


# 12<sup>th</sup> Symposium

Cape Town • 1-4 February 2016

Cape Town International Convention Centre

**INTS** International  
Neurotrauma  
Society



## Programme and Information Book



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## Scientific Programme Committee

Prof Bo-Michael Bellander, Karolinska University Hospital, Sweden  
Dr András Büki, University of Pécs, Hungary  
Prof Tony Figaji, University of Cape Town, South Africa  
Prof Edward Hall, University of Kentucky College of Medicine, USA  
Prof David Hovda, UCLA Brain Injury Research Center, USA  
Prof David Menon, University of Cambridge, United Kingdom  
Prof Michael Fehlings, University of Toronto, Canada  
Prof Lars Hillered, Uppsala University, Sweden  
Prof Takeshi Maeda, Nihon University School of Medicine, Japan  
Prof John Povlishock, Virginia Commonwealth University, USA  
Prof Katsuji Shima, National Defense Medical College Japan, Japan  
Prof Esther Shohami, Hebrew University of Jerusalem, Israel  
Prof Andreas Unterberg, Heidelberg University Hospital, Germany  
Prof Robert Vink, University of South Australia, Australia

## 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.



Our primary goal is that you have a productive and rewarding meeting. For all of the presenters, thank you for your hard work and your efforts to be here to present it. This meeting is mainly about your contributions. We hope that it will be well received, that you will impart something to others, and by their feedback that they will impart something of worth to you. For all delegates, please contribute in all possible ways – in question and answer sessions, around the posters, in coffee breaks and meal times – your feedback is invaluable – it is what makes this meeting come alive. This must not be a meeting of dry lectures but rather of to and fro discussion, even cut and thrust debate where needed, so that we get the most out of our time together.

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 enormity 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*

# Symposium Programme

Venues for other meetings and sessions will be confirmed in the final programme on site.

## Monday, 1 February 2016

17h00 – 18h30	INTS Board Meeting ( <i>The Boardroom 1.3</i> )
19h00 – 20h00	Opening of INTS2016 ( <i>Ballroom West</i> )
20h00 – 21h00	Welcome Cocktail Function ( <i>Exhibition Hall</i> )

## Tuesday, 2 February 2016

08h00 – 09h00	SUNRISE SEMINAR: ( <i>Ballroom West</i> )	SUNRISE SEMINAR: ( <i>Meeting room 1.4</i> )	SUNRISE SEMINAR: ( <i>Meeting room 1.6</i> )
	<b>SS1: Clinical Trials</b> <i>Session Chairs: Ross Bullock &amp; Andrew Maas</i>	<b>SS2: Update on axonal pathology</b> <i>Session Chairs: Barry Jordan &amp; David Brody</i>	<b>SS3: Clinical Issues In Spine Injury</b> <i>Session Chairs: Robert Dunn &amp; Kyoung-Suok Cho</i>
08h00 – 08h20	Clinical Trial design: Lessons learned - <i>Jamie Cooper</i>	Update On Axonal Injury – <i>John Povlishock</i>	New Classification – <i>Michael Fehlings</i>
08h20 – 08h40	Data Collection And Sharing - <i>Peter Le Roux</i>	Axonal Pathology After TBI – <i>Willie Stewart</i>	Spinal Cord Pressure And Perfusio – <i>Robert Vink</i>
08h40 – 09h00	RCTs, Comparative Effectiveness And Patient Heterogeneity - <i>Patrick Kochanek</i>	Axonal Injury After Repetitive TBI – <i>Mayumi Prins</i>	Timing And Role Of Surgical Intervention – <i>David Welsh</i>
09h00 – 09h15	REFRESHMENT BREAK - ( <i>Ballroom East – Exhibition Hall</i> )		
09h15 – 10h45	MAIN PLENARY ( <i>Ballroom West</i> ) <i>Session Chairs: Patrick Kochanek &amp; Edward Hall</i>		
09h15 – 09h45	Current Status and Priorities for Research in TBI - <i>Ross Bullock</i>		
09h45 – 10h15	Current Status and Priorities for Research in Spinal Cord Injury - <i>Michael Fehlings</i>		
10h15 – 10h45	Mild TBI: from Denial to Hysteria - <i>Chris Giza</i>		
10h45 – 11h40	MAIN PLENARY ( <i>Ballroom West</i> ) <i>Session Chairs: Robert Vink &amp; Andreas Unterberg</i>		
10h45 – 11h00	Update on Status of Basic and Clinical Neurotrauma Research in China – <i>Baiyun Liu</i>		
11h00 – 11h15	Update on International Initiatives in TBI research: Challenges and Successes – <i>Andrew Maas, Elizabeth Theriault</i>		
11h15 – 11h40	Introduction of the INTS 2016 Honorary Lecturer: <i>Andreas Unterberg</i> Honorary Lecture: Brain Injury- a Lifetime Problem for Neurosurgeons and Neuroscientists – <i>Alex Baethmann</i>		
11h40 – 13h00	POSTER SESSION – FIRST ROUND ( <i>Ballroom East – Exhibition Hall</i> )		
13h00 – 14h00	LUNCH ( <i>Ballroom East – Exhibition Hall</i> )		
14h00 – 15h15	PARALLEL PLENARY ( <i>Meeting Room 1.4</i> )	PARALLEL PLENARY ( <i>Meeting Room 1.6</i> )	PARALLEL PLENARY ( <i>Ballroom West</i> )
	<b>PP1: Neuroprotection and Regeneration</b> <i>Session Chairs: Willie Stewart &amp; Thomas Glenn</i>	<b>PP2: Neuro-inflammation</b> <i>Session Chairs: Baiyun Lu &amp; Adel Helmy</i>	<b>PP3: Spinal Cord Injury – Clinical</b> <i>Session Chairs: David Welsh &amp; Jan Schwab</i>
14h00 – 14h25	OBTT: Logistical Challenges In Multi-Centred Laboratory Studies – <i>Patrick Kochanek</i>	Experimental Strategies To Manipulate Microglia Activation – <i>Elisa Zanier</i>	New Outcome Assessment Tools – <i>Rob Dunn</i>
14h25 – 14h50	Carbonyl Scavenging As Neuroprotective Approach For TBI – <i>Edward Hall</i>	Lessons From Preclinical Models – <i>Robert Vink</i>	Methylprednisolone In Spinal Cord Injury – <i>Jan Schwab</i>
14h50 – 15h15	The Role Of The Endocannabinoid System In Neuroprotection And Regeneration – <i>Esther Shohami</i>	Lessons From Clinical Methods – <i>Adel Helmy</i>	A Clinical Guideline for the Timing of Surgical Decompression in the Treatment of Acute Traumatic Spinal Cord Injury – <i>Michael Fehlings</i>
15h15 – 15h55	FREE PAPERS – PARALLEL ( <i>Meeting Room 1.4</i> )	FREE PAPERS - PARALLEL ( <i>Meeting Room 1.6</i> )	FREE PAPERS - PARALLEL ( <i>Ballroom West</i> )
15h15 – 15h25	Role of cerebrovascular cells in tau processing following traumatic brain injury – <i>Corbin Bachmeier</i>	Investigating the complex relationship between neuroinflammation, neurodegeneration and long-term functional outcomes in an experimental model of traumatic brain injury – <i>Lyndsey Collins-Praino</i>	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 - <i>Nicole Angela Terpolilli</i>	Characterising the localised inflammatory response in pericontusional brain following traumatic injury – <i>Mathew Guilfoyle</i>	Complete reduction of cervical dislocations: a biomechanical approach – <i>Sujoy Sanyal</i>
15h35 – 15h45	RTBI induced decrease in cerebral glucose metabolism contributes to Alzheimer's pathogenesis – <i>Tiffany Greco</i>	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 – <i>Kyoung-Suok Cho</i>
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 – <i>Melinda Fitzgerald</i>	Human umbilical cord perivascular cell (hucpvc) therapy for traumatic brain injury: targeting the neurovascular unit – <i>Katya Park</i>	Epidemiology of acute spinal cord injuries in the Groote Schuur Hospital acute spinal cord injury (GSH ASCI) unit over the past 11 years – <i>Rob Dunn</i>
15h55 – 16h00	<i>Discussion</i>	<i>Discussion</i>	<i>Discussion</i>
16h00 – 16h15	REFRESHMENT BREAK ( <i>Ballroom East – Exhibition Hall</i> )		
16h15 – 18h00	PARALLEL PLENARY ( <i>Ballroom West</i> )	PARALLEL PLENARY ( <i>Meeting Room 1.6</i> )	PARALLEL PLENARY ( <i>Meeting Room 1.4</i> )
	<b>PP4: Chronic Progressive Injury</b> <i>Session Chairs: Esther Shohami &amp; Grace Griesbach</i>	<b>PP5: Spinal cord injury – Preclinical</b> <i>Session Chairs: Michael Fehlings &amp; Reggie Edgerton</i>	<b>PP6: Clinical Neuromonitoring</b> <i>Session Chairs: Randy Chesnut &amp; David Menon</i>
16h15 – 16h40	Evidence For Chronic Traumatic Degeneration – <i>Barry Jordan</i>	Neuroprotection Trials – <i>Michael Fehlings</i>	Guidelines For Multimodality Monitoring – <i>Peter le Roux</i>
16h40 – 17h05	Neuropathology Of Single And Repetitive TBI – <i>Willie Stewart</i>	Inflammation in SCI – <i>Jan Schwab</i>	Integrating Neuromonitoring – <i>Tony Figaji</i>
17h05 – 17h30	The Role Of Apo E On Outcome – <i>Barry Jordan</i>	Hypothermia – <i>Dalton Dietrich</i>	Determination Of Brain Death: Global Variations – <i>Takashi Araki</i>

17h30 – 18h00	FREE PAPERS – PARALLEL ( <i>Ballroom West</i> )	FREE PAPERS - PARALLEL ( <i>Meeting Room 1.6</i> )	FREE PAPERS - PARALLEL ( <i>Meeting Room 1.4</i> )
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 – <i>Benoit Mouzon</i>	Effects Of Adenosine Monophosphate-activated Kinase In The Ventral Horn Of Rabbit Spinal Cord After Transient Ischemia - <i>Seung-myung Moon</i>	A novel non-invasive cerebral bio-impedance monitor mimics ICP waveform in severe TBI patients – <i>Guy Rosenthal</i>
17h40 – 17h50	Influence of a western diet and Apo E genotype on outcome after mild repetitive TBI in a mouse model – <i>Fiona Crawford</i>	Identification of a protease activated receptor 2-il-6-stat3 signaling circuit that regulates astroglial and motor recovery in traumatic spinal cord injury – <i>Isobel Scarisbrick</i>	Autoregulation-based optimal cerebral perfusion pressure in a prospective traumatic brain injury cohort – <i>Joseph Donnelly</i>
17h50 – 18h00	Human traumatic brain injury induces rapid accumulation of amyloid-beta oligomers and protofibrils in surgically resected brain tissue – <i>Niklas Marklund</i>	Embryonic spinal cord derived cells help to prevent muscle atrophy after peripheral nerve transection – <i>Carolyn Ruven</i>	Core outcomes and common data elements in chronic subdural haematoma (CODE-CSDH) – <i>Angelos Kolias</i>
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) – <i>Angelos Kolias</i>
19h00 – 22h00	EVENING AT LEISURE / OPTIONAL EVENT		

## Wednesday, 3 February 2016

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

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)
	<b>FP12: Paediatrics: Preclinical and Clinical</b> <i>Session Chairs: Michael Bell &amp; Ken Brady</i>	<b>FP13: Clinical Care</b> <i>Session Chairs: Deepak Gupta &amp; Gian Marus</i>	<b>FP14: Preclinical science</b> <i>Session Chairs: Denes Agoston &amp; Thomas Glenn</i>
16h15 – 16h25	Large-animal combined insult model for inflicted brain injury in infancy – <i>Beth Costine</i>	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 – <i>Sam Gandy</i>
16h25 – 16h35	Systemic metabolic derangements are linked to both intracranial pressure and cerebrovascular reactivity in paediatric traumatic brain injury – <i>Adam Young</i>	20 years of ICP monitoring in traumatic brain injury - single centre experience from Cambridge, UK – <i>Joseph Donnelly</i>	Self-assembling peptides and neural precursor cells foster neural regeneration following experimental cervical spinal cord injury - <i>Klaus Zweckberger</i>
16h35 – 16h45	Continuous multimodality monitoring in children after traumatic brain injury- preliminary experience – <i>Adam Young</i>	Current use of intracranial pressure monitoring in Japan – <i>Eiichi Suehiro</i>	Hypoxia Following Traumatic Brain Injury In Rats Exacerbates Lesion Size Whereas Hypoxia-inducible Factor 1 Alpha Increased In Normoxic Rats – <i>Eric Thelin</i>
16h45 – 16h55	Hyperoxia and mortality after severe TBI in children; challenging the definition of hyperoxia – <i>Ilse Klouwen</i>	Alcohol and mortality after moderate-to-severe traumatic brain injury: a meta-analysis of observational studies – <i>Era Daniel Mikkonen</i>	Transplantation Of Human Neural Stem Cells In Penetrating Ballistic Brain Injury – <i>Aminul Ahmed</i>
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 – <i>Barbara Gregson</i>	Controlled-cortical impact produces regio-specific dysfunction of stimulated dopamine neurotransmission in the dorsal striatum that can be restored with chronic methylphenidate treatment – <i>Rashed Harun</i>
17h05 – 17h15	Severe TBI In Children Treated According To Lund Concept 2000-2009 – <i>Linus Reen</i>	Hopes trial: the randomized multicenter controlled trial for preoperative early-induced hypothermia and its scientific rationale – <i>Shoji Yokobori</i>	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 – <i>Angelos Koliass</i>	Mechanisms of dysregulation of glucose metabolism following graded traumatic brain injury – <i>Lisa Hill</i>
17h25 – 17h35	Fix the Lesion or Keep Development Going? Neuroblast Distribution after Cortical Impact in the Immature Gyrencephalic Brain – <i>Beth Costine</i>	Bayesian model of traumatic brain injury biomarker kinetics – <i>Ari Ercole</i>	Comparing 2 rodent models of single and repetitive blast-induced traumatic brain injury - <i>Lizan Kawa</i>
17h35 – 17h45	Proteomics of brain microdialysis fluid in children with severe TBI – <i>Sarah Iwe</i>	Significant Oxygen Extraction Increases Commonly Occur at a CPP of 100 mm Hg - <i>Howard Yonas</i>	Investigating the pathological effects of single mild or repetitive sub-minimal blast-induced neurotrauma – <i>Sarah Hellewell</i>
17h45 – 17h55	Discussion: Priorities for research in paediatric TBI	Phosphorus Spectroscopy: Interrogating Brain Metabolism In Acute Severe Traumatic Brain Injury – <i>Matthew Stovell</i>	Single severe TBI produces progressive pathology with contralateral white matter damage one year after injury – <i>Francesca Pischiutta</i>
17h55 – 18h00	<i>Discussion</i>	<i>Discussion</i>	<i>Discussion</i>
19h30 – 23h00	<b>GALA DINNER (Ballroom East, CTICC)</b>		

## Thursday, 4 February 2016

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





## 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



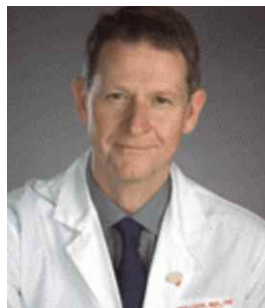
**Prof Bo-Michael Bellander**  
Head of Neurotraumatology  
Karolinska University Hospital,  
Sweden



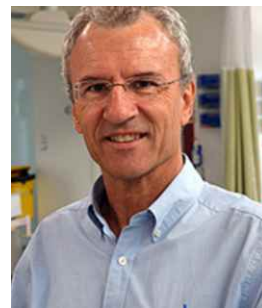
**Prof Ken Brady**  
Associate Professor of Pediatrics,  
Anesthesia, and Critical Care  
Texas Children's Hospital, Baylor  
College of Medicine  
United States of America



**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**  
 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



**Prof Lars Hillered**  
 Professor, Senior Consultant  
 Division of Neurosurgery,  
 Uppsala University Hospital,  
 Sweden



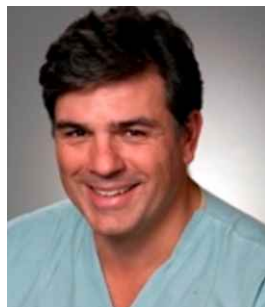
**Prof Peter Hutchinson**  
 Professor of Neurosurgery  
 University of Cambridge  
 United Kingdom



**Prof Barry Jordan**  
 Assistant Medical Director  
 Burke Rehabilitation Hospital  
 United States of America



**Prof Patrick Kochanek**  
 Director, Safar Center for  
 Resuscitation Research and  
 Vice Chair, Critical Care  
 Medicine  
 University of Pittsburgh School  
 of Medicine  
 United States of America



**Prof Peter Le Roux**  
 Co-Director of the Brain and Spine  
 Center at Lankenau Medical Center  
 in Wynnewood  
 Professor of Neurosurgery in the  
 Sidney Kimmel Medical College,  
 Thomas Jefferson University  
 United States of America



**Prof Andrew Maas**  
 Professor & Chairman  
 Department of Neurosurgery  
 University Hospital of Antwerp  
 and University of Antwerp  
 Belgium



**Prof Takeshi Maeda**  
 Associate Professor  
 Departments of Neurological  
 Surgery and Anesthesiology,  
 Nihon University School of Medicine  
 Japan



**Prof David Krishna Menon**  
Head of Department of Anaesthesia  
University of Cambridge  
United Kingdom



**Dr Virginia Newcombe**  
Academy of Medical Sciences /  
Health Foundation Clinician  
Scientist Fellow  
University Division of Anaesthesia,  
Cambridge University,  
United Kingdom



**Prof Jose Pineda**  
Associate Professor  
Washington University School  
of Medicine  
United States of America



**Prof John Povlishock**  
Professor and Chair, Department  
of Anatomy and Neurobiology  
Virginia Commonwealth University  
School of Medicine  
United States of America



**Prof Mayumi Prins**  
Professor  
UCLA Department of Neurosurgery  
United States of America



**Dr Sujoy Sanyal**  
Senior Consultant Neurosurgeon  
Rabindranath Tagore Hospital  
India



**Prof Jan Schwab**  
Professor of Neurology and  
Neurosciences  
The Ohio State University -  
Wexner Medical Center  
United States of America



**Prof Esther Shohami**  
Professor Emeritus  
Hebrew University of Jerusalem  
Israel



**Prof William Stewart**  
Consultant Neuropathologist  
Queen Elizabeth University Hospital  
Scotland



**Prof Charles Tator**  
Professor of Neurosurgery  
University of Toronto  
Canada



**Prof Robert Vink**  
Pro Vice Chancellor: Health Sciences  
University of South Australia  
Australia



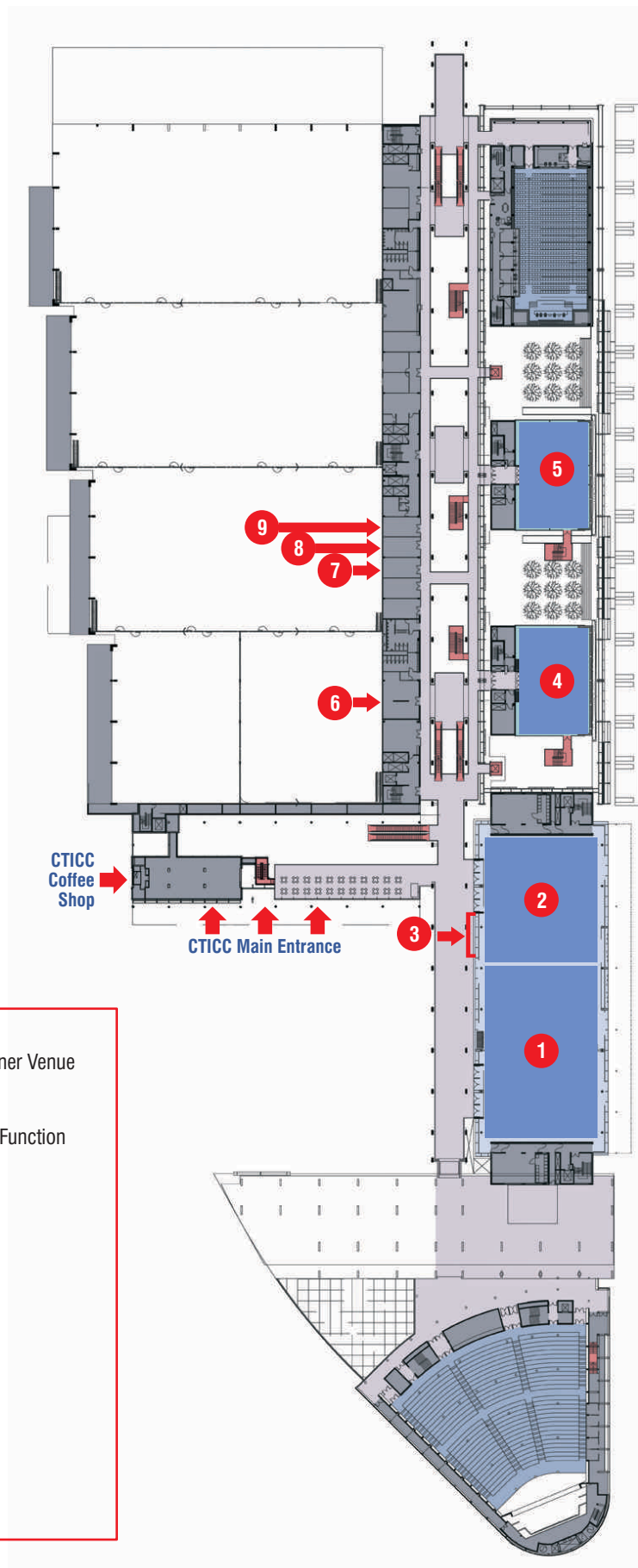
**Dr David Welsh**  
Consultant Neurosurgeon  
Vincent Pallotti Hospital  
South Africa



**Dr Elisa Zanier**  
Unit of Cell therapy and Acute Brain Injury,  
Head Institute of Pharmacological  
Research Mario Negri (IRFMN),  
Italy

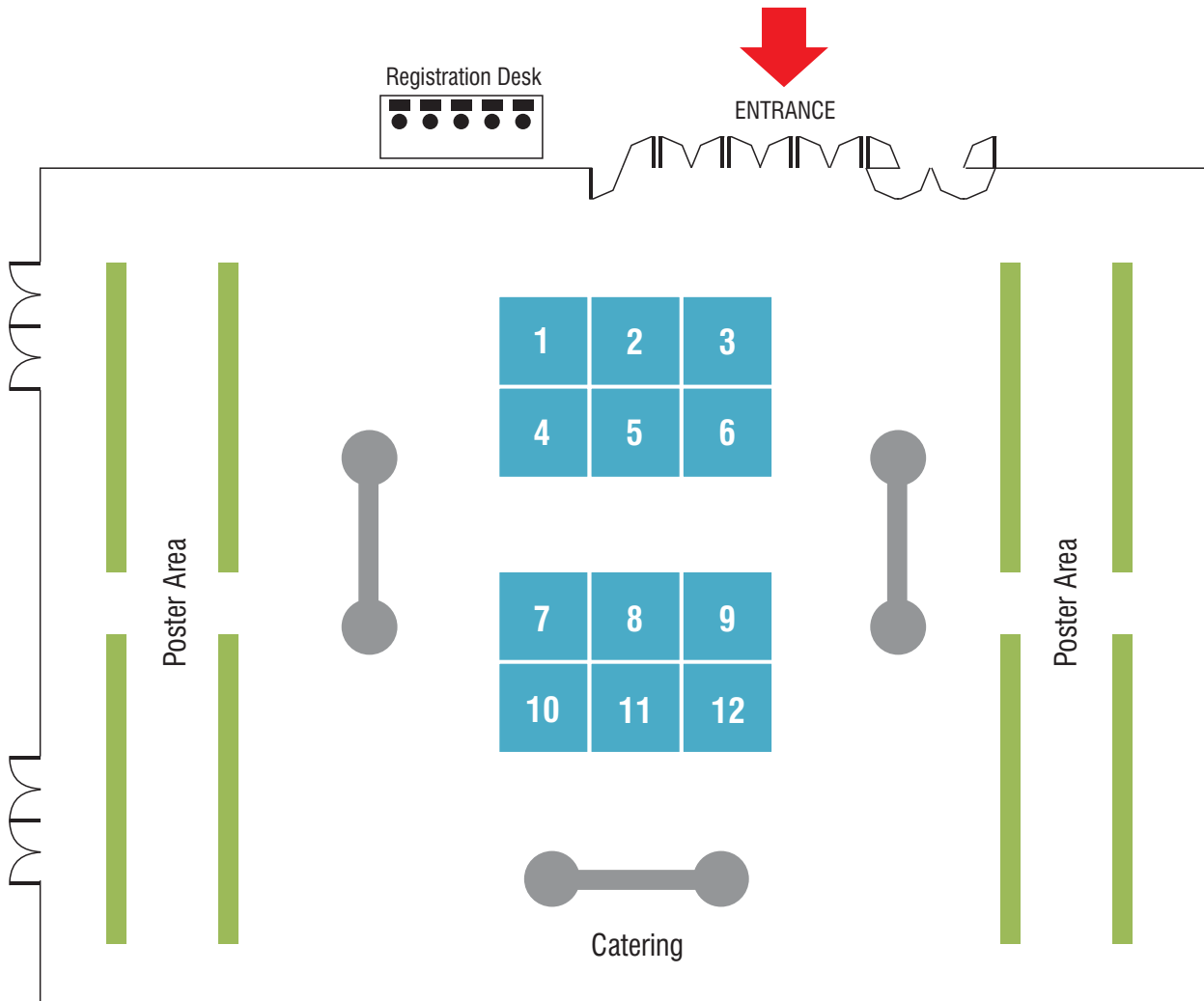
# INTS2016 Symposium Venues

## CTICC, Level 1/First Floor



- 1 Ballroom West: Plenary Venue / Gala Dinner Venue
- 2 Ballroom East: Exhibition Hall - Posters, Refreshments, Lunch, Welcome Function
- 3 Registration and Help Desk
- 4 Meeting Room 1.4 / 1.41-2 / 1.4-4
- 5 Meeting Room 1.6
- 6 Boardroom 1.3 - INTS Board
- 7 Room 1.53 Speaker's Preparation Room
- 8 Room 1.54 INTS2016 Secretariat
- 9 Room 1.55 INTS2016 Store Room

## Exhibition Floorplan - BALLROOM EAST



### Sponsors and Exhibitors

The INTS2016 Organising Committee gratefully acknowledges the following organisations for their support.



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Cadwell	7
Craniotech	10
DePuy Synthes	12
Intamed	9
Integra	11
Medtronic	1, 2 & 3
Local Gift Market	5 & 6
Tecmed	4
Transport & Tours Desk	8

## General Information

### VENUE

Cape Town International Convention Centre  
Convention Square, 1 Lower Long Street, Cape Town

Telephone: +27 (0) 21 410 5000

GPS co-ordinates: - 33.915141,18.425657

### EMERGENCY NO's

Police Flying Squad 10111

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Symposium Team:

- Karin: +27 (0)83 270 9219
- Lauren: +27 (0)81 025 4667
- Estie: +27 (0)82 410 0226

### AIRPORT TRANSFERS

Should you want to arrange a dedicated return transfer, please contact Robin. Uber is also active in Cape Town.

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### CPD POINTS

CPD accreditation is provided by the Health Professions Council of South Africa. Points are approved for Level 1 at 1 per hour. The official CPD accreditation number is **MDB001/013/01/2016**. Please keep this number on record for your auditing purposes. CPD Certificates will not be provided.

At the time of going to print the status for International Delegates was not available. Please enquire at the Registration Desk.

### DISCLAIMER:

The Local Organising Committee, the INTS and the Symposium Organisers accept no liability for any damages, injuries and/or losses of whatever nature incurred by delegates and accompanying persons.

### PARKING

Day parking vouchers will be sold at a reduced rate by the CTICC over lunch time on 2, 3 and 4 February.

### POSTERS

All posters should be up by Tuesday 2 February at 09h00. The exhibition hall will be open on Monday 1 February from 13h00 onwards for the set-up of posters. The welcome function will take place in the exhibition hall so it is advisable that you set up before the function. Please note that the hall will be closed between 15h30 – 16h30 for Health & Safety inspections. Each board will be numbered – please make sure that you use the board with your poster number on it.

Posters should be removed between 16h00 and 18h00 on Thursday 4 February 2016. If posters are left behind, the CTICC waste department will remove them.

### REGISTRATION: ON-SITE

The registration and help desk times are as follows:

Monday 1 February	13h00 – 21h00
Tuesday 2 February	07h00 – 19h00
Wednesday 3 February	07h30 – 20h00
Thursday 4 February	07h30 – 16h30

For security reasons, please ensure that you wear your name badge at all times, including to the social events. Please note that delegates and accompanying persons will need their registration badges to get access to the Symposium proceedings and the social events.

## SOCIAL EVENTS

### Monday 1 February 2016, Welcome Cocktail Function

Time: 20h00 After the opening ceremony  
Venue: Ballroom East (exhibition hall), CTICC  
Access Control: INTS 2016 delegates and registered accompanying persons  
Dress Code: Business dress / Smart casual

### Wednesday 3 February 2016, Symposium Gala Dinner

Time: 19h00 for 19h30 Pre-dinner drinks  
19h30 – 23h00 Dinner  
Venue: Ballroom West, CTICC  
Access Control: Pre-registration and payment is necessary for this event.  
Dress Code: Smart Casual

## SPEAKER'S PREVIEW ROOM

All speakers are to report to the speaker's preview room to meet with the technician who will load and test the presentation. **Speakers are to visit the speaker's preview room at least one day before their presentation.**

Venue: Room 1.53, First Floor, CTICC (if you go up the escalator turn to you left, keep left and you will find room 1.53 on the left)

### Operational times:

Monday 1 February	13h00 – 18h00
Tuesday 2 February	07h00 – 18h00
Wednesday 3 February	07h30 – 18h00
Thursday 4 February	07h30 – 15h00

**Please note that presentations will be recorded. Speakers will be required to inform the staff in the speaker's preview room if their presentation and material cannot but used for further marketing and educational purposes.**

## TOURS AND OPTIONAL SOCIAL EVENT/TOUR

The appointed tour operator can assist with day tours and customised tours and other pre-booked transport. They are also responsible for organising the Optional Evening tours. Please note that these tours will depart from the CTICC. Please contact them directly for all your tour and transport requirements.

Please visit them at the Travel and Tours Desk from 2 - 4 February during refreshment and lunch breaks.



## Authors List - Oral Presentations

Abstracts can be downloaded from the website in pdf format - [www.ints2016.com/index.php/programme/abstracts](http://www.ints2016.com/index.php/programme/abstracts)

Abstract ID	First name	Surname	Title of abstract
169	Sami	Abu Hamdeh	Human Traumatic Brain Injury Induces Rapid Accumulation Of Amyloid-beta Oligomers And Protofibrils In Surgically Resected Brain Tissue - to be presented by Prof Niklas Markland
153	Hadie	Adams	Characterising The Temporal Evolution Of Icp And Cerebrovascular Reactivity After Severe Traumatic Brain Injury.
122	Denes	Agoston	Biomarker Changes In Various Fluid Compartments After Traumatic Brain Injury; Temporal Considerations And The Involvement Of The Glymphatic System.
32	Aminul	Ahmed	Transplantation Of Human Neural Stem Cells In Penetrating Ballistic Brain Injury
128	Anna	Antoni	Effectiveness Of CT Imaging And Observation For Detection Of Secondary Intracranial Hemorrhage In Patients With Anticoagulation Therapy.
164	Talin	Babikian	Whole Brain Mr Spectroscopic Determinants Of Functional Outcomes - In Pediatric Traumatic Brain Injury
142	Corbin	Bachmeier	Role of cerebrovascular cells in tau processing following traumatic brain injury.
132	David	Brody	Advanced Diffusion Mri Radiological Pathological Correlations In Post Mortem Human Brain From Chronic Traumatic Encephalopathy Patients
103	Kyoung Suok	Cho	Comparison Of Anterolateral And Posterior Approaches In The Management Of Thoracolumbar Burst Fractures
68	Lyndsey	Collins-Praino	Investigating The Complex Relationship Between Neuroinflammation, Neurodegeneration And Long-term Functional Outcomes In An Experimental Model Of Traumatic Brain Injury.
27	Frances	Corrigan	Toll Like Receptor 4 Activation Can Be Either Detrimental Or Beneficial Following Mild Repetitive Traumatic Brain Injury Depending On Timing Of Activation
158	Beth	Costine	Large-Animal Combined Insult Model For Inflicted Brain Injury In Infancy
159	Beth	Costine	Fix the Lesion or Keep Development Going? Neuroblast Distribution after Cortical Impact in the Immature Gyrencephalic Brain.
196	Fiona	Crawford	Influence Of A Western Diet And Apoe Genotype On Outcome After Mild Repetitive TBI In A Mouse Model
60	Emily	Dennis	Integrated DWI And MRS Reveal White Matter Dysfunction In Pediatric TBI
38	Valentina	Di Pietro	Mechanisms Of Dysregulation Of Glucose Metabolism Following Graded Traumatic Brain Injury presented by Lisa Hill
173	Joseph	Donnelly	20 Years Of Icp Monitoring In Traumatic Brain Injury- Single Centre Experience From Cambridge, Uk
174	Joseph	Donnelly	Autoregulation-based Optimal Cerebral Perfusion Pressure In A Prospective Traumatic Brain Injury Cohort
13	Robert	Dunn	Epidemiology Of Acute Spinal Cord Injuries In The Grootte Schuur Hospital Acute Spinal Cord Injury (gsh Ascii) Unit Over The Past 11 Years
167	Ari	Ercole	Bayesian model of traumatic brain injury biomarker kinetics
144	Michael	Fehlings	A Clinical Guideline For The Use Of High-dose Methylprednisolone In The Treatment Of Acute Traumatic Spinal Cord Injury
72	Raimund	Firsching	Posttraumatic Unconsciousness. Diffuse Axonal Injury Or Brain Stem Lesion?
105	Melinda	Fitzgerald	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
165	Sam	Gandy	Cortical Gray Matter-white Matter Junction Pattern Of Retention Of The Tauopathy Ligand 18f-t807 (avid-1451) In Clinically Probable Cte
43	Thomas	Glenn	Lactate And Human Traumatic Brain Injury: Effects Of Early Infusion On Body And Brain
201	Fernando	Gomez-pinilla	Gene Networks Analysis To Elucidate Complexity And To Identify Biomarkers Of Tbi
92	Tiffany	Greco	RTBI Induced Decrease In Cerebral Glucose Metabolism Contributes To Alzheimer's Pathogenesis
199	Barbara	Gregson	Individual Patient Data Meta-analysis: Surgery For Spontaneous And Traumatic Intracerebral Haemorrhage
110	Mathew	Guilfoyle	Characterising The Localised Inflammatory Response In Pericontusional Brain Following Traumatic Injury
138	Deepak	Gupta	Intracerebral Hypoglycemia And Its Clinical Relevance As Prognostic Indicator In Severe Traumatic Brain Injury: A Cerebral Microdialysis Study From India.



133	Jodie	Hall	Intravenous AAV9-IL4 as a method for simultaneously regulating inflammation inside and outside the central nervous system
50	Jed	Hartings	Characterization Of Spreading Depolarizations In Severe Traumatic Brain Injury: A Prospective Multi-center Study
163	Rashed	Harun	Controlled-cortical Impact Produces Regiospecific Dysfunction Of Stimulated Dopamine Neurotransmission In The Dorsal Striatum That Can Be Restored With Chronic Methylphenidate Treatment
200	Joseph	Hazzard, Jr.	Sport Related Norms For Novel Concussion Assessment Tools- A Pilot
97	Sarah	Hellewell	Investigating The Pathological Effects Of Single Mild Or Repetitive Sub-minimal Blast-induced Neurotrauma
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59	Andrei	Irimia	Post-traumatic Human Seizures And Inter-ictal Discharges Are Generated Via Recurrent Excitation Of Peri-lesional Neural Assemblies
88	Ibrahim	Jalloh	Succinate Administered Focally Enters The Tricarboxylic Acid Cycle Of Brain And Ameliorates The Lactate/pyruvate Ratio In Traumatic Brain Injury Patients: A 13c-labelled Microdialysis Study
145	Andrew	Kane	Early Magnetic Resonance Imaging in Traumatic Brain Injury Enhances Prognostication in the Critical Care Setting presented by Virginia Newcombe
151	Lizan	Kawa	Comparing 2 Rodent Models Of Single And Repetitive Blast-induced Traumatic Brain Injury
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99	Ilse	Klouwen	Hyperoxia and mortality after severe TBI in children; challenging the definition of hyperoxia
73	Angelos G	Kolias	Survival after surgery for acute subdural haematoma in adults: an observational cohort study of 2,498 patients
89	Angelos G	Kolias	Core outcomes and common data elements in chronic subdural haematoma (CODE-CSDH)
90	Angelos G	Kolias	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)
121	Angelos G	Kolias	A Pragmatic Randomized Trial Of Decompressive Craniectomy Versus Craniotomy For Adults With Acute Subdural Haematoma (RESCUE-ASDH)
179	Angelos G	Kolias	The management and outcome of patients with chronic subdural haematoma: a prospective, multicenter, observational cohort study in the United Kingdom
147	Lars-owe	Koskinen	Secondary Peak Of S-100b Is Associated With Decompressive Hemicraniectomy
210	Mark	Krasberg	To Drain Or Not To Drain? Is There A Measurable Advantage To Draining Ventricular Fluid Following Severe TBI?
81	Anna	Leonard	Localization Of The Corticospinal, Rubrospinal And Spinothalamic Tracts In Pigs: Implications For Modelling Traumatic Spinal Cord Injury
18	Era	Mikkonen	Alcohol And Mortality After Moderate-to-severe Traumatic Brain Injury: A Meta-analysis Of Observational Studies
67	Stefania	Mondello	Circulating Brain Damage Markers For The Diagnosis And Outcome Prediction Of Traumatic Brain Injuries. A Systematic Review And Meta-analysis
77	Stefania	Mondello	The Potential Utility Of Brain Injury Biomarker In Pre-clinical Drug Screening By Operation Brain Trauma Therapy
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146	Seung-myung	Moon	Effects Of Adenosine Monophosphate-activated Kinase In The Ventral Horn Of Rabbit Spinal Cord After Transient Ischemia
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52	Katya	Park	Human umbilical cord perivascular cell (HUCPVC) therapy for traumatic brain injury: targeting the neurovascular unit
93	Eugene	Park	In Vivo Evaluation Of Cerebral Blood Flow Metabolism, Apoptosis And Stem Cell Trafficking Following Traumatic Brain Injury Using Multi-spectral Optoacoustic Tomography Imaging In Rats.
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127	Linus	Reen	Severe Tbi In Children Treated According To Lund Concept 2000-2009
189	Guy	Rosenthal	A Novel Non-invasive Cerebral Bio-impedance Monitor Mimics Icp Waveform In Severe Tbi Patients
23	Carolin	Ruven	Embryonic spinal cord derived cells help to prevent muscle atrophy after peripheral nerve transection.
141	Isobel	Scarisbrick	Identification Of A Protease Activated Receptor 2-il-6-stat3 Signaling Circuit That Regulates Astroglial And Motor Recovery In Traumatic Spinal Cord Injury



## Authors List - Poster Presentations

Abstracts can be downloaded from the website in pdf format - [www.ints2016.com/index.php/programme/abstracts](http://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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104	Kyoung Suok	Cho	Comparison Of Early And Late Decompression For Cervical Spinal Cord Injury
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34	Valentina	Di Pietro	Micrnas As Novel Biomarkers In Mild And Severe Traumatic Brain Injury presented by Lisa Hill
131	Basil	Enicker	Demographic Profile Of Traumatic Brain Injury Due To Inter-personal Violence In The Province Of Kwazulu-natal, South Africa
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
160	Se-hoon	Kim	Usefulness Of Expandable Cage For Vertebral Body Reconstruction In Trauma-related Unstable Thoracolumbar Spine Fractures Via Single-stage Posterior Approach: Surgical Results Of 30 Patients
162	Se-hoon	Kim	Effectiveness Of The Titanium Expandable Cages For Patients With Pathologic Thoracolumbar Spine Fracture
71	Xiang	Mao	Saikosaponin A Protects The Brain After Controlled Cortical Impact By Inhibiting The Mapk Pathway In Rats
55	Victoria	Mccutcheon	A Two-tier Model Of Traumatic Brain Injury In Zebrafish Designed For High-throughput Drug Evaluation
180	Cezar	Mizrahi	Evacuation Of Chronic Subdural Hematoma In Nonagenarians And Centurions: A 10-year Single Institution Experience.
184	Cezar	Mizrahi	Cranial Injuries Caused By Rubber Bullets
30	Junzo	Nakao	The Study Of The Severity Factor Of Acute Subdural Hematoma Of Elderly People With Antithrombotic Treatment Including Noveloralanticoagulants (NOAC).
139	Marie	Onakomaiya	Multi-Tasking in the Computer Assisted Rehabilitation Environment (CAREN) Distinguishes Service Members with Mild Traumatic Brain Injury Alone from those with Comorbid Post-Traumatic Stress Disorder
19	Rahul	Raj	Intensive Care Unit Volume And Mortality Of Patients With Traumatic Brain Injury
197	Florence	Reith	The Reliability Of The Glasgow Coma Scale: A Systematic Review
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12	Nuno	Silva	A Poly-pharmacotherapy Approach To Repair The Injured Spinal Cord: Is It The Whole Greater Than The Sum Of Its Parts?
74	Mattias	Skold	Ventral Root Avulsion And Replantation - Description Of Different Gene Expression Patterns In Acute And Delayed Replantation.
86	Xin Lin	Tan	Worse Outcomes After Experimental Tbi In Mutant Tdp-43 Mice
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123	Arnold	Toth	Microbleeds May Expand Acutely After Traumatic Brain Injury

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124	Corina	Bondi	Evaluation Of Executive Function Impairments After Experimental Frontal Traumatic Brain Injury
116	Helen	Bramlett	Effects Of Posttraumatic Hypothermia On Microglia/macrophage Phenotypes After Moderate Fluid Percussion Brain Injury In Rats
204	Paul	Brennan	A Gcs And Pupils Prognostic Index
188	Carlos	Candanedo	Characteristics Of External Ventricular Drainage Parameters In Severe Tbi Versus Non-tbi Patients
101	Kyoung Suok	Cho	Clinical And Radiographic Results Of Unilateral Transpedicular Balloon Kyphoplasty For The Treatment Of Osteoporotic Vertebral Compression Fractures
115	Fredrik	Clausen	Engulfing Astrocytes - A Link Between Tbi And Alzheimer's Disease?
16	Abdallahman	Gamil	Resuscitation Of Traumatic Brain Injured Sudanese Patients
31	Mattias	Gunter	Neuronal Vulnerability To Oxidative Stress Is Affected By Genetic Polymorphism And Related To Susceptibility To Inflammation In The Central Nervous System
119	Holly	Hinson	Early Fever Is Associated With Inflammation After TBI
21	Michael	Hoffer	Tracking Neurosensory Symptoms Of Mtbi Over Time
56	Alexander	Kiderman	Assessment Of Oculomotor, Vestibular, And Reaction Time Responses Following A Concussive Event
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94	Weiping	Li	"Cytoskeleton Protein Carbonylation Contributes To Axonal Injury Following Oxidative Stress presented by Dr Yong-Zhong Gao"
14	Mohammad	Maleki	Inter-Hemispheric Subdural Hematoma ( IHSDH)
70	Xiang	Mao	Procyanidins Protects Against Oxidative Damage And Cognitive Deficits After Traumatic Brain Injury
69	Xiang	Mao	Decompressive Craniectomy For Severe Traumatic Brain Injury Patients With Fixed Dilated Pupils
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11	Magloire Nkosi	Mpembu	Anxiety, Depression And Cognition Among Medular Injury Patient In Kinshasa (dr Congo). A Cross Sectional Study
80	Haruo	Nakayama	Sports-related Head Injury Seen From Big Data Of Internet Search Engines In Japan
106	Ryan	O'Hare Doig	Specific Combinations Of Ca <sup>2+</sup> Channel Inhibitors Reduce Excessive Ca <sup>2+</sup> Influx And Increase Neuronal And Glial Cell Viability In Vitro
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of normal and abnormal brain development

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## Selected contributions

- Cellular and Axonal Constituents of Neocortical Molecular Layer Heterotopia: **Ramos, R.L.**; **Siu, N.Y.** (Old Westbury, N.Y.); **Brunken, W.J.** (Brooklyn, N.Y.); **Yee, K.T.** (Jackson, Miss.); **Gabel, L.A.** (Easton, Pa.); **Van Dine, S.E.**; **Hoplight, B.J.** (Old Westbury, N.Y.)
- The Developmental Mismatch in Structural Brain Maturation during Adolescence: **Mills, K.L.** (London/Bethesda, Md.); **Goddings, A.-L.** (London); **Clasen, L.S.**; **Giedd, J.N.** (Bethesda, Md.); **Blakemore, S.-J.** (London)
- The Role of the Anterior Insula in Adolescent Decision Making: **Smith, A.R.**; **Steinberg, L.**; **Chein, J.** (Philadelphia, Pa.)
- Teens Impulsively React rather than Retreat from Threat: **Dreyfuss, M.**; **Caudle, K.**; **Drysdale, A.T.**; **Johnston, N.E.**; **Cohen, A.O.** (New York, N.Y.); **Somerville, L.H.** (Cambridge, Mass.); **Galván, A.**; **Tottenham, N.** (Los Angeles, Calif.); **Hare, T.A.** (Zurich); **Casey, B.J.** (New York, N.Y.)
- Prenatal Infection Affects the Neuronal Architecture and Cognitive Function in Adult Mice: **Li, W.-Y.**; **Chang, Y.-C.** (Taipei); **Lee, L.J.-H.** (Taipei/Zhunan); **Lee, L.-J.** (Taipei)
- Prenatal Exposure to the Viral Mimetic Poly I: C Alters Fetal Brain Cytokine Expression and Postnatal Behaviour: **Ratnayake, U.** (Clayton, Vic./Parkville, Vic.); **Quinn, T.**; **LaRosa, D.A.**; **Dickinson, H.**; **Walker, D.W.** (Clayton, Vic.)
- Molecular Changes during Neurodevelopment following Second- Trimester Binge Ethanol Exposure in a Mouse Model of Fetal Alcohol Spectrum Disorder: From Immediate Effects to Long-Term Adaptation: **Mantha, K.**; **Laufer, B.I.**; **Singh, S.M.** (London, Ont.)
- Increased Aggression, Improved Spatial Memory, and Reduced Anxiety-Like Behaviour in Adult Male Mice Exposed to Fluoxetine Early in Life: **Kiryanova, V.**; **Dyck, R.H.** (Calgary, Alta.)

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