

Program Overview

Time	Wednesday, October 18	Thursday, October 19	Friday, October 20th
	Gärtnersaal	Gärtnersaal	Gärtnersaal
9:00 - 10:30	Pre-Conference Workshops 1: - How to Write a Winning Manuscript - Introduction to Statistics	Focus: Spinal Cord Injury Chairs: Martin Schwab, Florence Bareyre	Focus: Neuroimaging Chairs: Virginia Newcombe, David Sharp
10:30 - 11:00	Coffee Break	Coffee Break & Poster Session	Coffee Break & Poster Session
11:00 - 12:30	Pre-Conference Workshops 2: - Animal models of TBI - Deep Learning	Focus: Neurocritical Care Chairs: Raimond Helbok, Elham Rostami	Focus: Neurorehabilitation and Longterm Outcome Chairs: Katrin Rauen, Marina Zeldovich
12:30 - 13:30	Lunch Break & Poster Session	Lunch Break & Poster Session	Closing Remarks and Awards / Lunch Break
13:30 - 14:00	Welcome to ENO 2023	Meet the Editors: Journal of Neurotrauma	
14:00 - 15:30	Focus: The Spectrum of Clinical TBI Chairs: Andrew Maas, Adel Helmy	Focus: Fluid Biomarkers of Neurotrauma Chairs: Stefania Mondello, Andras Buki	
15:30 - 16:00	Coffee Break & Poster Session	Coffee Break & Poster Session	
16:00 - 17:30	Focus: Experimental TBI Chairs: Elisa Zanier, Leda Dimou	Focus: Sport-Related Neurotrauma Chairs: Inga Koerte, Niklas Marklund	
17:30 - 18:30	Data Blitz - Experimental TBI Chairs: Susanne Schwarzmaier, Sigal Liraz Zaltsman	Introducing ENO (members only)	
18:30 - 19:30			
19:30 - 23:00	Bavarian Evening at Hofbräuhaus Platzl 9, 80331 München		

Presentations

Session 1: The Spectrum of Clinical TBI

Andrew Maas	TBI in 2023
Adel Helmy	TBI: Mechanistic Biomarkers to Address Heterogeneity
Joukje van der Naalt	Perspective on mild TBI: Challenges for research
Fan Sun	ANGPTL3 Dysregulation and Lipid Metabolism Changes in Traumatic Brain Injury
Mujun Sun	Neuropathophysiology, biomarkers, and deficits after intimate partner violence-related brain injury: Translational insights from a novel rat model and human patients
Alexander Younsi	Traumatic Brain Injury Treatment in Germany: Insights from the TBI-Databank DGNC/DGU

Session 2: Experimental TBI

Elisa Zanier	Mesenchymal stromal cells for traumatic brain injury: from mechanisms to translation
Leda Dimou	Glial reaction after TBI: detrimental or beneficial?
David Loane	Microglial dysfunction in the aged and injured brain
Carlos Fitzsimons	Traumatic brain injury promotes neurogenesis at the cost of astroglialogenesis in the adult hippocampus
Francesca Pischiutta	Mesenchymal stromal cell secretome improves traumatic brain injury outcomes: searching for the protective mediators
Susanne Schwarzmaier	Characterization of Vasogenic and Cytotoxic Brain Edema Formation after brain trauma by Free Water Diffusion MRI

Data Blitz – Experimental TBI

Susanne Schwarzmaier, Sigal Liraz Zaltsman

Lea Hippauf	Priming of the neurovascular unit in a double- hit model of perinatal inflammation and jmTBI
Francesco Roselli	Fast splenic interferon response and Dendritic Cell maturation after TBI.
Kosisochukwu Umeasalugo	Mild traumatic brain injury (mTBI) reduces neurosteroid levels in absence of gross pathology
Gloria Vegliante	Human TBI-generated tau leads to cognitive dysfunction and widespread tau pathology in wild-type but not tauKO mice by intracerebral inoculation.
Carly Douglas	Pro-inflammatory signaling along the P2X7R/NOX2 inflammatory axis in microglia
Georgios Michaletos	Impaired proliferation of oligodendrocyte precursor cells in aged mice following traumatic brain injury
Luther Loose	Traumatic brain injury induces a sex-dependent expression and activity pattern of inducible nitric oxide synthase

Session 3: Spinal Cord Injury

Martin Schwab	The anti-Nogo-A antibody clinical trials in acute spinal cord injury: From bench to bedside
Florence Bareyre	Shaping circuits following spinal cord injury
Hannah Bertels	Neurotransmitter phenotype switching by spinal excitatory neurons regulates locomotor recovery after spinal cord injury
Angela Ruban	Blood-glutamate scavenging therapy reduced glutamate excitotoxicity and significantly improved neuromotor recovery after moderate/severe spinal cord injury in mice.
Alexander Younsi	IL-4 modulates the local and systemic inflammatory response and confers enhanced functional recovery after traumatic spinal cord injury in rats.
Rimantas Vilcinis	Effective preemptive decompression following acute subdural hematoma evacuation
Almir Aljovic	Role of guidance cues in regulation of post injury inflammation

Session 4: Neurocritical Care

Raimond Helbok	Multimodal neuromonitoring in TBI: ICP and beyond
Elham Rostami	TBI : Current state of the art and future perspective
Shubhayu Bhattacharyay	Big data in TBI: dynamic modelling, clustering, and prognosis in the ICU
Ilaria Lisi	Characterization of astrocytic changes associated with post-traumatic epilepsy in mice
Francesco Roselli	Dynamics of synaptic damage in patients after traumatic brain injury
Abigail Livny	Diagnosis and Outcome Prediction of Concussion based on a Multimodal Structural and Functional Connectomics and Artificial Intelligence Algorithm

Session 5: Fluid Biomarkers of Neurotrauma

Stefania Mondello	Towards Clinical Implementation of Blood-based Biomarkers for Traumatic Brain Injury: Where Do We Stand?
Andras Buki	Clinical application of protein biomarkers in traumatic brain injury
Ava Puccio	Biomarkers in Neurotrauma: Updates from TRACK-TBI and Future Planning
Gershon Spitz	Plasma biomarkers in chronic traumatic brain injury and their association with Amyloid and Tau PET, white matter microarchitecture, and cognition
Julie Cheung	Acute inflammatory protein expression predicts subacute autoantibody responses following moderate and severe human traumatic brain injury: a prospective observational study
Stuart McDonald	Acute and sub-acute blood biomarkers to assist diagnosis in CT negative isolated mild traumatic brain injury

Session 6: Sport-Related Neurotrauma

Inga Koerte	Sport-related brain injury
Niklas Marklund	Persistent post-concussive symptoms in athletes
Emma Russell	Repetitive Head Impacts in Contact Sport Athletes
Hector Arciniega	Shape Analysis of Subcortical Structures in Former American Football Players
Evgenios Kornaropoulos	Individualised profiling of white matter organisation in PPCS athletes to increase precision in neurotrauma assessment
William O'Brien	Temporal Profiles of Serum GFAP and NfL After Sport-Related Concussion in Australian Football Players: Identifying Sub-Groups of Pathophysiological Trajectories

Session 7: Neuroimaging

Virginia Newcombe	Understanding the consequences of TBI using advanced neuroimaging
David Sharp	Imaging investigation of the long-term effects of traumatic brain injury.
Leonard Jung	New Insights into Cognitive Decline in Former Contact sports athletes later in life.
Sigal Zaltsman	MRI-based treatment response assessment maps, TRAMs, for depicting short/long-term subtle BBB disruption in traumatic brain injury
Anja Betz	Long-term Outcomes in Executive Functioning, Behavior, and White Matter Microstructure after Pediatric Mild Traumatic Brain Injury
Luisa Schuhmacher	Diffusion alterations at the gray matter-white matter intersection are associated with traumatic encephalopathy syndrome

Session 8: Neurorehabilitation and Longterm Outcome

Katrin Rauen	Neuropsychiatric burden after traumatic brain injury
Marina Zeldovich	Methods for Longitudinal Outcome Evaluation in Traumatic Brain Injury: Insights from Recent Research
Arseny Sokolov	Virtual reality for enhancing cognitive neurorehabilitation after TBI
Christophe Dubois	Endocannabinoid-mediated rescue of somatosensory cortex activity, plasticity and related behaviors following an early life brain trauma
Peter Toth	Decline in Serum IGF-1 Level Associates with Neurovascular Uncoupling and Cognitive Decline in Survivors of Severe Traumatic Brain Injury
Rebecca Henry	Interaction of high-fat diet and brain trauma alters adipose tissue macrophages and brain microglia associated with exacerbated cognitive dysfunction.

Posters

Presenter	Title	Number
Day 1		
Tamara Schink	Surgically treated chronic subdural hematomas in octa- and nonagenarians: Clinical characteristics and outcome	1
Tamara Schink	Care paths, clinical management and decision making in 437 octa- and nonagenarians with mild traumatic brain injury presenting to a neurosurgical emergency department	2
Tamara Schink	Chronic subdural hematoma in younger patients: Demographic, clinical and outcome analysis of a rare pathology	3
Lea Hippauf	Sexual dimorphism after pediatric mTBI in astrocytes and behavior of mice	4
Fan Sun	The effects of C3 and CD14 after polytrauma and hemorrhagic shock	5
Edoardo Mazzone	T-Lymphocyte infiltration in the brain parenchyma is a hallmark of acute neuroinflammation following subarachnoid hemorrhage in mice	6
Janeen Laabei	NOX2-mediated regulation of microglial NLRP3 inflammasome in Traumatic Brain Injury	7
Nathan Strogulski	Role of NOX and PPP in the Immunometabolic Response of Microglia to LPS Stimulation	8
Florian olde Heuvel	Neuronal Interleukin-13 and its receptor are involved in synaptic activity and neuroprotection	9
Day 2		
Albrecht Fröhlich	Neuronal nuclear calcium signalling suppression of microglial reactivity is mediated by osteoprotegerin after traumatic brain injury	10
Albrecht Fröhlich	FGFR inhibition limits microglia reactivity and synaptic loss upon TBI	11
Yinghuimin Guo	Inhibition of leukocyte adhesion does not affect brain edema formation until 7 days after experimental brain trauma	12
Reut Raizman	Functional-structural coupling of brain network graph theory measures associated with clinical outcome impairment in pediatric traumatic brain injury	13
Alizee Pann	How to profile rugby men after concussion?	14
Federico Moro	Persistent thalamic changes in astrocyte-related MR measures are associated with post-traumatic epilepsy development in mice.	15
Valentina Di Pietro	Assessing blood oxygen level-dependent signal variability as a biomarker of brain injury in sport-related concussion	16