebral cyst evacuation guided by intraoperative ultrasound.  
*Andres Vargas (Colombia)*
- 11:40 - 11:50 Superficial Cerebral Siderosis secondary to Craniopharyngioma  
*Likhith Alakandy (United Kingdom)*
- 11:50 - 12:00 In the search for new anticancer molecules with interaction with membrane receptors: Integrins, an old reborn target  
*Alejandro Gómez Martínez (Colombia)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - PED2 | Pediatric****Room N**

**Moderators:** *Boop, Frederick*  
*Dominguez, Leonardo*  
*Zuccaro, Graciela*

- 10:40 - 10:50 Survival and prognostic factors in pediatric patients with Medulloblastoma treated at a National Pediatric Hospital in Peru.  
*Jose Daniel Flores-Sanchez (Perú)*
- 11:00 - 11:10 Radical resection of craniopharyngioma in children  
*Germán Ballesteros Cuevas (Mexico)*
- 11:10 - 11:20 Pediatric orbital hydatid cyst simulating orbital tumor  
*Lamia Benantar (Morocco)*
- 11:20 - 11:30 MoyaMoya disease/syndrome in pediatric population, surgery and results of a prospective study in a Latin America  
*Johann Serrato (Colombia)*
- 11:30 - 11:40 Giant cavernomatous malformation with posterior fossa lymphangiomatous phenotype associated with orbital venolymphatic anomaly in an 11-month-old patient: A Case report and Literature Review.  
*Jose Daniel Flores-Sanchez (Perú)*
- 11:40 - 11:50 Arachnoid Cyst in Pediatrics: Report of 43 cases  
*Alberto Ramirez (Perú)*
- 11:50 - 12:00 Dermal sinus tract associated with abscessed intramedullary dermoid tumor of cervical location  
*Victoria Ronquillo (Ecuador)*
- 12:00 - 12:10 Global Incidence Proportion of Intraventricular Hemorrhage of Prematurity: A Meta-Analysis of Studies Published 2010-2020  
*Michael DeCuyper (United States)*

15/03/2022

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - SB3 | Skull Base**

**Room O Moderators:** *Orozco Mera, Javier*  
*Arráez Sánchez, Miguel Angel*  
*Borba, Luis*

10:50 - 11:00 Lessons learned from complications and experience with 416 patients with hemifacial spasm; the dos and the don'ts !  
*Ahmed AlMenabbawy (Egypt)*

11:00 - 11:10 Multiple Meningiomas in the diagnosis of Neurofibromatosis Type 2 and other tumor disposition syndromes  
*Cathal Hannan (United Kingdom)*

11:10 - 11:20 Safe Entry Zones to the Brainstem by Surgical Approach and Location  
*Antonio Bernardo (United States)*

11:20 - 11:30 Concerns of cerebrospinal fluid leak in aggressive expanded endonasal endoscopic approach for craniopharyngiomas  
*Marlon Ortiz (Cuba)*

11:30 - 11:40 Extended Endonasal Endoscopic Approach in craniopharyngiomas: "the rule of 3" in surgical dissection.  
*Marlon Ortiz (Cuba)*

**10:40 - 12:20 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - FUN2 | Functional**

**Room P Moderators:** *Lopez Rios, Adriana Lucia*  
*Broggi, Giovanni*  
*Buitrago, Cesar*

10:40 - 10:50 Ipsilateral rhizotomy and contralateral posteromedial thalamotomy by Gamma Knife Radiosurgery for complex trigeminal neuralgia  
*Juan Pablo Leal Isaza (Colombia)*

10:50 - 11:00 Could be spinal cord stimulation an alternative for the management of refractory non-neuropathic shoulder pain A report of two cases.  
*Juan Pablo Castaño Montoya (Spain)*

11:00 - 11:10 Brain Volume Related Complications of Deep Brain Stimulation  
*James Ulrich (United Kingdom)*

11:10 - 11:20 Differential approach to the treatment of chronic pelvic pain  
*Andrey Polushkin (Russian Federation)*

11:20 - 11:30 Sympathetic block: a low-cost therapeutic alternative for treating complex regional pain syndrome, a high-cost disease.  
*Claudia Garzón (Colombia)*

11:30 - 11:40 Ropivacaine/Dexmedetomidine scalp block (RoDex Technique) for awake surgery and functional stereotactic surgery.  
*Carlos Erosa Velázquez (Mexico)*

11:40 - 11:50 Radioneuromodulation in oncological and trigeminal neuralgia, a clinical reality and a concept to be defined in the neurosurgical field.  
*Eduardo Lovo (El Salvador)*

**12:30 - 13:45 LUNCH SESSION - Dr Ossama Al-Mefty****Auditorium Moderators:**

12:30 - 13:15 HEELER: the light that will never goes out  
*Ossama Al-mefty (United States)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 1****Floor 3 Lobby Moderators:**

- Intraventricular metastasis of a clear cell carcinoma : a case report  
*Ala Belhaj (Tunisia)*
- Ethmoidonasal carcinoma invading the frontal sinus: report of two cases and review of the literature  
*Ala Belhaj (Tunisia)*
- Intracerebellar schwannoma: a very rare entity of tumours of the posterior fossa: a case report and review of the literature  
*Ala Belhaj (Tunisia)*
- Cerebellar liponeurocytoma: report of a recurrent case and review of the literature  
*Ala Belhaj (Tunisia)*
- Hypopituitarism secondary to a pituitary metastasis in a young woman with an invasive breast carcinoma  
*Ala Belhaj (Tunisia)*
- Glioblastoma of the posterior fossa in children: report of a case and review of the literature  
*Ala Belhaj (Tunisia)*

12:30 - 12:40 Cerebellopontine angle paraganglioma: report of a case and review of the literature  
*Ala Belhaj (Tunisia)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 2****Floor 3 Lobby Moderators:**

12:30 - 12:40 Pseudotumoral presentation of a multiple sclerosis: case report and review of the literature  
*Ala Belhaj (Tunisia)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 3****Floor 3 Lobby Moderators:**

- 12:56 - 13:06 Rare presentation of pineal and suprasellar pineoblastoma mimicking a bifocal germ cell tumor.  
*Hajhouji Farouk (Morocco)*
- 13:09 - 13:19 Case report: Calcifying Pseudoneoplasm of the Neuroaxis (CAPNON) presenting with refractory secondary epilepsy  
*Maurício Bezerra Sales (Brazil)*
- 13:22 - 13:32 Evaluation of the impact of the interval between surgery and radiotherapy in additional surgical approach of glioblastoma  
*Maurício Bezerra Sales (Brazil)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 4****Floor 3 Lobby Moderators:**

- 12:30 - 12:40 Gliosarcoma - case revision  
*Ingrid Campos (Brazil)*
- 12:43 - 12:53 The thousand faces of the Glioblastoma, an atypical case report.  
*Juan Pablo Castaño Montoya (Spain)*
- 12:56 - 13:06 Surgical Outcomes of Intramedullary Spinal Cord Tumors and the prognostic Value of Intraoperative Neuromonitoring: analysis of 21 patients in a single institution  
*Amanda Del Rosario Cuastumal Aguirre (Colombia)*
- 13:09 - 13:19 EPIDEMIOLOGICAL-CLINICAL-PATHOLOGICAL CORRELATION IN PATIENTS WITH GLIOBLASTOMA MULTIFORME (WHO Grade IV) FROM 2012 TO 2016  
*Henry del Cid Solares (Guatemala)*
- 13:22 - 13:32 Rare case of Cranial Subcutaneous lymphoma with calvarial extension: Case report and literature review  
*Fahd Derkaoui Hassani (Morocco)*
- 13:35 - 13:45 CARCINOMA ESCAMOCELULAR METASTÁSICO A COLUMNA: REPORTE DE CASO Y REVISIÓN DE LA LITERATURA  
*Diana Paola Duarte Mora (Colombia)*
- 13:48 - 13:58 DEMOGRAPHIC CHARACTERIZATION OF ADULT PATIENTS WITH INTRACRANIAL TUMORS AT THE CENTRAL MILITARY HOSPITAL, BOGOTÁ COLOMBIA  
*Diana Paola Duarte Mora (Colombia)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 5****Floor 3 Lobby Moderators:**

- 12:30 - 12:40 Comprehensive Profile of Clinical Aspects, Surgical and Perioperative Management in Patients with Glioblastoma - Single Institutional Study  
*Bogdan Constantin Dumitrescu (Romania)*
- 12:43 - 12:53 Pineal region Meningioma : Case report and literature review  
*Hajhouji Farouk (Morocco)*
- 13:35 - 13:45 Pineal tumor resolved by Approach Endoscopic Supracerebellar Infratentorial. Case report and literature review.  
*Juvenal Huanca Amaru (Bolivia)*
- 13:48 - 13:58 Brain radionecrosis. Case report and literature review  
*Yurledys Jhohana Linares Benavides (Colombia)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 6****Floor 3 Lobby Moderators:**

- 13:48 - 13:58 Concurrent Intraventricular Intracranial Myxoid Mesenchymal Tumor and Ependymoma in a Long-Term Ewing Sarcoma Survivor  
*Alexis Morell (United States)*

**12:30 - 14:00 Varian | Workshop****Room HI Moderators:**

- 12:30 - 14:00 HyperArc an end-to-end class solution for the treatment of intracranial single and multiple targets  
*Milton Ixquiac (Guatemala)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 7****Floor 3 Lobby Moderators:**

- 12:30 - 12:40 Initiation Axis Syndrome: Description of a Novel Postoperative Neurological Syndrome and Review of Connectomic Insights into Postoperative Neurological Deficit Prevention  
*Alexis Morell (United States)*
- 12:43 - 12:53 Perioperative complications in endoscopic endonasal versus transcranial resections of adult craniopharyngiomas  
*Alexis Morell (United States)*
- 12:56 - 13:06 Transcortical Resection of a Giant Bilobed Falcine Meningioma  
*Alexis Morell (United States)*
- 13:09 - 13:19 CLINICAL, EPIDEMIOLOGICAL AND PHARMACOLOGICAL PROFILE OF PATIENTS WITH NERVOUS SYSTEM TUMORS  
*Robson Luís Oliveira Amorim (Brazil)*
- 13:22 - 13:32 GENETIC AND EPIGENETIC ASPECTS OF PITUITARY ADENOMAS: AN INTEGRATIVE REVIEW  
*Robson Luís Oliveira Amorim (Brazil)*
- 13:48 - 13:58 Anatomical description and variations of the anterior arterial brain circulation in Colombian cadaveric specimens  
*Harold Palmera Pineda (Colombia)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 8****Floor 3 Lobby Moderators:**

- 12:30 - 12:40 Incidence of tumors of the Central Nervous System in a Reference Hospital in Central Mexico.  
*Gustavo de Jesus Parra Romero (Mexico)*
- 12:56 - 13:06 Intraspinal primary tumors: Local experience with a mixed surgical team in a series of cases  
*Jose Rafael Perozo Ron (Chile)*
- 13:48 - 13:58 EWING'S SARCOMA OF CRANIAL LOCATION: CASE REPORT  
*Alberto Ramirez (Perú)*

**12:30 - 14:00 o8t Omniscient Neurotechnology Workshop****Room N Moderators:** *Sughrue, Michael*  
*Morell, Alexis*

- Optimizing Precision Network Surgery Through the Lens of Connectomics  
*Charles Teo (Australia)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 9****Floor 3 Lobby Moderators:**

- 12:30 - 12:40 TRANSCARUNCULAR ACCESS AS A CAVERNOUS HEMANGIOMA IN MEDIAL ORBITAL REGION APPROACH  
*Arony Teuri Ramirez Sarmiento (Brazil)*
- 12:43 - 12:53 Primary Central Nervous System Lymphoma of Diffuse B cells in a Patient with Neurofibromatosis Type 1: A Case Report.  
*Diego Alberto Sandoval-lópez (Mexico)*
- 12:56 - 13:06 Solitary Fibrous Tumor/Hemangiopericytoma (SFT/HPC); a Central Nervous System Lesion. Case report and review of the literature in a 15 years old patient.  
*Johann Serrato (Colombia)*
- 13:09 - 13:19 Analysis of PIWI-interacting RNAs in glioblastoma stem cells: Identification of new therapeutic  
*Martin Smrčka (Czech Republic)*
- 13:22 - 13:32 Small RNAseq analysis of microRNAs in brain metastasis: New diagnostic tool  
*Martin Smrčka (Czech Republic)*

**12:30 - 14:00 e-POSTER SESSION 2 | Screen 10****Floor 3 Lobby Moderators:**

- 13:09 - 13:19 PRIMARY INTRAMEDULLARY GLIOBLASTOMA, CASE REPORT AND LITERATURE REVIEW  
*Andres Vargas (Colombia)*
- 13:22 - 13:32 Case presentation of a Burkitt Lymphoma diagnosed initially as a hematoma posterior to head trauma  
*Gabriel Eduardo Vargas-Rosales (Colombia)*
- 13:48 - 13:58 Blake's pouch cyst : A Case Report  
*Ala Belhaj (Tunisia)*

**12:30 - 14:00 Medtronic Satellite Symposium****Room O Moderators:**

- Latest Trends in Neuromodulation | Toronto Western Hospital experience with Brainsense™ technology  
*Andrés Lozano (Canada)*
- Best Practices in Severe Spasticity: ITB Therapy  
*Fabian Piedimonte (Argentina)*



**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - GL5 | Global Neurosurgery****Room A**

**Moderators:** *Masini, Marcos*  
*Cadavid, Luis Carlos*  
*El Ghandour, Nasser*

- 14:00 - 14:10 Aesthetics outcomes in patients submitted to pterional craniotomy and its variants: A Scoping Review.  
*Daniel Gonçalves (Brazil)*
- 14:10 - 14:20 Management of intracranial suppurations at the Ibn Tofail Hospital of Mohamed VI UHC : epidemiological, clinical and therapeutic aspects  
*Lamia Benantar (Morocco)*
- 14:20 - 14:30 Barriers to Neurotrauma Care in Low- to Middle- Income Countries: An International Survey of Neurotrauma Providers  
*Saniya Mediratta (United Kingdom)*
- 14:30 - 14:40 Psychological assessment of neuro-surgical Candidates post-selection - is it worth the penny  
*Jigishaa Moudgil-joshi (United Kingdom)*
- 14:40 - 14:50 Technical and clinical efficacy of India's first, "Made in India" Neuronavigation system  
*Srinivasan Uddanapalli (India)*
- 14:50 - 15:00 Neurosurgical Wrong Surgical Site in Lower-Middle- or Low-Income Countries (LMICs): A Survey Study  
*Mohamed Soliman (Egypt)*
- 15:00 - 15:10 Erratum and corrigendum in Neurosurgical publications: an in-depth analysis and inference  
*Jigishaa Moudgil-joshi (United Kingdom)*
- 15:10 - 15:20 Intraoperative Neuromonitoring in Neurosurgery. Our Preliminary Experience and Literature Review  
*Said Ait Benali (Morocco)*
- 15:20 - 15:30 Interest of a Morbidity and Mortality Review in a department of Neurosurgery. Our experience  
*Said Ait Benali (Morocco)*
- 15:30 - 15:40 Cranioplasty as neurosurgical procedure with potential risk of legal claims  
*Zygmunt Siedlecki (Poland)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - GL6 | Global Neurosurgery**

**Room BC Moderators:** *Adelson, P. David*  
*Ordonez-Mora, Edgar*  
*Quintana, Leonidas*

- 14:00 - 14:10 Needs of Young African Neurosurgeons and Residents: A cross-sectional study  
*Ignatius Esene (Cameroon)*
- 14:10 - 14:20 Infections and Neurosurgery: Reality, Challenges and Work Strategies at Hermanos Ameijeiras Hospital  
*Peggys Cruz Pérez (Cuba)*
- 14:20 - 14:30 Fulfilling the Specialist Neurosurgery Workforce Needs in Africa: a Projection Modeling and Analysis Towards 2030  
*Anthony Fuller (United States)*
- 14:30 - 14:40 Neurosurgeon's awareness of folate as a prevention strategy of neural tube defects: global perspective  
*Anastasia Arynchyna-Smith (United States)*
- 14:40 - 14:50 The need of international collaboration for developing Neurosurgical Care and training in Ethiopia  
*Hodan Abdi (United States)*
- 14:50 - 15:00 Complications after anterior cervical discectomy - single institution study of 789 patients  
*Vladimir Katuch (Slovakia)*
- 15:00 - 15:10 Subarachnoidal hemorrhage in endonasal endoscopic resection of pituitary macroadenoma. Case report and literature review. Guillermo Almenara Irigoyen National Hospital  
*Olenka Sapallanay-Ojeda (Perú)*
- 15:10 - 15:20 Global Neurosurgery among the EANS community: preliminary results of a multinational survey on interest and participation  
*Nicolò Marchesini (Italy)*
- 15:20 - 15:30 Exploring the adherence to guidelines for adult spinal trauma in low and middle-income healthcare economies: a survey on barriers and possible solutions  
*Nicolò Marchesini (Italy)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - VA7 | Vascular****Room EF**

**Moderators:** *Alaraj, Ali*  
*Ramos Girón, Alejandro*

- 14:00 - 14:10 Middle Meningeal Artery (MMA) Embolization for Chronic Subdural Haematoma: A Prospective UK study  
*Alvaro Rojas Villabona (United Kingdom)*
- 14:10 - 14:20 ANGIOGRAPHICALLY NEGATIVE INTRAVENTRICULAR HEMORRHAGE, CASE SERIES AND LITERATURE REVIEW  
*Johann Serrato (Colombia)*
- 14:20 - 14:30 Mechanical Thrombectomy of very elderly patients over 90 years old with acute ischemic stroke.  
*Yushiro Take (Japan)*
- 14:30 - 14:40 Risk factors and outcome analysis of patients with intraoperative rupture (IOR) of ruptured cerebral aneurysm during microsurgical clipping.  
*Gopal Raman Sharma (Nepal)*
- 14:40 - 14:50 Decompressive Hemicraniectomy in Hemispheric Ischemic Stroke: a prospective cohort in a Brazilian Population  
*Daniel Gonçalves (Brazil)*
- 14:50 - 15:00 Results of a single center in the treatment of aneurysmal subarachnoid hemorrhage: is early intervention and neurosurgeon's experience effective in prognosis  
*Cagri Elbir (Turkey)*
- 15:00 - 15:10 Minimally Invasive Surgery for Spontaneous Intracerebral Hematoma: Real-life Implementation Model and Economic Estimation  
*Alejandra Mosteiro (Spain)*
- 15:10 - 15:20 CROSS CLIPPING TECHNIQUE FOR COMPLEX ANEURYSMS OF THE MIDDLE CEREBRAL ARTERY (MCA).  
*Edgar Nathal Vera (Mexico)*
- 15:20 - 15:30 DESCRIPTION OF THE MINIPETERIONAL APPROACH TECHNIQUE THROUGH AN EXTRADURAL APPROACH  
*Edgar Nathal Vera (Mexico)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - HY1 | Hydrocephalus****Room G**

**Moderators:** *Herrada Pineda, Tenoch  
Martín Laez, Ruben  
Ramón, Juan Fernando*

- 14:00 - 14:10 Anatomic-Endoscopic Variations of the Floor of the Third Ventricle: Surgical Implication in the Third Ventriculostomy.  
*Nadin Abdala Vargas (Colombia)*
- 14:10 - 14:20 Shunt therapy in idiopathic normal pressure hydrocephalus: results from a long-term observation  
*Giovanni Grasso (Italy)*
- 14:20 - 14:30 Post-operative seizures following shunt surgery for normal pressure hydrocephalus  
*Adam Nunn (United Kingdom)*
- 14:30 - 14:40 Hydrocephalus: Retrospective Study, Casuistry During One Year in an Institution in Colombia  
*Johann Serrato (Colombia)*
- 14:40 - 14:50 Gamma number: a unique radiological measure in the radiological diagnosis of hydrocephalus  
*Angela Carrascosa Granada (Spain)*
- 15:00 - 15:10 Innovative use of a Novel Device For Securing External Ventricular Drains In Adults: A Pilot Study, Comparison To Existing Techniques And Cost Analysis  
*James MW Robins (United Kingdom)*
- 15:10 - 15:20 Colloid cysts and the role of endoscope assisted microscopic resection; a comparative controlled study  
*Ahmed AlMenabbawy (Egypt)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - SP05 | Spine****Room J**

**Moderators:** *Zuluaga, Julián*  
*Zileli, Mehmet*  
*Parajon Díaz, Avelino*

14:00 - 14:10 CEMENT REINFORCEMENT OF THE ENGAGED VERTEBRAL BODIES IN CASES WITH SYMPTOMATIC LOOSENING, MIGRATION AND FRACTURE OF TRANSPEDICULAR SCREWS

*Yavor Enchev (Bulgaria)*

14:10 - 14:20 Posterolateral epidural supra-C2-root approach (PESCA) for biopsy of lesions of the odontoid process and the retro-odontoid region in same sitting after occipitocervical fixation and decompression

*Sasan Darius Adib (Germany)*

14:20 - 14:30 Biologic nucleoplasty a novel procedure for degenerative disc disease, single-center experience at Hospital Universitario San José Infantil in Bogotá, Colombia.

*Juan-Pablo Perilla-Estrada (Colombia)*

14:30 - 14:40 Facet-joint corticosteroids injections and percutaneous lumbar rhizotomy as chronic low back pain treatment. A cost-effectiveness comparison.

*Sebastian A. Ochoa Guzman (Ecuador)*

14:40 - 14:50 Visual field related quality of life after deformity correction in cases of lower cervical spine trauma of patients with ankylosing spondylitis - Retrospective monocentric study

*Petr Vachata (Czech Republic)*

15:00 - 15:10 INSTRUMENTED DECOMPRESSION IN THE ELDERLY WITH DEGENERATIVE LUMBAR CANAL STENOSIS WITH COMORBIDITIES IMPROVES QUALITY OF LIFE

*Harjinder Singh Bhatoe (India)*

15:10 - 15:20 Surgical treatment of spinal metastases and factors associated with post-operative survival - a 10-year retrospective analysis

*Felix Steckler (United Kingdom)*

15:20 - 15:30 Epidural Hypertension Theory in Patients with Lumbar Spinal Stenosis: Pilot Study.

*Andrés Camilo Vargas-Jiménez (Spain)*

15:30 - 15:40 Surgical Strategies and Management of Adult Spine Tuberculosis at the Hospital Antonio Lorena in Cusco - PERÚ

*Jean Marcel Castelo Vega (Perú)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - OC07 | Oncology****Room K**

**Moderators:** *Senz, Ernst Karl*  
*Morell, Alexis*  
*Broggi, Giovanni*

- 14:00 - 14:10 Surgical Management of a Extra and Intracranial Transitional Meningioma: Case Report  
*Arturo Miguel Rosales Amaya (Mexico)*
- 14:10 - 14:20 Surgical management of brain glioma assisted with operative ultrasonography vs neuronavigation: case series and single-institution analysis of outcomes  
*Ernesto Javier Delgado Jurado (Mexico)*
- 14:20 - 14:30 Phytotherapeutics in GBM: A review of current literature for in-vivo use  
*Shan Mian (United Kingdom)*
- 14:30 - 14:40 Signaling pathways involved in the relapse of Glioblastoma: A Review  
*Fernando Peralta (Colombia)*
- 14:40 - 14:50 Prognostic factors associated with long-term survival in WHO grade II meningiomas: a third-level center experience  
*Filippo Andrea Sinosi (Italy)*
- 14:50 - 15:00 Complications related with ventricular opening in postoperative glioma surgery. Retrospective Single Center Analysis  
*Mário Campos (Portugal)*
- 15:00 - 15:10 Microsurgical resection of central lobe gliomas: How we do it  
*Rocio Mamani (Perú)*
- 15:10 - 15:20 Radiation Induced Meningioma vs. Sporadic Meningioma: Does Radiation Compound Prognostic Factors for High Grade Meningioma  
*Mustafa El Sheikh (United Kingdom)*
- 15:20 - 15:30 Awake cranial surgery with intraoperative language mapping for brain tumors. A single-center experience  
*Andrés Cervio (Argentina)*
- 15:30 - 15:40 Surgical Treatment of IV Ventricle Ependymomas  
*Andrés Cervio (Argentina)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - OC08 | Oncology****Room LM**

**Moderators:** *Teo, Charles*  
*Carmona, Leonel*  
*Aguiar, Paulo Henrique*

14:00 - 14:10 Morpho-molecular characterization of gemistocytic astrocytomas and its clinical significance

*Andrei Zrelov (Russian Federation)*

14:10 - 14:20 Cervical cordotomy in terminal cancer: pain relieving in oncological treatment

*Paulo Henrique Aguiar (Brazil)*

14:30 - 14:40 Pituitary Giant Cell Granuloma: Rare Entity

*Shikhil Uppal (India)*

14:30 - 14:40 SPONTANEOUS REGRESSION OF BRAIN TUMORS IN CHILDREN: PRESENTATION OF A CASE OF PILOCYTIC ASTROCYTOMA AND REVIEW OF THE LITERATURE

*Ricardo Lopez (Mexico)*

14:40 - 14:50 The Chance for New Brain Metastases when Patients Stop Systemic Therapy

*Douglas Kondziolka (United States)*

14:50 - 15:00 Extensive spinal cord injury: Why and when to decide for biopsy. Case report

*Jose Garcia Benavides (Perú)*

15:00 - 15:10 Surgical Management of Intra and Extracranial Metastases of Testicular Cancer: Case Report

*Arturo Miguel Rosales Amaya (Mexico)*

15:10 - 15:20 Evolution from sleep patient to awake surgery as a rule for intraaxial brain tumor surgery, multitasking evaluation

*Andres Vargas (Colombia)*

15:20 - 15:30 Mexican Sphenoid Sinus Radiological Anatomy. Key Data for Endoscopic Endonasal Surgery

*Agustín Dorantes Argandar (Mexico)*

15:30 - 15:40 Lynch Syndrome Presenting with Anaplastic Meningioma with Neuroendocrine Differentiation - A Case report and review of literature

*Likhith Alakandy (United Kingdom)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - PED3 | Pediatric**

**Room N** **Moderators:** *Valenzuela Abasolo, Sergio*  
*Ghotme, Kemel*

- 14:00 - 14:10 Value of Ventricular irrigation in Gram negative Cerebral Ventriculitis  
*Ahmed AlMenabbawy (Egypt)*
- 14:10 - 14:20 Slit Ventricle Syndrome and Sub-Temporal Decompression  
*James Ulrich (United Kingdom)*
- 14:20 - 14:30 COVID-19 Impact on Body Mass Index in Children with Spina Bifida  
*Shelly Sharma (United States)*
- 14:40 - 14:50 Efficacy of minimal invasive technique surgery for compund cranyosinostosis, experience in a single hospital  
*Germán Ballesteros Cuevas (Mexico)*
- 14:50 - 15:00 Management of traumatic atlanto-occipital dislocation (AOD) in a 10-year-old male with pin-less halo immobilisation  
*Chandrasekaran Kaliaperumal (United Kingdom)*
- 15:00 - 15:10 The Spina Bifida Experience from Pakistan. It is The Time to Commence Food Fortification in the Country  
*Qurrat Ain (Pakistan)*
- 15:10 - 15:20 Open vs Endoscopic Assisted Surgery for Craniosynostosis in Terms of Blood Loss, Infection Risk and Hospital: A Study from Low-Mid Income Countries  
*Qurrat Ain (Pakistan)*
- 15:30 - 15:40 Posterior fossa Pilocytic astrocytoma contributing to obstructive sleep apnoea in a child: Case report and review of literature  
*Chandrasekaran Kaliaperumal (United Kingdom)*
- 15:40 - 15:50 The 100 Most Discussed Articles in Pediatric Neurosurgery: An Analysis of the Altmetric Database  
*Michael DeCuyper (United States)*



**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - SB4 | Skull Base****Room O**

**Moderators:** *Bernardo, Antonio*  
*Guzmán, Francisco*  
*Ramina, Ricardo*

- 14:00 - 14:10 Does the TRANSSPHER Grading system 'TRANSSPHER' to purely endoscopic pituitary surgery for macroadenomas Our series of 235 consecutive patients.  
*James MW Robins (United Kingdom)*
- 14:20 - 14:30 Minimally invasive 360-degree approach with endoscopic visualization to intracranial lesions: Experience in La Misericordia Clínica Internacional during 2016-2021  
*Dieb Maloof Cuse (Colombia)*
- 14:30 - 14:40 The Hitchhiker's Position in Endoscopic Pituitary Surgery  
*John Kilgallon (United States)*
- 14:40 - 14:50 Endoscopic Keyhole approach to skull base tumors. Surgical concerns.  
*Omar López Arbolay (Cuba)*
- 14:50 - 15:00 Fungal mass mimicking as meningioma in immunocompetent adult female  
*Shikhil Uppal (India)*
- 15:00 - 15:10 The Tumour Microenvironment in Growing and Static Vestibular Schwannomas  
*Cathal Hannan (United Kingdom)*
- 15:10 - 15:20 Concurrent Endonasal and Subtemporal Approach to a giant craniopharyngioma. Case Report  
*Marlon Ortiz (Cuba)*
- 15:20 - 15:30 ENDOSCOPIC ENDONASAL RESECTION OF PITUITARY TUMORS IN PERU  
*Jerson Flores (Perú)*
- 15:30 - 15:40 A pure-endoscopic endonasal resection of an esthesioneuroblastoma invading the anterior fossa  
*Jose Luis Chaves (Colombia)*

**14:00 - 16:00 PERSONAL NEUROSURGICAL PRACTICE AND RESEARCH - FUN3 | Functional**

**Room P** **Moderators:** *Buitrago, Cesar*  
*Piedimonte, Mr. Fabian*

- 14:00 - 14:10 Experience of combined pudendal and sacral neurostimulation in treatment of patient with chronic pelvic pain  
*Andrey Polushkin (Russian Federation)*
- 14:20 - 14:30 Percutaneous Radiofrequency Thermocoagulation via Hartel Technique for the Treatment of Trigeminal Neuralgia: A Systematic Review  
*Alejandro Vargas-Moreno (Colombia)*
- 14:30 - 14:40 Spinal cord stimulation and cauda equinasyndrome: Could it be a valid option A report of two cases  
*Juan Pablo Castaño Montoya (Spain)*
- 14:40 - 14:50 intracerebral stereotaxic injection of taurine in mice: understanding the anti-epileptic properties of taurine.  
*Yassine Yachou (France)*
- 14:50 - 15:00 Rescue Subthalamotomy for Parkinson's disease with bipolar thermal energy through deep brain stimulation electrodes: experience in a Latin American institution.  
*Juan Camilo Salcedo (Colombia)*
- 15:00 - 15:10 Symptomatic Intraparenchymal Pneumonoccephalus with Spontaneous Recovery after Parkinson's Surgery  
*Lucca Pizzato Tondo (Brazil)*
- 15:10 - 15:20 Gasserian ganglion rescue stimulation, for severe and refractory trigeminal neuropathic pain in a Latin American institution: a case series presentation.  
*Juan Felipe Mier (Colombia)*

**16:30 - 16:50 PLENARY SESSION - Vascular II**

**Auditorium** **Moderators:** *Borba, Luis*  
*Grotenhuis, André*  
*Perilla, Tito*

- 16:30 - 16:50 From Bench to Bedside - Development of Neuroprotectants for Cerebral Ischemia  
*Michael Tymianski (Canada)*

**16:50 - 17:10 PLENARY SESSION - Peripheral Nerve**

**Auditorium** **Moderators:** *Perilla, Tito*  
*Grotenhuis, André*  
*Borba, Luis*

- 16:30 - 16:50 Peripheral Nerve Surgery. Update and Future.  
*Lukas Rasulic (Serbia)*

**17:10 - 17:30 PLENARY SESSION - Skull Base II**

**Auditorium** Moderators: *Perilla, Tito*  
*Borba, Luis*  
*Grotenhuis, André*

17:10 - 17:30 Petroclival Meningioma Update  
*Ossama Al-mefty (United States)*

**17:30 - 17:50 PLENARY SESSION - Functional**

**Auditorium** Moderators: *Borba, Luis*  
*Grotenhuis, André*  
*Perilla, Tito*

17:30 - 17:50 Future Developments in Functional Neurosurgery  
*Andrés Lozano (Canada)*

**17:50 - 18:10 PLENARY SESSION - Special Guest II**

**Auditorium** Moderators: *Grotenhuis, André*  
*Perilla, Tito*  
*Borba, Luis*

17:50 - 18:10 La Ciencia y el Arte / Science and Art  
*Nicolás Montero (Colombia)*