









### February 1-4, 2016

## Cape Town, South Africa

### Closing Message

The 12<sup>th</sup> Symposium of the International Neurotrauma Society in Cape Town 2016 was a wonderful occasion of sharing science, preclinical and clinical lessons, and visions for the future of neurotrauma research. More than forty countries from all over the globe were represented, including for the first time several from the African continent. We had the privilege to host an Honorary Lecture by Alexander Baethmann to celebrate his many years in neurotrauma research and we awarded young researchers for their contributions, specifically the Sir Graham Teasdale award to Lisa Hill for the best oral presentation and best poster awards to Fredrik Clausen and Nyota Masumbuko-Kahamba (sponsored by the European Brain Injury Consortium). The rest of the program was filled with a stellar list of invited speakers that can be seen below – we thank once again all the invited speakers, presenters of new research, and all delegates who interacted, debated, connected and celebrated neurotrauma research at INTS 2016.

Importantly, this was the first time the Symposium was held in the developing world and its success was a testament to the appetite in our community for collaborations across borders. As I said in my opening address, these conversations were encouraged by having a Chardonnay in hand, looking at Table Mountain and smelling the air off the ocean in the harbour. Our goal was to connect with each other and make the world a smaller place by taking seriously our mandate as an international society. I hope that we achieved just that.

Tony Figaji, Chair of the INTS 2016 Symposium









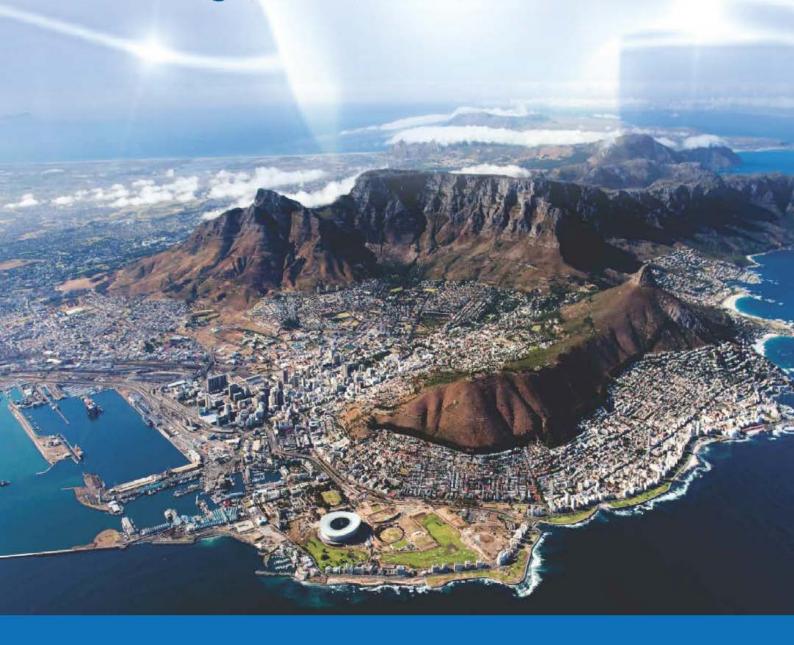


Cape Town • 1-4 February 2016

Cape Town International Convention Centre



# **Programme and Information Book**



### Welcome message by INTS President

Dear Delegates of the 12th Symposium of the International Neurotrauma Society,

It is my great honor and pleasure to welcome you to Cape Town.

In the last two years the organizers headed by Professor Tony Figaji made extreme efforts to make this event a memorable and substantially important meeting of our society. The Board of the Society aimed to aid the organizers, who, in my opinion have done a great job, in the construction of a scientific program of real merit and value. We are living in interesting times: the landscape of neurotrauma research and care has been rapidly changing, creating new challenges for the scientific community. We have to face and answer questions and problems raised by the aging of the population and the increasing occurrence of challenging multimorbid cases.



The location of the meeting also has to highlight and remind us that neurotrauma has particular challenges in developing countries and that the scientific community has to make every effort to distribute the gains and benefits of their results all over the entire World, representing another "translation of research", if you will. These interesting times are also characterized by an unprecedented growing body of international collaborations headed by the INTBIR initiative.

As President of the International Neurotrauma Society my major goal, which with the aid of the Board, our next President and the General Assembly, should also achieve is the establishment of, and the transition to a membership-based, strong scientific society, serving the goals of translational research where our communications, meetings and goals focus on a balanced distribution and promotion of activities of both basic and clinical science. This kind of dual focus and the bench to bedside approach was and will be the trait and symbol of our society. I hope that this meeting will serve the goals of the society and contribute to the better care of brain and spine injury worldwide.

### Wishing you a valuable and fruitful meeting!

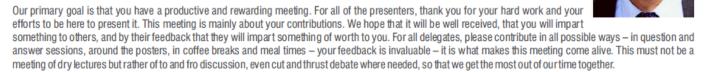
András Büki

Professor and Chair
Department of Neurosurgery, Pecs University, Pecs, Hungary
President of the International Neurotrauma Society
Secretary of the Hungarian Neurosurgical Society
Member of the Hungarian College of Neurosurgeons
Treasurer of the EANS
Board Member of the European Brain Injury Consortium

### Welcome message by INTS2016 Chair

Dear Colleagues and Friends

Welcome to Cape Town and the 2016 Symposium of the International Neurotrauma Society. We are excited to host this meeting in our city, the first time it has been held outside the so-called developed world. This is an important step, given the mandate of an international society to be truly global and the fact that the burden of neurotrauma is greatest in the developing world. So too, though, are the opportunities. And amidst all the research, clinical, or policy challenges that we will face in the years to come, I hope that we remember how each of these represents a unique opportunity to accomplish something worthwhile.



Please attend the poster sessions and comment on the work. It honours the presenter and you will learn something valuable. The amount of work represented by each of these posters is considerable and the presenters will benefit from your active engagement. Please also visit the industry stands – these meetings would not be possible without the generous support of our industry partners.

In addition to having a great meeting, I hope that you will also enjoy Cape Town and South Africa. Feel free to ask any of us locals for advice — we each have our own take on what is great about this place. There is so much to do, but please do not be tempted to skip the academic sessions - we need you there! When the program is done however, enjoy everything Cape Town has to offer — from the iconic Table Mountain to the panoramic views on the circular path up Lion's Head, from any of the dozens of beaches on the Indian Ocean or Atlantic Ocean side of the Peninsula to Cape Point at its tip, from the Constantia vineyards of the city to the winelands of Stellenbosch and Franshoek a little further out, from the street food markets and coffee shops to the world class high end restaurants, from the coolness of the Kalk Bay fishing village to the buzz of the Waterfront, from the history of the Bo-Kaap Malay community to the enomity of Robben Island, whether you are hiking, abseiling, sharkcage diving, surfing, kiteboarding, paragliding, mountain biking, animal watching, swimming with penguins, or just relaxing with your Chardonnay — I hope you have a fantastic stay in Cape Town.

Come back anytime.

Tony Figaji

2016 Congress Host Vice president of the INTS Professor of Neurosurgery Head of Paediatric Neurosurgery University of Cape Town NRF Chair of Clinical Neurosciences Venues for other meetings and sessions will be confirmed in the final programme on site.

### Monday, 1 February 2016

17h00 - 18h30	INTS Board Meeting (The Boardroom 1.3)	
19h00 - 20h00	pening of INTS2016 (Ballroom West)	
20h00 - 21h00	Welcome Cocktail Function (Exhibition Hall)	

### Tuesday, 2 February 2016

08h00 – 09h00	SUNRISE SEMINAR: (Ballroom West)	SUNRISE SEMINAR: (Meeting room 1.4)	SUNRISE SEMINAR: (Meeting room 1.6)
	SS1: Clinical Trials Session Chairs: Ross Bullock & Andrew Maas	SS2: Update on axonal pathology Session Chairs: Barry Jordan & David Brody	SS3: Clinical Issues In Spine Injury Session Chairs: Robert Dunn & Kyoung-Suok Cho
08h00 – 08h20	Clinical Trial design: Lessons learned - Jamie Cooper	Update On Axonal Injury – John Povlishock	New Classification – Michael Fehlings
08h20 – 08h40	Data Collection And Sharing - Peter Le Roux	Axonal Pathology After TBI – Willie Stewart	Spinal Cord Pressure And Perfusion – Robert Vink
08h40 - 09h00	RCTs, Comparative Effectiveness And Patient Heterogeneity - Patrick Kochanek	Axonal Injury After Repetitive TBI – Mayumi Prins	Timing And Role Of Surgical Intervention – David Welsh
09h00 – 09h15	F	REFRESHMENT BREAK - (Ballroom East – Exhibition He	in
09h15 – 10h45	MAIN PLENARY (Ballroom West)		Session Chairs: Patrick Kochanek & Edward Ha
09h15 – 09h45	Current Status and Priorities for Research in TBI - I	Ross Bullock	
09h45 – 10h15	Current Status and Priorities for Research in Spinal	Cord Injury - Michael Fehlings	
10h15 – 10h45	Mild TBI: from Denial to Hysteria - Chris Giza		
10h45 – 11h40	MAIN PLENARY (Ballroom West)	s	ession Chairs: Robert Vink & Andreas Unterber
10h45 – 11h00	Update on Status of Basic and Clinical Neurotraum	a Research in China – Baiyun Liu	
11h00 – 11h15	Update on International Initiatives in TBI research:	Challenges and Successes – Andrew Maas, Elizabeti	n Theriault
11h15 – 11h40	Introduction of the INTS 2016 Honorary Lecturer: A Honorary Lecture: Brain Injury- a Lifetime Problem	ndreas Unterberg for Neurosurgeons and Neuroscientists – Alex Baethi	mann
11h40 – 13h00	POSTER SESSION – FIRST ROUND (Ballroom East	– Exhibition Hall)	
13h00 – 14h00		LUNCH (Ballroom East – Exhibition Hall)	
14h00 – 15h15	PARALLEL PLENARY (Meeting Room 1.4)	PARALLEL PLENARY (Meeting Room 1.6)	PARALLEL PLENARY (Bellroom West)
	PP1: Neuroprotection and Regeneration Session Chairs: Willie Stewart & Thomas Glenn	PP2: Neuro-inflammation Session Chairs: Baiyun Lu & Adel Helmy	PP3: Spinal Cord Injury – Clinical Session Chairs: David Welsh & Jan Schwab
14h00 – 14h25	OBTT: Logistical Challenges In Multi-Centred Laboratory Studies – Patrick Kochanek	Experimental Strategies To Manipulate Microglia Activation – Elisa Zanier	New Outcome Assessment Tools – Rob Dunn
14h25 – 14h50	Carbonyl Scavenging As Neuroprotective Approach For TBI – Edward Hall	Lessons From Preclinical Models – Robert Vink	Methylprednisolone In Spinal Cord Injury – Jan Schwab
14h50 – 15h15	The Role Of The Endocannabinoid System In Neuroprotection And Regeneration – Esther Shohami	Lessons From Clinical Methods – Adel Helmy	A Clinical Guideline for the Timing of Surgical Decompression in the Treatment of Acute Traumatic Spinal Cord Injury – Michael Fehlings
15h15 – 15h55	FREE PAPERS - PARALLEL (Meeting Room 1.4)	FREE PAPERS - PARALLEL (Meeting Room 1.6)	FREE PAPERS - PARALLEL (Ballroom West)
15h15 – 15h25	Role of œrebrovascular cells in tau processing following traumatic brain injury – Corbin Bachmeier	Investigating the complex relationship between neuroinflammation, neurodegeneration and long-term functional outcomes in an experimental model of traumatic brain injury – Lyndsey Collins-Praino	A clinical guideline for the use of high-dose methylprednisolone in the treatment of acute traumatic spinal cord injury – <i>Michael Fehlings</i>
15h25 – 15h35	Migraine-associated mutations in the Cav2.1 p/q Ca2+ channel increase posttraumatic cortical spreading depressions and significantly worsen outcome following traumatic brain injury - Nicole Angela Terpolilli	Characterising the localised inflammatory response in pericontusional brain following traumatic injury – Mathew Guilfoyle	Complete reduction of cervical dislocations: a biomechanical approach – Sujoy Sanyal
15h35 – 15h45	RTBI induced decrease in cerebral glucose metabolism contributes to Alzheimer's pathogenesis – Tiffany Greco	Intravenous AAV9-IL4 as a method for simultaneously regulating inflammation inside and outside the central nervous system – <i>Jodie Hall</i>	Comparison of anterolateral and posterior approaches in the management of thoracolumbar burst fractures – Kyoung-Suok Cho
15h45 – 15h55	Determining the relative contribution of early oxidative changes, loss of oligodendrocyte precursor cells and node/paranode abnormalities to function, in nerve vulnerable to secondary degeneration – Melinda Fitzgerald	Human umbilical cord perivascular cell (hucpvc) therapy for traumatic brain injury: targeting the neurovascular unit – Katya Park	Epidemiology of acute spinal cord injuries in the Groote Schuur Hospital acute spinal cord injury (GSH ASCI) unit over the past 11 years – Rob Dunn
15h55 – 16h00	Discussion	Discussion	Discussion
16h00 – 16h15		REFRESHMENT BREAK (Ballroom East – Exhibition Hal	
16h15 – 18h00	PARALLEL PLENARY (Ballroom West)	PARALLEL PLENARY (Meeting Room 1.6)	PARALLEL PLENARY (Meeting Room 1.4)
	PP4: Chronic Progressive Injury Session Chairs: Esther Shohami & Grace Griesbach	PP5: Spinal cord injury – Preclinical Session Chairs: Michael Fehlings & Reggie Edgerton	PP6: Clinical Neuromonitoring Session Chairs: Randy Chesnut & David Menon
16h15 – 16h40			Guidelines For Multimodality Monitoring – Peter I Roux
16h40 – 17h05	Neuropathology Of Single And Repetitive TBI  – Willie Stewart	Inflammation in SCI – Jan Schwab	Integrating Neuromonitoring – Tony Figaji
17h05 – 17h30	The Role Of Apo E On Outcome – Barry Jordan	Hypothermia – Dalton Dietrich	Determination Of Brain Death: Global Variations - Takashi Araki





17h30 – 18h00	FREE PAPERS - PARALLEL (Ballroom West)	FREE PAPERS - PARALLEL (Meeting Room 1.6)	FREE PAPERS - PARALLEL (Meeting Room 1.4)
17h30 – 17h40	Life-long sports-related repetitive concussive head injury in htau mice: deficits in cerebral blood flow, gliosis, axonal injury and mild increase(s) in t-tau and tau oligomers – Benoit Mouzon	Effects Of Adenosine Monophosphate-activated Kinase In The Ventral Horn Of Rabbit Spinal Cord After Transient Ischemia - Seung-myung Moon	A novel non-invasive cerebral bio-impedance monitor mimics ICP waveform in severe TBI patients – Guy Rosenthal
17h40 – 17h50	Influence of a western diet and Apo E genotype on outcome after mild repetitive TBI in a mouse model – Fiona Crawford	Identification of a protease activated receptor 2-il- 6-stat3 signaling circuit that regulates astrogliosis and motor recovery in traumatic spinal cord injury — Isobel Scarisbrick	Autoregulation-based optimal cerebral perfusion pressure in a prospective traumatic brain injury cohort – Joseph Donnelly
17h50 – 18h00	Human traumatic brain injury induces rapid accumulation of amyloid-beta oligomers and protofibrils in surgically resected brain tissue – Niklas Marklund	Embryonic spinal cord derived cells help to prevent muscle atrophy after peripheral nerve transaction – Carolin Ruven	Core outcomes and common data elements in chronic subdural haematoma (CODE-CSDH) – Angelos Kolias
18h00 – 18h10			A randomised, double blind, placebo-controlled trial of a two-week course of dexamethasone for adult patients with a symptomatic chronic subdural haematoma (DEX-CSDH trial) – Angelos Kolias
19h00 – 22h00	EVENING AT LEISURE / OPTIONAL EVENT		

### Wednesday, 3 February 2016

08h00 – 09h00	SUNRISE SEMINAR: (Ballroom West)	SUNRISE SEMINAR: (Meeting room 1.4)	SUNRISE SEMINAR: (Meeting room 1.6)
	SS4: Pathophysiology Session Chairs: John Povlishock & Mayumi Prins	SS5: Assessing Outcome Session Chairs: Grace Griesbach & Lars Hillered	SS6: Paediatric issues Session Chairs: Chris Giza & Llewellyn Padayachy
08h00 - 08h20	Oxidative Injury – Edward Hall	Optimising Assessment Tools – Andrew Maas	Autoregulation In Paediatric Brain Injury – Ken Brady
08h20 - 08h40	Where Are We Going With Cortical Spreading Depression Research In TBI? – Jed Hartings	Cognitive Decline And Repair following TBI – Esther Shohami	Managing Paediatric TBI: Variations In Current Practice – Michael Bell
08h40 - 09h00	Plasticity In Rehabilitation Of Spinal Cord Injury – Reggie Edgerton	Patient-reported and Performance-based Outcomes in Persons after Mild Traumatic Brain – Nicole van Steinbuchel	Developing A Paediatric Neurocritical Care Approach – Jose Pineda
09h00 - 09h15		REFRESHMENT BREAK (Ballroom East - Exhibition Hall	D
09h15 – 10h45	MAIN PLENARY (Ballroom West)		Session Chairs: Andras Buki & Helen Bramlett
09h15 - 09h45	Engaging Clinicians In The Lab – John Povlishock		
09h45 - 10h15	Engaging Scientists In The Clinic - Peter Hutchinso	n	
10h15 – 10h45	Round Table Discussion: How best to promote bend Helen Bramlett, Edward Hall	ch to bedside collaborations in building a great unit –	Peter Hutchinson, John Povlishock, Andras Buki,
10h45 - 11h15	FREE PAPERS (Ballroom West)		
10h45 - 10h55	Mitochondrial DNA And Traumatic Brain Injury - Lis	a Hill	
10h55 - 11h05	Lactate And Human Traumatic Brain Injury: Effects	Of Early Infusion On Body And Brain – Thomas Glen	n
11h05 – 11h15	Succinate Administered Focally Enters The Tricarbo Patients: A 13c-labelled Microdialysis Study - Ibrah	oxylic Acid Cycle Of the Brain And Ameliorates The Lim Jalloh	actate/Pyruvate Ratio In Traumatic Brain Injury
11h15 – 13h00	POSTER SESSION - SECOND ROUND (Ballroom E	ast – Exhibition Hall)	
13h00 – 14h00		LUNCH (Ballroom East – Exhibition Hall)	
14h00 – 15h15	PARALLEL PLENARY (Meeting Room 1.6)	PARALLEL PLENARY (Meeting Room 1.41-2)	PARALLEL PLENARY (Meeting Room 1.43-4)
	PP7: Microdialysis/ Monitoring Session Chairs: Lars-Owe Koskinen & Niklas Marklund	PP8: Biomarkers Session Chair: Takashi Maeda & Sam Mokogong	PP9: Mild TBI Session Chair: Robert Vink & Mayumi Prins
14h00 – 14h25	Metabolomics – Bo-Michael Bellander	Biomarkers in Mild TBI – Ramon Diaz-Arrastia	The Role Of Substance P In The Development Of Neurodegeneration Following Concussion – Frances Corrigan
14h25 – 14h50	Proteomics in microdialysis - Methods And Results – Lars Hillered	Biomarker Research In Multicentered Studies  – Andras Buki	Animal Models Of Mild TBI – Mayumi Prins
14h50 – 15h15	Extended Applications Of Microdialysis - Drug Recovery – Peter Hutchinson	Challenges In Applying Biomarker Research Into Clinical Practice – Bo-Michael Bellander	Rehabilitation After Mild TBI – Grace Griesbach
15h15 – 15h55	FREE PAPERS -PARALLEL (Meeting Room 1.6)	FREE PAPERS - PARALLEL (Meeting Room 1.41-2)	FREE PAPERS-PARALLEL (Meeting Room 1.43 - 4)
	FP9	FP10	FP11
15h15 – 15h25	Microdialysis in severe TBI: a single centre experience in India – Deepak Gupta	Biomarker Changes In Various Fluid Compartments After Traumatic Brain Injury; Temporal Considerations And The Involvement Of The Glymphatic System – Denes Agoston	Toll Like Receptor 4 Activation Can Be Either Detrimental Or Beneficial Following Mild Repetitive Traumatic Brain Injury Depending On Timing Of Activation – Frances Corrigan
15h25 – 15h35	Mitochondrial Dysfunction And Ischaemia In Severe TBI: A Microdialysis Study – Raghav Singla	Circulating Brain Damage Markers For The Diagnosis And Outcome Prediction Of Traumatic Brain Injuries. A Systematic Review And Meta-analysis – Stefania Mondello	Assessment Of Oculomotor, Vestibular, And Reaction Time Responses Following A Concussive Event – Alexander Kiderman
15h35 – 15h45	To Drain Or Not To Drain? Is There A Measurable Advantage To Draining Ventricular Fluid Following Severe TBI? – Mark Krasberg	The Potential Utility Of Brain Injury Biomarkers In Pre-clinical Drug Screening By Operation Brain Trauma Therapy - Stefania Mondello	Sport Related Norms For Novel Concussion Assessment Tools- A Pilot – Joseph Hazzard, Jr
15h45 – 15h55	Post-traumatic Human Seizures And Inter-ictal Discharges Are Generated Via Recurrent Excitation Of Peri-lesional Neural Assemblies – Andres Irimia	Gene Networks Analysis To Elucidate Complexity And To Identify Biomarkers Of TBI – Fernando Gomez-Pinilla	Modeling PTSD and Repetitive Concussive Injury (from Mice to Men) - Joseph Ojo
15h55 - 16h00	Discussion	Discussion	Discussion

16h15 – 18h05	FREE PAPERS -PARALLEL (Meeting Room 1.41-2)	FREE PAPERS - PARALLEL (Meeting Room 1.6)	FREE PAPERS-PARALLEL (Meeting Room 1.43 - 4)
	FP12: Paediatrics: Preclinical and Clinical Session Chairs: Michael Bell & Ken Brady	FP13: Clinical Care Session Chairs: Deepak Gupta & Gian Marus	FP14: Preclinical science Session Chairs: Denes Agoston & Thomas Glenn
16h15 – 16h25	Large-animal combined insult model for inflicted brain injury in infancy – Beth Costine	Characterising the temporal evolution of ICP and cerebrovascular reactivity after severe traumatic brain injury – <i>Hadie Adams</i>	Cortical Gray Matter-White Matter Junction Pattern Of Retention Of The Tauopathy Ligand 18f-t807 (avid-1451) In Clinically Probable CTE – Sam Gandy
16h25 – 16h35	Systemic metabolic derangements are linked to both intracranial pressure and cerebrovascular reactivity in paediatric traumatic brain injury – Adam Young	20 years of ICP monitoring in traumatic brain injury - single centre experience from Cambridge, UK – Joseph Donnelly	Self-assembling peptides and neural precursor cells foster neural regeneration following experimental cervical spinal cord injury - Klaus Zweckberger
16h35 – 16h45	Continuous multimodality monitoring in children after traumatic brain injury- preliminary experience – Adam Young	Current use of intracranial pressure monitoring in Japan – Elichi Suehiro	Hypoxia Following Traumatic Brain Injury In Rats Exacerbates Lesion Size Whereas Hypoxia- inducible Factor 1 Alpha Increased In Normoxic Rats – Eric Thelin
16h45 – 16h55	Hyperoxia and mortality after severe TBI in children; challenging the definition of hyperoxia – Ilse Klouwen	Alcohol and mortality after moderate-to-severe traumatic brain injury: a meta-analysis of observational studies – Era Daniel Mikkonen	Transplantation Of Human Neural Stem Cells In Penetrating Ballistic Brain Injury – Aminul Ahmed
16h55 – 17h05	Prediction of cerebral morphine concentration in pediatric traumatic brain injury (TBI) with the rat physiologically based pharmacokinetic (PBPK) model – <i>E.C.M.de Lange</i>	Individual patient data meta-analysis: surgery for spontaneous and traumatic intracerebral haemorrhage – Barbara Gregson	Controlled-cortical impact produces regio-specific dysfunction of stimulated dopamine neurotransmission in the dorsal striatum that can be restored with chronic methylphenidate treatment – Rashed Harun
17h05 – 17h15	Severe TBI In Children Treated According To Lund Concept 2000-2009 – Linus Reen	Hopes trial: the randomized multicenter controlled trial for preoperative early-induced hypothermia and its scientific rationale – Shoji Yokobori	Localization of the corticospinal, rubrospinal and spinothalamic tracts in pigs: implications for modelling traumatic spinal cord injury - <i>Anna Leonard</i>
17h15 – 17h25	Whole brain MR spectroscopic determinants of functional outcomes in pediatric traumatic brain injury – <i>Talin Babikian</i>	The management and outcome of patients with chronic subdural haematoma: a prospective, multicenter, observational cohort study in the United Kingdom – Angelos Kolias	Mechanisms of dysregulation of glucose metabolism following graded traumatic brain injury – Lisa Hill
17h25 – 17h35	Fix the Lesion or Keep Development Going? Neuroblast Distribution after Cortical Impact in the Immature Gyrencephalic Brain – Beth Costine	Bayesian model of traumatic brain injury biomarker kinetics – Ari Ercole	Comparing 2 rodent models of single and repetitive blast-induced traumatic brain injury - Lizan Kawa
17h35 – 17h45	Proteomics of brain microdialysis fluid in children with severe TBI – Sarah Ive	Significant Oxygen Extraction Increases Commonly Occur at a CPP of 100 mm Hg - Howard Yonas	Investigating the pathological effects of single mild or repetitive sub-minimal blast-induced neurotrauma – Sarah Hellewell
17h45 – 17h55	Discussion: Priorities for research in paediatric TBI	Phosphorus Spectroscopy: Interrogating Brain Metabolism In Acute Severe Traumatic Brain Injury – Matthew Stovell	Single severe TBI produces progressive pathology with contralateral white matter damage one year after injury – Francesca Pischiutta
17h55 – 18h00	Discussion	Discussion	Discussion
19h30 – 23h00	GALA DINNER (Ballroom East, CTICC)		

### Thursday, 4 February 2016

08h00 - 09h00	SUNRISE SEMINAR: (Meeting room 1.6)	SUNRISE SEMINAR: (Ballroom West)	SUNRISE SEMINAR: (Meeting room 1.4)
	SS7: Collaborative Data Collection Session Chairs: Ramon Diaz-Arrastia & Deepak Gupta	SS8: Sports Concussion Session Chair: Mike DuTrevou & Chris Giza	SS9: Animal Models In Spinal Cord Injury: Dalton Dietrich & Reggie Edgerton
08h00 - 08h15	CENTER TBI – Andrew Maas	Controversies In Sports Concussion – Chris Giza	Trials Of Bioengineered Strategies – Charles Tator
08h15 - 08h30	ADAPT – Michael Bell	Activate The Brain Or Rest After Concussion?  – Grace Griesbach	Stem Cells In SCI – Dalton Dietrich
08h30 - 08h45	INTBIR – Elizabeth Theriault	Postconcussion Syndrome - A Disabling Consequence Of Concussion - Charles Tator	Electrical Stimulation Of Brainstem And Spinal Cord – Reggie Edgerton
0845 - 09h00	Instituting Evidence-Based Recommendations In TBI – Challenges faced – Jose Pineda	Round Table Discussion: Priorities For Concussion Research – Speakers and Chairs	Round table Discussion: Priorities for future preclinical SCI research – Speakers and Chairs
09h00 - 09h15	REFRESHMENT BREAK (Ballroom East – Exhibition Hall)		
09h15 - 10h45	MAIN PLENARY (Bailroom West)  Session Chairs: Esther Shohami & Dalton Dietrich		
09h15 - 09h45	Challenges In Severe TBI Management – David Menon		
09h45 - 10h15	Challenges In Acute Spinal Injury Management – C	harles Tator	
10h15 - 10h45	Operation Brain Trauma Therapy - Patrick Kochan	ek	
10h45 - 11h25	FREE PAPERS (Ballroom West)		Session Chairs: GK Prusty & Andreas Unterberg
10h45 - 11h05	Results Of The ANZIC Randomized Controlled Trial Of EPO27 – Jamie Cooper		
11h05 - 11h15	A Pragmatic Randomized Trial Of Decompressive Craniectomy Versus Craniotomy For Adults With Acute Subdural Haematoma (RESCUE-ASDH) – Angelos Kolias		
11h15 - 11h25	Characterization of Spreading Depolarizations in Se	evere Traumatic Brain Injury: A Prospective Multi-cen	ter Study – Jed Hartings
11h25 - 13h00	POSTER SESSION – THIRD ROUND (Ballroom East – Exhibition Hall)		
13h00 – 14h00	LUNCH (Ballroom East – Exhibition Hall)		





14h00 – 15h15	PARALLEL PLENARY (Ballroom West)	PARALLEL PLENARY (Meeting Room 1.4)	
151110	PP10: Medical vs Surgical Treatment of Raised		
	ICP Session Chairs: Patrick Semple & Bo-Michael Bellander	PP11: Advanced Imaging Technologies Session Chairs: Howard Yonas & Virginia Newcombe	
14h00 - 14h20	Medical Treatment Of Raised ICP - David Menon	DTI and prognostication - Virgina Newcombe	
14h20 – 14h40	Surgical Treatment Of Raised ICP – Peter Hutchinson	Advanced Diffusion MRI Radiological Pathological Correlations In Post Mortem Human Brain From Chronic Traumatic Encephalopathy Patients – David Brody	
14h40 – 15h00	Round Table Discussion – David Menon, Peter Hutchinson, Tony Figaji	Early Magnetic Resonance Imaging in Traumatic Brain Injury Enhances Prognostication in the Critical Care Setting – Virginia Newcombe	
15h00 – 15h15	Cerebral Contusions: Patients Who Talk And Deteriorate – <i>Takeshi Maeda</i>	Round Table Discussion: Priorities for future imaging research in TBI and SCI: Howard Yonas, Virginia Newcombe, David Brody, Jonathan Coles.	
15h15 – 15h55	FREE PAPERS -PARALLEL (Ballroom)	FREE PAPERS - PARALLEL (Meeting Room 1.4)	
	FP16	<u>FP17</u>	
15h15 – 15h25	Survival after surgery for acute subdural haematoma in adults: an observational cohort study of 2,498 patients – <i>Angelos Kolias</i>	Use of diffusion tensor imaging to assess the impact of normobaric hyperoxia within normal appearing brain following traumatic brain injury – Jonathan Coles	
15h25 - 15h35	Comparative effectiveness of surgery for acute	Posttraumatic unconsciousness: diffuse axonal	
45,05	subdural hematoma – Thomas Van Essen	injury or brain stem lesion? – Raimond Firsching	
15h35 – 15h45	Secondary Peak Of S-100B Is Associated With Decompressive Hemicraniectomy – Lars-Owe Koskinen	Integrated DWI and MRS reveal white matter dysfunction in pediatric TBI – Emily Dennis	
15h45 – 15h55	Effectiveness of CT imaging and observation for detection of secondary intracranial hemorrhage in patients with anticoagulation therapy – Anna Antoni	In vivo evaluation of cerebral blood flow metabolism, apoptosis and stem cell trafficking following traumatic brain injury using multispectral optoacoustic tomography imaging in rats — Eugene Park	
15h55 - 16h00	Discussion	Discussion	
16h00 – 16h15		REFRESHMENT BREAK (Foyer outside Ballroom)	
16h15 – 17h15	INTS Business Meeting, Closing Remarks, and A	Announcement of INTS 2018 (Ballroom West)	

### **Invited Speakers**



Prof Takashi Araki
Lecturer, Senior Assistant
Professor
Department of Emergency and
Critical Care Medicine, Nippon
Medical School Hospital
Japan



Prof Michael Bell
Professor of Critical Care Medicine
University of Pittsburgh School of
Medicine
United States of America



Prof Bo-Michael Bellander Head of Neurotraumatology Karolinksa University Hospital, Sweden



Prof Ken Brady
Associate Professor of Pediatrics,
Anesthesia, and Critical Care
Texas Children's Hospital, Baylor
College of Medicine
United States of America



Dr András Büki University of Pécs, Hungary



Prof Ross Bullock University of Miami and Jackson Hospital, United States of America



Prof (DJ) Jamie Cooper Professor of Intensive Care Medicine Monash University Australia



Dr Frances Corrigan Lecturer University of Adelaide Australia



Prof Ramon Diaz-Arrastia
Director of Clinical Research,
Center for Neuroscience and
Regenerative Medicine
Uniformed Services University of
the Health Sciences
United States of America



Prof W. Dalton Dietrich
Professor of Neurological Surgery,
Neurology and Cell Biology
University of Miami
United States of America



Prof Robert Dunn
Consultant Spine and Orthopaedic
Surgeon
Pieter Moll and Nuffield Chair of
Orthopaedic Surgery: University of
Cape Town
South Africa



Prof V. Reggie Edgerton
Professor - Integrative Biology and
Physiology, Neurology, and
Neurosurgery Departments at UCLA
University of California, (UCLA)
United States of America



Prof Michael Fehlings
Professor of Neurosurgery
Toronto Western Hospital,
University Health Network and
University of Toronto
Canada



Prof Chris Giza
Director, UCLA Steve Tisch
BrainSPORT Program, Medical
Director, Operation Mend, Associate
Professor, Departments of
Pediatrics and Neurosurgery at
UCLA, University of California,
United States of America



Dr Grace Griesbach National Director of Clinical Research Centre for Neuroskills United States of America



Prof Edward D. Hall

Ch Professor of Anatomy &
Neurobiology, Neurosurgery,
Neurology & Physical Medicine &
Rehabilitation,
University of Kentucky, College of Medicine
United States of America



Mr Adel Helmy
University Lecturer
University of Cambridge /
Princess Alexandra Hospital
United Kingdom/ Australia



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Abstracts can be downloaded from the website in pdf format - www.ints2016.com/index.php/programme/abstracts

Poster presenters are requested to be available at their posters to do a short presentation of approximately 3 minutes to a group of delegates and representatives of the scientific programme committee. There is a possibility that two groups might visit your poster during the session.

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34	Valentina	Di Pietro	Micrornas As Novel Biomarkers In Mild And Severe Traumatic Brain Injury presented by Lisa Hill
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215	Erzsébet	Ezer	A fallen elderly patient with coagulopathy – a new dominant type of severe traumatic brain injury? (Analysis of the "Pécs severe head injury database".)
207	Scott	Ferguson	Age And Gender Effects In The Acute Response To Repetitive Mild Tbi In Htau Transgenic Mice
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12	Nuno	Silva	For Nervous Tissue Repair.  A Poly-pharmacotherapy Approach To Repair The Injured Spinal Cord: Is It The Whole Greater Than The Sum Of Its Parts?
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