PRELIMINARY PROGRAM
Wednesday, June 20

PLENARY ROOM

h. 14.00 – 14.30   WELCOME AUTHORITIES

Fascione V (Italy)
Chairman of Innovation Startup and International Office of Campania Region

Tomasello F (Italy)
President of Second Congress of MANS

Bakhti S (Algeria)
President of MANS

Khan MT (Pakistan)
Chairman of Neurotraumatology Committee of WFNS

Cappabianca P (Italy)
Co-Chairmen ICRAN2018 – Secretary SINCH

PLENARY ROOM - PLENARY SESSION #1

JOINT SESSION MANS - ICRAN

h. 14.30 – 16.15   RECENT ADVANCES ON TRAUMATIC BRAIN INJURY
Chairmen: D’Avella D (Italy), Tomasello F (Italy), Iaccarino C (Italy)

h. 14.30   Rimini ICRAN 1996 - Napoli ICRAN2018 20 years later, Servadei F (Italy)

h. 14.45   Clinical trials in neurotrauma, Hutchinson P (UK)

h. 15.00   Recent advances on cranio-facial trauma and reconstruction, Califano L (Italy)

h. 15.15   Cerebrospinal fluid hydrodynamics and recent advances in neuroimaging of traumatic brain injury, Vukic M (Croatia)

h. 15.30   Intensive care medicine for severe TBI 20 years later, Stocchetti N (Italy)

h. 15.45   Fission or fusion: destiny of mitochondria following traumatic brain injury, Signoretti S (Italy)

h. 16.00   Following FDA approval: future applications of blood-based biomarkers for diagnosis and management of severe traumatic brain injury, Hayes RL (USA)

ROOM 1 - PARALLEL SESSION #1

h. 16.30 – 18.30   THE TRAUMATIC BRAIN INJURY PATIENT MANAGEMENT IN INTENSIVE CARE UNIT
Chairmen: Gordini G (Italy), Lavinio A (UK)

16.30   The Intensive Care Unit management of elderly severe traumatic brain injury patients, Stocchetti N (Italy)

16.45   Fever control and hypothermia, Ortolano F (Italy)

17.00   How to evaluate the initial severity of traumatic brain injury?, Payen JF (France)
Wednesday, June 20

17.15 Is intracranial pressure monitoring futile?, Chesnut RM (USA)
17.30 The transcranial doppler ultrasound in the Neurointensive Care Unit, Rasulo F (Italy)
17.45 Pre-hospital traumatic brain injury care, Bouzat P (France)
18.00 Discussion

ROOM 2 - PARALLEL SESSION #2

h. 16.30 – 18.30 NEUROTRAUMA – FROM PREVENTION TO TREATMENT TO REHABILITATION: PROGRAMS WORLDWIDE TO INTEGRATE DISCIPLINES AND ENHANCE OUTCOMES
Chairmen: Fontanella M (Italy), Mehdorn M (Germany)
16.30 Prevention of head and spine injuries, Kalangu K (Zimbabwe)
16.40 Brain stimulation for the altered state of consciousness, Mehdorn M (Germany)
16.50 Vagal nerve stimulation for drug resistant posttraumatic epilepsy, Ducati A (Italy)
17.00 Role of Magnetic Resonance Imaging in diffuse axonal injury and its prognostic value, Sinha V (India)
17.10 Neuromodulation of cerebral blood flow past or present?, Visocch M (Italy)
17.20 Multimodal monitoring: a conceptual prospective, Adelson D (USA)
17.30 Intrathecal Baclofen in the management of spasticity after cerebral or spinal trauma, Sakas DE (Greece)
17.40 Disaster response: advancing neurotrauma care worldwide, Andrews JR (USA)
17.50 The state of stupor in Iranian mysticism, Mahoozi L (Iran)
18.00 Influence of impaired craniospinal communication on intracranial pressure in different body position, Klarica M (Croatia)
18.10 Discussion

ROOM 3 – MEET & TALK SESSION

h. 16.30 – 18.30 MEET & TALK: GLOBAL NEURO TRAUMATIC BRAIN INJURY EXPERTS
Chairmen: Figaij A (South Africa), Timmons S (USA)
16.30 Surgical management of severe traumatic brain injury in low and middle income countries: the impact of the ecology of care, Rubiano A (Colombia)
16.40 Minimally invasive and precision surgery in neurotrauma, Matula C (Austria)
16.50 Outcome in traumatic brain injury: lessons learned from multicentric clinical trials, Maas A (Belgium)
17.00 Actual role of decompressive craniectomy in neurotrauma, Hutchinson P (UK)
17.10 Introduction to case discussion
17.15 Minicraniotomy under local anaesthesia and monitoring sedation for the operative treatment of acute extradural hematoma, Adeleye AO (Nigeria)
17.30 Surgical treatment of post-traumatic CSF leaks of the anterior cranial fossa, Del Maestro M (Italy)
17.45 Long-term outcome after traumatic brain injury in elderly patients, Lombardo A (Italy)
18.00 Access to neurosurgical care across Africa, Vaughan K (USA)
18.15 Message to take home Figaij A (South Africa), Timmons S (USA)
Thursday, June 21

PLENARY ROOM – MAIN SESSION #1

**h. 08.30-10.45  DEVELOPMENT OF RESOURCE STRATIFIED GUIDELINES FOR TRAUMATIC BRAIN INJURY**  
*Chairmen: Khan MT (Pakistan), Delitala A (Italy)*

- 08.30 Challenges to implement evidence based traumatic brain injury guidelines in worldwide practice, *Peul W* (Netherlands)
- 08.45 Strategies to achieve improved neurotrauma outcomes and establishment of level 1 trauma centres: ground zero basics, *Gupta D* (India)
- 09.00 Stratified protocols for severe traumatic brain injury management in low and middle income countries: how to become practical in the real world, *Rubiano A* (Colombia)
- 09.15 Variations in neurosurgical capacity among facilities within low and middle income countries, *Kee B Park* (USA)
- 09.30 Central nervous system injury from a global perspective, *Johnson W* (Switzerland)
- 09.45 The living evidence ecosystem: moving towards living reviews and guidelines, *Maas A* (Belgium)
- 10.00 Treatment of head injuries with minimal resources, *Kalangu K* (Zimbabwe)
- 10.15 WFNS role of improving care of neurosurgical patients in low and middle income countries, *Servadei F* (Italy)
- 10.30 Discussion

**ROOM 1**

**h. 08.30 – 10.45  CONSENSUS CONFERENCE ON POST-TRAUMATIC CRANIOPLASTY OPEN SESSION**  
*Chairmen: Florian IS (Croatia), Zanotti B (Italy)*

- 08.30 Osteointegration in cranial reconstruction, *Stefini R* (Italy)
- 08.40 Homologous banked bone grafts for the reconstruction of large cranial defects in pediatric patients, *Talamonti G* (Italy)
- 08.50 Cranioplasty implants using three-dimensional printers and polymethylmethacrylate casting, *Sinha V* (India)
- 09.00 Outcome analysis of cranioplasty: a single-center experience on PEEK, *Pompucci A* (Italy)
- 09.10 Cranioplasty with polypropylene-polyester knitwear prostheses prepared according to patient's CT scans- experiences with 200 patients with 12 months follow-up, *Kasprzak P* (Poland)
- 09.20 Multicenter post-marketing surveillance study on CUSTOMBONE SERVICE in a specific pediatric age group (7-13 years old), *Frassanito P* (Italy)
- 09.40 A thin but strong and easy to handle custom-made cranioplasty: EBM technology for skull bone defects reconstructions, *Francaviglia N* (Italy)
- 09.50 Complication of cranioplasty, *Florian IS* (Croatia)
- 10.00 Cranioplasty and ventriculomegaly: lessons learned from the past and the development of a strategy for complication avoidance, *Fountas K* (Greece)
- 10.10 Timing, *Iaccarino C* (Italy)
- 10.20 Impact of cranioplasty on neurorehabilitation, *Formisano R* (Italy)
Thursday, June 21

h. 10.30 Skin flap complications after decompressive craniectomy and cranioplasty: proposal of classification and treatment options, Di Rienzo A (Italy)

h. 10.40 Discussion

ROOM 2 - PARALLEL SESSION #3

h. 08.30 - 11.00 THE PERIOPERATIVE INTENSIVE CARE UNIT MANAGEMENT OF TRAUMATIC BRAIN INJURY PATIENTS
Chairmen: Payen JF (France), Rossi S (Italy)

08.30 TBI patients and hemorrhagic extracranial procedures, Chieregato A (Italy)
08.45 Osmotherapy in traumatic brain injury, Castioni CA (Italy)
09.00 Neurromonitoring after decompressive craniectomy, Picetti E (Italy)
09.15 Hemodynamic goals in traumatic brain injury, Robba C (Italy)
09.30 Glycemic control and nutrition in traumatic brain injury, Quintard H (France)
09.45 Managing severe traumatic brain injury without ICP monitoring: it's possible?, Chesnut RM (USA)
10.00 Introduction of the CENTER-TBI serum biobank: current state –future plants, Buki A (Hungary)
10.15 Second tier therapies: barbiturates and beyond, Longhi L (Italy)
10.30 Discussion

ROOM 3 - PARALLEL SESSION #4

h. 08.30 – 10.45 HOW I DO IT: TRAUMATIC SPINE INJURY 1
Chairmen: TBD, Vitiello E (Italy)

h. 08.30 Microsphere of EBM-titanium: a valid alterantive to PMMA in the treatment of thoraco-lumbar vertebral fractures, Francaviglia N (Italy)

h. 08.40 Advantanges of vertebral body stenting for traumatic fractures of thoraco-lumbar spine, Bocchetti A (Italy)

h. 08.50 Evolution of mini invasive treatment of TSI of neurologically intact patients, Muto M (Italy)

h. 09.00 Evolution of Minimally-Invasive techniques in instrumented thoraco-lumbar surgery: our experience, Gregori F (Italy)

h. 09.10 Damage control - spine surgery, Bolles GE (USA)

h. 09.20 Surgical approaches for the treatment of thoraco-lumbar fractures in neurologically intact patients: experiences with 50 consecutive cases, Nina P (Italy)

h. 09.30 Treatment of thoraco-lumbar fractures in neurologically intact patients: our experience, Amoroso E (Italy)

h. 09.40 Short percutaneous posterior instrumentation in thoraco-lumbar spinal fractures without spinal cord involvement, Campello M (Italy)

h. 09.50 Short-term lumbar plexus morbidity related to mini-open retroperitoneal transpsoas corpectomy, Guatta R (Switzerland)

h. 10.00 Treatment of unstable thoracolumbar junction fractures: short-segment pedicle fixation with inclusion of the fracture level versus long-segment, Dobran M (Italy)

h. 10.10 Posterior only approach for corpectomy and 360° fixation in dorso-lumbar fractures: series presentation and technical notes, Anania CD (Italy)
Thursday, June 21

h. 10.20 Thoracic & toracolumbar junction spine interbody fusion technique, Jeon SR (South Korea)

h. 10.30 Discussion

h. 08.30 – 10.45 POSTER SESSION #1
Chairmen: Apriawan T (Indonesia), Carreño JN (Columbia)

- Consensus protocol for the medical and surgical management of severe head injury, Brellah SB (Algeria)
- Music medicin in intensive care unit, Fuselli E (Italy)
- Relationships among neurocognitive disfunction, emotional instability and malingered neurocognitive disfunction in disability evaluation after TBI, Kim O-L (South Korea)
- A randomised controlled trial on the effect of cognitive rehabilitation for attention in mild traumatic brain injury: a preliminary report, Narayanan V (Malaysia)
- Engraftment, neuroglial trans-differentiation and behavioral recovery after complete spinal cord transection in rats, Luzzi S (Italy)
- Correlation between level of IL-6 and Glasgow outcome scale extended 3 months in severe traumatic brain injury patients in RSUD, Gozi FF (Indonesia)
- Cognitive map in acute phase of traumatic brain injury, Navarro-Main B (Spain)
- Increased expression of NOGO-A, a myelin-associated inhibitor to axonal regeneration, in human brain tissue following traumatic brain injury, Marklund N (Sweden)
- S100B protein: a screening tool in mild traumatic brain injury, Capisani C (Italy)
- Cerebral hemodynamic assessment using transcranial doppler and its correlation with invasive intracranial pressure: animal model, Sousa Noleto G (Brasil)
- Can highly-sensitive troponin I be a prognostic biomarker in patients with traumatic brain injury?, Loukil B (Tunisia)
- Vascular sphincters in central nervous system: pathophysiological implication and their role in traumatic brain injury, Sangiorgi S (Italy)

10.45 COFFEE

PLENARY ROOM – PLENARY SESSION #2

h. 11.00 – 13.30 ETHICS AND LEGAL CONTROVERSIES IN NEUROTRAUMA
Chairmen: Hutchinson P (UK), Servadei F (Italy)

11.00 A survey on the adherence of European neurosurgical centers to brain trauma foundation guidelines on severe traumatic brain injury, Germanò A (Italy)
11.15 Failure of traumatic brain injury guidelines: Quo Vademus Nunc?, Chesnutt R (USA)
11.30 Clinical decision for severe traumatic brain injury surgical management in austere environments: an ethical dilemma?, Rubiano A (Colombia)
11.45 Decompressive craniectomy no limits or withdrawal proposal, Iaccarino C (Italy)
12.00 Choice cisternostomy: patient selection and surgical results on consecutive series, Cherian I (Nepal)
Thursday, June 21

12.15 Ethics of research in patients with altered state of consciousness - experiences from an academic ethics committee, **Mehdorn M** (Germany)
12.30 Moral boundaries of craniocervical trauma, **Peul W** (The Netherlands)
12.45 Ethical dilemmas in the management of pediatric head trauma, **Ammar A** (Saudi Arabia)
13.00 Discussion

h. 13.30 – 14.30 **LUNCH TIME**
PLENARY ROOM – MAIN SESSION #2

h. 14.30 – 16.30 **HOW I DO IT: TRAUMATIC BRAIN INJURY 1**
*Chairmen: Devi Bhagavatula I (India), Ciurea AV (Romania)*

h. 14.30 Dural sealing: a consensus conference, **Servadei F** (Italy)

h. 14.40 Endoscopic management of traumatic CSF rhinorrhea – our experience in a tier 2 city in India, **Bandi BKR** (India)

h. 14.50 Damage control – neurosurgery, **Bolles GE** (USA)

h. 15.00 Comparison of two surgical techniques in management of acute SDH, **Bin Anis S** (Pakistan)

h. 15.10 Surgical management of acute subdural hematoma: a comparison between decompressive craniectomy and craniotomy on patients treated from 2010 to the present in a single center, **Cappelletti M** (Italy)

h. 15.20 Post-traumatic aSDH in elderly: a 3-years single center experience, **Moriconi E** (Italy)

h. 15.30 Short-term outcome of operated traumatic brain injury patients with intracranial hemorrhage in Tikur Anbessa specialized Hospital, **Biluts H** (Ethiopia)

h. 15.40 Clinical outcome from hemorrhage evacuation craniotomy of traumatic brain injury with critical Glasgow coma scale, **Apriawan T** (Indonesia)

h. 15.50 Early and late outcome predictors in moderate-severe traumatic brain injury: analysis of a monocentric cohort of 193 patients, **Gritti P** (Italy)

h. 16.00 Minimally invasive technique for urgent treatment of chronic subdural hematomas. Single center experience and future perspectives, **Cioffi V** (Italy)

h. 16.10 The management and outcomes of chronic subdural hematoma in UK, **Kolias A** (UK)

h. 16.20 Discussion

ROOM 1 - PARALLEL SESSION #5

h. 14.30 – 16.30 **NEUROTRAUMA ON THE WEB**
*Chairmen: Cherian I (Nepal), Zona GL (Italy)*

h. 14.30 Neurotrauma public engagement and education using social media, art and film: the Brainbook experience, **Rana H** (UK)

h. 14.40 Web-visibility of national neurosurgical societies in Europe: a necessary tool for enhancing scientific network cooperation and information distribution, **Raffa G** (Italy)

h. 14.50 Medical approach to posttraumatic CNS infections: what is available on the web, **Castillo JL** (Colombia)

h. 15.00 The CSF-shift edema and cisternostomy: clinical outcomes in a series of cases, **Burhan H** (Pakistan)
Thursday, June 21

h. 15.10 Role of decompressive craniotomies in severe head injury patients, Salahuddin T (Pakistan)

h. 15.20 Cisternostomy in severe traumatic brain injury: impact on multimodal cerebral monitoring, Simonin A (Switzerland)

h. 15.30 Outcome following decompressive craniectomy due to severe head injury: a case series study, Moustakis N (Greece)

h. 15.40 Preliminary experience with cysternostomy in severe traumatic brain injury, Giammattei L (Switzerland)

h. 15.50 Outcome of decompressive craniectomy for CHI in adults, Gatos C (Greece)

h. 16.00 Cisternostomy for management severe traumatic brain injury: a novel revolutionary surgical procedure, Wang Y (China)

h. 16.10 Discussion

ROOM 2 - PARALLEL SESSION #6

h. 14.30 – 16.30 HOW I DO IT: TBI IN ICU
Chairmen: Castillo JL (Colombia), De Blasio E. (Italy)

h. 14.30 Determining the lower limit of cerebral perfusion pressure in patients undergoing decompressive craniectomy following traumatic brain injury, Yoo DS (South Korea)

h. 14.40 Maximum contraction velocity on pupilometer as an indicator of specific compartment syndrome after traumatic brain injury, Clavijo A (Colombia)

h. 14.50 Pupillometry in detecting cerebrospinal fluid infection, Ioannoni E (Italy)

h. 15.00 Ipsilateral increased optic nerve sheath diameter as an early diagnostic tool for intracranial compartment syndrome in traumatic brain injury patients, Khan AA (Colombia)

h. 15.10 Rebound temperature rise after prolonged diclofenac infusion for fever management in patients with acute brain damage, Cattaneo M (Italy)

h. 15.20 The effect of mild hypothermia therapy in the level of MMP-9 proteine, the four and Marshall score in high risk traumatic brain injury, Prasetyo E (Indonesia)

h. 15.30 Up to date of hemodinamic monitoring and management in traumatic brain injury, Lee S (South Korea)

h. 15.40 Shared collected data: a tool for single centre clinical improvement. Intensive care unit infections in traumatic brain injury patients, Depetris I (Italy)

h. 15.50 Continuous EEG monitoring by a new wireless headset, Caricato A (Italy)

h. 16.00 A practical approach for the management of sodium disorders in traumatic brain injury, Castillo JL (Colombia)

h. 16.10 Discussion

ROOM 3 - PARALLEL SESSION #7

h. 14.30 – 16.30 RESEARCH IN NEUROTRAUMA
Chairmen: Belli A (UK), Iaconetta G (Italy)

h. 14.30 Mesenchymal stem cells-based therapies in brain injuries: state of the art and future perspectives, Bongetta D (Italy)
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h. 14.40 The role of stem cells in traumatic sciatic nerve regeneration in rats: functional and histological outcome, Shinde B (India)

h. 14.50 cSDH-A retrospective study to analyse the role of VEGF in pathophysiology and prevention of recurrence, Sundaravadhanan S (India)

h. 15.00 Microvascular changes in traumatic brain injury: a LM, TEM, SEM-corrosion casting morphological experimental study, Sangiorgi S (Italy)

h. 15.10 The correlation between cortical morphometry and neuropsychological outcome in mild traumatic brain injury, Narayanan V (Malaysia)

h. 15.20 Brain-derived neurotrophic factor (Val66Met) polymorphism predicts structural white matter and neurocognitive recovery in mild traumatic brain injury, Narayanan V (Malaysia)

h. 15.30 Development of stem cell agent in chronic spinal cord injury, Jeon SR (South Korea)

h. 15.40 Basic fibroblast growth factor effect on neuroprotective effect in traumatic brain injury model, Yoo DS (South Korea)

h. 15.50 Early levels of GFAP and NF-L in predicting the outcome of mild traumatic brain injury, Hossain I (Finland)

h. 16.00 3D printed biomodels for training in the surgical management of neurotrauma, Waran V (Malaysia)

h. 16.20 Discussion

PLENARY ROOM – MAIN SESSION #3

h. 16.30 – 18.30 TRAUMA OF CRANIO-CERVICAL, CERVICO-THORACIC JUNCTIONS: FROM DIAGNOSIS TO CURRENT EVIDENCE-BASED TREATMENT
Chairmen: Peul W (The Netherlands), Barbagallo G (Italy)

h. 16.30 Cranio cervical reconstruction, Visocchi M (Italy)

h. 16.40 Hand reconstruction in tetraplegia after cervical trauma using nerve transfer: how I do it?, Emamhadi M (Iran)

h. 16.50 Functional outcome of elderly patients treated for odontoid fracture. A multicentric study, Lofrese G (Italy)

h. 17.00 Surgical reconstruction considerations in high C-spine injury, Peul W (The Netherlands)

h. 17.10 Odontoid fracture in the elderly: ethical and technical controversies and our experience, Longo A (Italy)

h. 17.20 Extreme indication of the endoscopic endonasal approach for complex C1-C2 fractures, Iacoangeli M (Italy)

h. 17.30 One stage combined anterior-posterior approach for treatment of subaxial cervical spine dislocation fractures in ankylosing spondilitis of elderly patients, Marengo N (Italy)

h. 17.40 Preliminary results of the innovate trial: an international cooperative trial on surgical versus conservative treatment for odontoid fractures in elderly, Huybregts J (The Netherlands)

h. 17.50 The treatment of traumatic cervicothoracic junction pathology...when a more complex approach could be necessary? Preoperative planning and technical, Rapanà A (Italy)

h. 18.00 Axis injuries: decision making and treatment algorithms of C2 traumatic lesions, Del Maestro M (Italy)

h. 18.10 Discussion
Thursday, June 21

**ROOM 1 - PARALLEL SESSION #8**

h. 16.30 – 18.30  **HOW I DO IT: TRAUMATIC BRAIN INJURY 2**  
*Chairmen: De Marinis P (Italy), Paiva W (Brazil)*

h. 16.30  Penetrating intracranial trauma, Bolles G.E. (USA)

h. 16.40  Missile traumatic adult brain injury in the North of Palestine, Darwazeh M (Palestine)

h. 16.50  Outcome predictors of civilian gunshot wounds to the head: a retrospective five-year study from Pakistan, Khan MM (Pakistan)

h. 17.00  Factors predicting poor outcome after gunshot injuries to brain in Afghanistan civilian population - a review of 45 cases, Shaikh Y (Pakistan)

h. 17.10  Penetrating cranio-cerebral injuries: our experience, De Paulis D (Italy)

h. 17.20  Military neurotrauma: experience of the Military Hospital, Carreño JN (Colombia)

h. 17.30  Blast induced neurotrauma: a retrospective study in Indian armed forces, Sundaravadhanan S (India)

h. 17.40  The importance of neck position in ICP control, Petrella G (Italy)

h. 17.50  Neurosurgical management of non-missile penetrating head injuries, Signorelli F (Italy)

h. 18.00  Surgical elevation for symptomatic depressed skull fractures over dural venous sinus, Elsobky H (Egypt)

h. 18.10  Discussion

**ROOM 2 - PARALLEL SESSION #9**

h. 16.30 – 18.30  **UPDATE ON COAGULOPATHY IN NEUROTRAUMA**  
*Chairmen: Mastrojanni M (Italy), Di Minno G (Italy)*

h. 16.30  Prophylaxis in neurotrauma, Di Minno G (Italy)

h. 16.40  Platelet status in neurotrauma, Agostini V (Italy)

h. 16.50  Neurotrauma trends in Japan - Influence of aging and antithrombotic drugs, Suzuki M (Japan)

h. 17.00  Transfusion protocols for poly trauma patients with severe TBI injury, Carreño JN (Colombia)

h. 17.10  Traumatic intracranial hemorrhage and anticoagulant therapy after appearance of direct oral anticoagulants (DOAC) in Japan, Nakao J (Japan)

h. 17.20  Pre-surgical reversal of anticoagulation with Idarucizumab for chronic subdural hematoma in patient undergoing Dabigatran: case report and review of the literature, Blagia M (Italy)

h. 17.30  The impact of anticoagulation and antiplatelet treatment on outcome and recurrence rate in patients with chronic subdural hematoma, Fazzari E (Italy)

h. 17.40  Viscoelastic test: thromboelastogram in TBI and neurosurgical coagulopathy management, Leone M (Italy)

h. 17.50  Are antiplatelet and anticoagulants drugs a risk factor for bleeding in mild Traumatic Brain injury? Bongetta D (Italy)

h. 18.00  Incremental prognostic value of the activated partial thromboplastin time and creatinine in addition to the crash score in traumatic brain injury patients, Solla D (Brazil)

h. 18.10  Discussion
Thursday, June 21

**ROOM 3 - CONSENSUS CONFERENCE ON POST-TRAUMATIC CRANIOPLASTY**

**h. 17.00 – 18.30** EXPERT'S VOTING SESSION

**h. 16.30 – 18.30** POSTER SESSION #2  
*Chairmen: Schonauer C (Italy), Luzzi S (Italy)*

- Isolated subarachnoid hemorrhage in mild traumatic brain injury: is a repeat CT scan necessary?, **Guatta S (Switzerland)**
- Severe facial fractures is related to severe brain injury, **Kim SH (South Korea)**
- Addition of resection of temporal muscle and fascia in decompressive craniectomy in the treatment of Traumatic Brain injury, **Cho WH (South Korea)**
- Delayed traumatic intracerebral hemorrhage after decompressive craniectomy in patients with acute subdural hematoma, **Whang K (South Korea)**
- Influencing factors of delayed surgical epidural hematoma, **Whang K (South Korea)**
- Additive technologies in making new porous and mesh Titanium composite implants for skull defect reconstruction, **Kravchuk D (Russia)**
- Natural History of Mild Traumatic Brain Injury, **Shukla D (India)**
- Compare the intracranial pressure trend after the decompressive craniectomy between massive intracerebral hemorrhagic and major ischemic stroke patients, **Yoo DS (South Korea)**
- Very severe traumatic brain injury (GCS3-5): too much nihilism or optimism? **Samala R (India)**
- Growing skull fracture: a rare complication of head trauma in children, **Loukil B (Tunisia)**
- Traumatic brain injury in children: A 100 cases study, **Loukil B (Tunisia)**
- Fatal pediatric head injuries: an autopsy study, **Mwachaka P (Kenia)**

Friday, June 22

**PLENARY ROOM – PLENARY SESSION #3**

**h. 8.30 – 11.00** HEAD & SPINE INJURY IN LOW AND MIDDLE INCOME COUNTRIES  
*Chairmen: Kalangu K (Zimbabwe), Zenteno M (Bolivia)*

**08.30** The epidemiology of traumatic spine injuries in low and middle income countries, **Park KB (USA)**

**08.45** An international survey to inform the development of a global registry for traumatic brain injury - preliminary findings, **Gnanakumar S on behalf of the NIHR Global Health Research Group on Neurotrauma (UK)**

**09.00** Status of pre hospital care of head trauma patients in developing countries, **Sinha V (India)**

**09.15** Traumatic Brain injury in Bolivia, **Zenteno MG (Bolivia)**
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09.30  Traumatic brain injury: value of epidemiological research and education. Experience in two centers at corners of the world (Italy-Ecuador), Biroli F (Italy)

09.45  The national motorcycle helmet law two years on: review on its impact on the epidemiology of traumatic brain injury in a major government hospital in Cambodia, Venturini S (UK)

10.00  Etiology and predictive factors of spine surgery complications at major government hospital in Cambodia, Still M (USA)

10.15  Spinal trauma from a third world perspective, Shah AA (Pakistan)

10.30  Telemedicine in Vietnam, VanHe D (Vietnam)

10.45  Discussion

11.00  COFFEE

PLENARY ROOM – MAIN SESSION #4

h. 11.30 – 13.30  HEAD & SPINE INJURY IN LOW AND MIDDLE INCOME COUNTRIES 2
Chairmen: Park KB (USA), Stefini R (Italy)

h. 11.30  Epidemic of traumatic brain injuries in a low-middle income country (SRI LANKA) potential targets for global health initiatives, Wickramasinghe Wadanamby S (UK)

h. 11.40  Neurotrauma care in Quito, Ecuador, the value of education and international cooperation, Bottani L (Ecuador)

h. 11.50  Profile of head injuries: prehospital care, diagnosis and severity in an Ethiopian tertiary hospital, Laeket (Ethiopia)

h. 12.00  Optimization of local resources to manage neurotrauma in Bangalore, Tripathi M (India)

h. 12.10  Decompressive craniectomy in India, Sharma D (India)

h. 12.20  Surgical outcome of secondary decompressive craniectomy without intracranial pressure monitoring: a perspective from Pakistan, Khan MM (Pakistan)

h. 12.30  CT-based neurosurgical epidemiology: patterns of head trauma in rural Haiti, Barthélemy E (USA)

h. 12.40  Outcome in patients undergoing surgery for spinal injury in an Ethiopian hospital: an experience from a low income setup, Aklilu AT (Ethiopia)

h. 12.50  Current management and surgical care of spine trauma in Tanzania, Leidinger A (USA)

h. 13.00  A 2-years description of traumatic brain injury admissions in Tikur Anbessa specialized hospital in Ethiopia, Biluts H (Ethiopia)

h. 13.10  Discussion

ROOM 1 - PARALLEL SESSION #10

11.30 – 13.30  HOT TOPICS IN NEUROTRAUMA INTENSIVE CARE
Chairmen: Cafiero T (Italy), Munari M (Italy)

11.30  Fluid management in traumatic brain injury patients, Poole D (Italy)

11.45  Respiratory weaning in traumatic brain injury: a practical approach, Imperatore F (Italy)

12.00  Decompressive craniectomy in traumatic brain injury: an intensivist point of view, Berardino M (Italy)
### Friday, June 22

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<td>12.15</td>
<td>Development of a prognostic model to predict mortality after traumatic brain injury in an intensive care setting, <strong>Shukla D (India)</strong></td>
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<td>12.30</td>
<td>Update on advanced neuroimaging technologies, <strong>Newcombe V (UK)</strong></td>
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<td>12.45</td>
<td>Role of tissue oxygen monitoring in patients with acute brain injury in pediatric and adults patients, <strong>Benassi C (Italy)</strong></td>
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<td>13.00</td>
<td>Discussion</td>
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</tbody>
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#### ROOM 2 - PARALLEL SESSION #11

**h. 11.30 – 13.30**  
**PEDIATRIC TRAUMATIC BRAIN INJURY**  
*Chairmen: Adelson D (USA), Cinalli G (Italy)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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</thead>
<tbody>
<tr>
<td>11.30</td>
<td>Spine/spinal cord injury in children, <strong>Adelson D (USA)</strong></td>
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<tr>
<td>11.40</td>
<td>Decompressive craniectomy, <strong>Adelson D (USA)</strong></td>
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<tr>
<td>11.50</td>
<td>Pediatric traumatic brain injury guidelines proposal: results of ADAPT study, <strong>Gupta D (India)</strong></td>
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<tr>
<td>12.00</td>
<td>Management of traumatic intracerebral hemorrhage in children: a retrospective study of 82 children, <strong>Mentri N (Algeria)</strong></td>
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<tr>
<td>12.10</td>
<td>Feasibility of optimal arterial blood pressure determination for cerebral autoregulation monitoring in neonates and children: first experience in Italy, <strong>Pezzato S (Italy)</strong></td>
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<tr>
<td>12.20</td>
<td>Split calvarial graft reconstruction for growing skull fracture in pediatrics, <strong>Elsobky H (Egypt)</strong></td>
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<tr>
<td>12.30</td>
<td>Not delayed cranioplasty improves neurological outcome after head injury in children too. Monoinstitutional experience at Meyer's Hospital, <strong>Spacca B (Italy)</strong></td>
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<tr>
<td>12.40</td>
<td>Post-traumatic early complications in pediatric population and delayed particular issues: child is not a small adult, <strong>Zucchelli M. (Italy)</strong></td>
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<tr>
<td>12.50</td>
<td>Decompressive craniectomy in children: clinical features and treatment in our pediatric series, <strong>Aliberti F (Italy)</strong></td>
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<tr>
<td>13.00</td>
<td>Hydroxyapatite ceramic implants for cranioplasty in children: experience in Santobono-Pausilipon children's hospital of Naples, Italy, <strong>Spennato P (Italy)</strong></td>
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<tr>
<td>13.30</td>
<td>Discussion</td>
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</table>

#### ROOM 3 - PARALLEL SESSION #12

**h. 11.30 – 13.30**  
**HOW I DO IT: CRANIOPLASTY**  
*Chairmen: Tasiou A (Greece), De Falco R (Italy)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>11.30</td>
<td>Our experience with post-traumatic cranioplasty, <strong>Ciurea AV (Romania)</strong></td>
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<tr>
<td>11.40</td>
<td>Optimal timing for restorative cranioplasty, <strong>Tasiou A (Greece)</strong></td>
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<tr>
<td>11.50</td>
<td>Step ladder expansive cranioplasty: a concept, <strong>Sengupta SK (India)</strong></td>
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<tr>
<td>12.00</td>
<td>Cranioplasty after severe traumatic brain injury: effects of trauma and patient recovery on cranioplasty outcome, <strong>Hossain I (Finland)</strong></td>
</tr>
<tr>
<td>12.10</td>
<td>Study of intracranial pressure changes during cranioplasty, <strong>Tsianaka E (Greece)</strong></td>
</tr>
<tr>
<td>12.20</td>
<td>Neurophysiological evaluation with TMS before and after cranioplasty in Traumatic Brain Injury, <strong>Sousa Noleto G (Brasil)</strong></td>
</tr>
<tr>
<td>12.30</td>
<td>Titanium cranioplasty implants molded utilizing 3D printing technique, <strong>Waran V (Malesya)</strong></td>
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<tr>
<td>12.40</td>
<td>Decompressive craniectomy for traumatic brain injury: the value of cranioplasty and hydrocephalus on outcome, <strong>Nasi D (Italy)</strong></td>
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Friday, June 22

h. 12.50  Clinical experience with cranioplasty in seven years in Sant’ Anna Hospital of Como. What we have learned, Casiraghi P (Italy)

h. 13.00  Handmade cranioplasty: how I do it, Cuoci A (Italy)

h. 13.10  Discussion

h. 11.30 – 13.30  POSTER SESSION #3
  Chairmen: Chiaramonte C (Italy), TBD
  - Usefulness of procalcitonin levels within the CSF to reduce patient’s exposure to antibiotics in neurosurgery-associated bacterial meningitis: a feasibility pilot study, Biasucci DG (Italy)
  - Implementation of cEEG/qEEG in neurointensive care unit: proposal of a standardized training program for intensivists, Biasucci DG (Italy)
  - Comparison of pupilometer and optic nerve sheath diameter as diagnostic tools for detection of traumatic intracranial compartment syndrome in facilities with limited resources, Khan AA (Colombia)
  - Sleep disorders after traumatic brain injuries during sports activity. Study in young athletes, Syrmos N (Greece)
  - Life threatening large subcutaneous hematoma in a patient with coagulopathy: a rare case, Loukil B (Tunisia)
  - Post-operative cognitive dysfunction (POCD), Bolles GE (USA)
  - Management of penetrating gunshot wound in the ethmoid air cells by endonasal endoscopy exploration, Kuntawi Aji Y (Indonesia)
  - Complete post-traumatic tetraplegy in Klippel-Feil syndrome: case report and literature review, Blagia M (Italy)
  - Single screw anterior fixation for type II odontoid fractures: a single centre experience, Luglietto D (Italy)
  - Atlas Injuries: Decision Making and Treatment Algorithms of Cl Traumatic Lesions, Del Maestro M (Italy)
  - Severe traumatic injuries of the cranio cervical and cervicothoracic junction: Report of two cases, Floris F (Italy)
  - Clinical outcome, mortality and morbidity in traumatic cervical spinal cord injury in adult vs elderly patients, Lee SB (South Korea)
  - Table modification technique to achieve sufficient lumbar lordosis in multiple lumbar fusion, Jeon SR (South Korea)

13.30 LUNCH

PLENARY ROOM – MAIN SESSION #5

14.30 – 16.30  HOW I DO IT: TRAUMATIC SPINE INJURY 2
  Chairmen: Iacoangeli M (Italy), Caiazzo P (Italy)

h. 14.30  Instrumentation through interrupted trajectory in complex cervical spine cases, Attia W (Saudi Arabia)

h. 14.40  Treatment of occipital condyle fractures, Güçlü DG (Turkey)

h. 14.50  Surgical reduction and fixation for the Cl-2 subluxation, Chiang Y (Taiwan)
Friday, June 22

h. 15.00 Vertebral body spread in thoracolumbar burst fractures can predict posterior construct failure, **Lofrese G (Italy)**

h. 15.10 PRP and osteoinducing agents during osteosynthesis of burst DL fracture especially in elderly, ** Alfieri A (Italy)**

h. 15.20 Multiple vertebral fractures: a 9 years experience of a single center, **Wembagher GC (Italy)**

h. 15.30 Jazz in trauma spine surgery, **Brembilla C (Italy)**

h. 15.40 Establishing the right priorities for treatment of thoracic and thoracolumbar spinal injuries in multiply injured patients; the "spine damage control" protocol, **Rapanà A (Italy)**

h. 15.50 Restoring vertebral height and kyphosis with spinejack in traumatic thoracolumbar junction compression fractures: preliminary radiological outcome in one center, **Lucantoni C (Italy)**

h. 16.00 Discussion

**ROOM 1 - PARALLEL SESSION #13**

14.30 – 16.30 **HOW I DO IT: TRAUMATIC BRAIN INJURY 3**
Chairmen: **Kolias A (UK)**, **Catapano G (Italy)**

h. 14.30 Code black: implementing a time-critical protocol for neurotrauma surgery in a London major trauma centre, **Mohamed MA (UK)**

h. 14.40 Post-traumatic arterial neurovascular lesions, **Cuoci A (Italy)**

h. 14.50 Endocrine relapse and hypopituitarism in acute phase and 12 months after Traumatic brain injury: first investigation in Molise, **Niro MM (Italy)**

h. 15.00 Blood pressure and pulse rate changed before and after decompression surgery; reverse Cushing phenomenon, **Yoo DS (South Korea)**

h. 15.10 Our experience on ICP monitoring and management: 2 years retrospective analysis of data of moderate and severe traumatic brain injury, **Tiezzi G (Italy)**

h. 15.20 Is intracranial pressure monitoring useful for all patients with moderate and severe head injury? An institutional experience in a tire 2 city in India, **Kuncha G (India)**

h. 15.30 Dose related efficacy of Mannitol in traumatic brain injury based on intracranial pressure monitoring, **Ali SK (Pakistan)**

h. 15.40 Traumatic brain injury in elderly patients, **Baltateanu D (Romania)**

h. 15.50 Effectiveness of steroids in conservative management of CSDH: preliminary results from a mono centric prospective observational study, **Valacchi D (Italy)**

h. 16.00 Minimally invasive surgery in traumatic hematomas, **Paiva W (Brasil)**

h. 16.10 Discussion

**ROOM 2 - PARALLEL SESSION #14**

14.30 – 16.30 **HOW I DO IT: CRANIOPLASTY 2**
Chairmen: **Ghadirpour R (Italy)**, **Sabouri M (Iran)**

h. 14.30 Cranioplasty: our experience in the last 2 year with the cryopreservation, **Petrella G (Italy)**

h. 14.40 Autologous versus heterologous cranioplasty: which choice?, **Cancedda M (Italy)**
The sinking flap syndrome: who, when, why. Report of our experience in 44 cases and proposal of a new classification, Di Rienzo A (Italy)

Cranioplasty using a hybrid (3D printed titanium mash and calcium phosphate material) biocompatible custom made implant: preliminary experience in a series of six patients, Borsa S (Italy)

Prospective observational study identifying the risk factors and findings in initial CT scan which predisposes for the development of hydrocephalus in patients with severe head injury, Pattupogula SK (India)

Risk factors and treatment of post-traumatic hydrocephalus following decompressive craniectomy: please close the box!, Nasi D (Italy)

Ultra-early bifrontal DC in patients with severe traumatic brain injury: Durotomy, without duroplasty and cisternostomy, our experience, Blagia M (Italy)

Treatment of postcraniectomy infected dural substitute and CSF leakage using free fascia lata, Callovini G (Italy)

Extensive dural ossification following decompressive posttraumatic craniectomy: a case report and review of the literature, Guida L (Italy)

Radiological evaluation of lumber or thoracic trauma cases in young amateur footballers, Syrmos NC (Greece)

Post-traumatic acute myelopathy in giant calcified thoracic disc herniation: surgical approach and outcome considerations, Lucantoni C (Italy)

Vertex extradural hematomas: when to operate? Case report and literature review, Azzam M (Indonesia)

Postoperative bilateral blindness in a 38 years old woman with post-traumatic chronic subdural hematoma: a case report, Moriconi E (Italy)

Asymptomatic vasospasm due to traumatic subarachnoid hemorrhage: a case report, Fitra F (Indonesia)

Post-traumatic cavernous carotid fistula: about two cases, Imoumby F (Morocco)

Penetrating injury after gunshot: a case report and literature review, Papadimitriou I (Greece)

Immediate development of a contralateral acute delayed epidural hematoma evacuation: case report and literature review, Gregori F (Italy)

Sphenoid Sinus cerebrospinal fluid rhinorrhea, Jalessi M (Iran)

Treatment of post traumatic syringomyelia: case report and literature review, Cannizzaro D (Italy)

Hydroxiapatite cranioplasty: a significative improvement in patients with sinking flap syndrome, Franchina F (Italy)

The decompressive craniectomy: use, complications and benefits, De Paulis D (Italy)
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- Poli-compartmental syndrome in severe multiple trauma: should the multi-compartmental monitoring include the brain?, Del Corso F (Italy)
- Surgical positioning for CVJ, Schonauer C (Italy)
- Prognostic value of neurophysiological evaluation in severe traumatic brain injury, Foresti C (Italy)
- Talk-and-die: neuroworsening never gets anecdotal, Lippa L (Italy)
- Risk Factors of in-hospital mortality in traumatic brain injury patients with or without polytrauma, Cadisco A (Italy)
- Optic nerve sheath diameter ultrasonography for the assessment and prediction of intracranial hypertension in traumatic brain injured patients - a prospective observational study, Iachi A (Italy)
- Prospective observational study on outcome of patients with moderate/severe traumatic brain injury (TBI-PRO): a monocentric experience, Gritti P (Italy)
- Occipital and posterior cranial fossa epidural hematoma associated with skull fractures involving the transverse sinus, Tiezzi G (Italy)
- Effect of antiplatelet therapy on long term outcome after traumatic brain injury, Lombardo A (Italy)
- Complex cranio-maxillofacial gunshot trauma: surgical treatment and reconstruction, Vaiano A (Italy)