Translating research. Transforming lives.

NeuroTrauma2018

The 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care

AUGUST 11-16, 2018

TORONTO, CANADA

ONSITE PROGRAM

Follow us on Twitter @NeuroTrauma18 and
Facebook @neurotrauma2018 for updates during the Conference!

www.neurotrauma2018.com #NeuroTrauma2018

NeuroTrauma 2018 Sponsors

The NeuroTrauma 2018 Symposium wishes to warmly thank the following organizations for their generous support of the Symposium:

GOLD SPONSOR

VERTEX

SILVER SPONSORS

Codman SPECIALTY SURGICAL

NIH National Institute of Neurological Disorders and Stroke

Fortuna Fix
UNRAVELING THE POWER OF REGENERATION

Ontario Neurotrauma Foundation
Fondation ontarienne de neurotraumatologie

Rick Hansen Institute
Institut Rick Hansen

BRONZE SPONSORS

Medtronic

MissionConnect
a program of TIRR Foundation

AOSPINE NORTH AMERICA

CRAIG·H NEILSEN FOUNDATION

AOSPINE knowledge FORUM

L&K BIOMED

Global Neuro

SUPPORTERS

DePuy Synthes

European Brain Injury Consortium

neuron
Network of European Funding for Neuroscience Research

Spinal Cord & Brain Injury Research Center

supported by
Rick Hansen Foundation
THROUGH THE
Blusson Integrated Cures Partnership
icord

oirm
Ontario Institute for Regenerative Medicine

University of Pittsburgh

neural outcomes
consulting inc.

WINGS for LIFE
SPINAL CORD RESEARCH FOUNDATION.

Journal of Neurotrauma
Mary Ann Liebert, Inc. publishers

KARGER
Medical and Scientific Publishers

NREF
Neurosurgery Research & Education Foundation

Table of Contents

NeuroTrauma2018

neurotrauma2018

NeuroTrauma18

#neurotrauma2018
www.neurotrauma2018.com

Wireless Internet
Network: **Westin-MeetingRoom**
Access Code: **Neurotrauma2018**

Welcome Message

The 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care in Toronto, Canada will be a wonderful occasion of sharing science, preclinical and clinical lessons, and visions for the future of neurotrauma research and care. This symposium has served as the premier forum for the exchange of ideas and information related to traumatic brain injury (TBI) and spinal cord injury (SCI) with a strong focus of the meeting to integrate clinical, translational, and basic science neurotrauma-related information. The format of the symposium will consist of informative discovery, translational, and clinical sessions and workshops, as well as programs for students and early career investigators. Plenary sessions, workshops, and poster sessions are being planned to focus on topics of current research and practice issues. A public lecture, patient perspective presentations, and networking opportunities will round out the program.

The meeting is co-hosted by the International & National Neurotrauma Society and the AANS/CNS Joint Section on Neurotrauma and Critical Care. This combination of expertise allows for presentations that integrate state-of-the-art clinical, translational and basic science information on the consequences of damage to the nervous system.

This is an exciting time in neurotrauma research and care and we welcome you to Toronto for the Neurotrauma 2018 Symposium.

Dr. Michael G. Fehlings
Neurotrauma 2018
Host & Co-Chair

Dr. Anthony E. Kline
Neurotrauma 2018
Co-chairs

Dr. Eve C. Tsai
Neurotrauma 2018
Co-chairs

NeuroTrauma2018 Societies

The International Neurotrauma Society (INTS)

The INTS is a body of scientists who attempt parity between brain and spinal cord injury research while preserving, as best as possible, equality in geographic location, gender and basic science versus clinical emphasis.

The purpose of the INTS is to foster the worldwide dissemination of Neurotrauma research and to supervise International Neurotrauma symposia throughout the world.

The intention continues to be to alternate the venue of the symposium meetings between Australasia, Europe and the Western Hemisphere every two or three years. To do so, the INTS authorizes a local host for each meeting and assists the local host's organizing committee thorough the International Scientific Advisory Board of the INTS.

The National Neurotrauma Society (NNS)

The National Neurotrauma Society seeks to accelerate research that will provide answers for clinicians and ultimately improve the treatments available to patients. The National Neurotrauma Society will continue to promote excellence in the field by providing opportunities for scientists, establishing standards in both basic and clinical research, encouraging and supporting research, and promoting liaisons with other organizations that influence the care and cure of neurotrauma victims.

The AANS/CNS Section on Neurotrauma and Critical Care

The purpose of the American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS) Joint Section on Neurotrauma and Critical Care is to provide a forum for education and research on trauma and critical care of the nervous system, to coordinate activities and programs relating to trauma, critical care and sports medicine for the AANS/CNS and other societies, committees and agencies, to represent the parent organizations, at their discretion, at any organization or group on matters relating to trauma, critical care and sports medicine, and to advise the AANS/CNS of activities which relate to nervous system trauma and critical care by other individuals, group and/or agencies.

Scientific Program Committee

Conference Co-Chairs:

Dr. Michael G. Fehlings
NeuroTrauma 2018
Host, Co-Chair

Dr. Anthony E. Kline
NNS President, Co-Chair

Dr. Eve C. Tsai
AANS/CNS Joint Section on Neurotrauma and Critical Care, Co-Chair

Toronto LOC:

Dr. Michael G. Fehlings
NeuroTrauma 2018 Host
University of Toronto

Dr. Andrew J. Baker
University of Toronto

Dr. Cindi M. Morshead
University of Toronto

INTS:

Dr. Anthony Figaji
INTS President
University of Cape Town

Dr. Peter Hutchison
University of Cambridge

Dr. Soheila Karimi
University of Manitoba

Dr. Brian Kwon
University of British Columbia

AANS/CNS:

Dr. Uzma Samadani
University of Minnesota

Dr. Eve C. Tsai
University of Ottawa

Dr. Franco Servedei
University of Parma

Dr. Paul M. Arnold
University of Kansas

Dr. Fahad Alkherayf
University of Ottawa

NNS:

Dr. Candace Floyd
NNS Past-President
University of Alabama at Birmingham

Dr. Anthony E. Kline
NNS President,
University of Pittsburgh

Dr. Kimberly R. Byrnes
NNS Vice President
Uniformed Services University

Dr. Grace Griesbach
NNS Secretary-Treasurer
Centre for NeuroSkills

Dr. Mayumi Prins
NNS Vice-President-Elect
TEAM President
University of California

Local Organizing Committee

Dr. Michael G. Fehlings,
University of Toronto

Dr. Tim Worden,
University Health Network

Dr. Charles Tator,
University of Toronto

Dr. Alexander Velumian,
University of Toronto

Dr. Cindi M. Morshead,
University of Toronto

Dr. Anoushka Singh,
University Health Network

Dr. Derek van der Kooy,
University of Toronto

Nadia Jaber,
University of Toronto

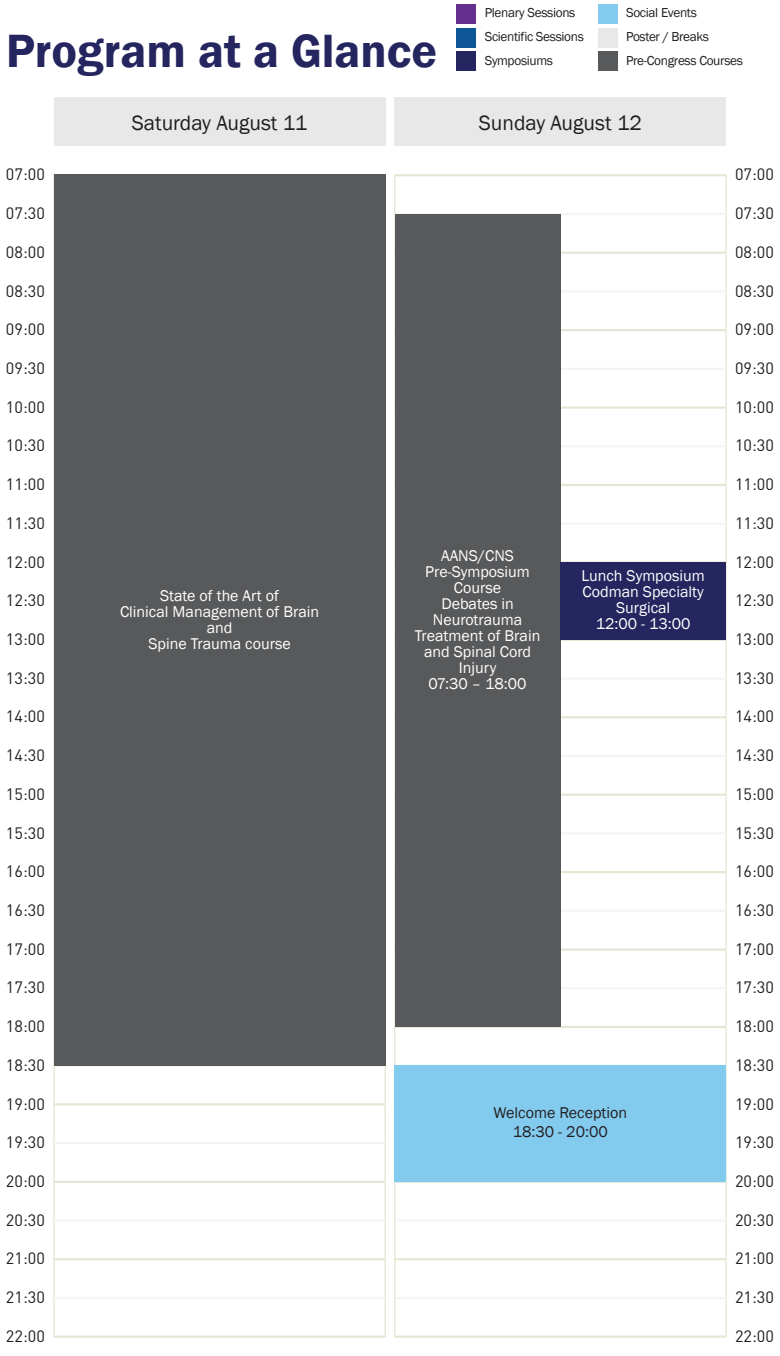
Dr. Andrew J. Baker,
University of Toronto

Dr. Jeff Wilson,
University of Toronto

Joanne Jones,
University Health Network

SCIENTIFIC PROGRAM

Program at a Glance



Program at a Glance

Plenary Sessions
Scientific Sessions
Symposiums
Social Events
Poster / Breaks
Pre-Congress Courses

Monday August 13

07:00
07:30 — Breakfast Symposium - Invite Only
Fortuna Fix
7:30 - 8:20
08:00
08:30 — **P1** State of the Art in Neurotrauma:
From Cell to Community
08:30 - 10:45
09:00
09:30
10:00
10:30
11:00 — Poster Session, Coffee Break and Exhibits
10:45 - 11:15
11:30 — **S1** Outcomes Assessment in TBI and SCI 11:15 - 12:45 | **S2** Electrical Stimulation and Repair in SCI 11:15 - 12:45 | **S3** Major Ongoing Studies in TBI 11:15 - 12:45
12:00
12:30
13:00 — Lunch Symposium
TEAM Presentation
13:00 - 14:00
13:30
14:00
14:30 — **P2** Acute and Chronic Stress After Central Nervous System Injury
14:15 - 16:00
15:00
15:30
16:00 — Coffee Break and Exhibits 16:00 - 16:30
16:30 — **S4** Dietary Fat in CNS Trauma and Repair 16:30 - 18:00 | **S5** Modulators of Tissue Scarring and Extracellular Matrix 16:30 - 18:00 | **S6** The International TBI Initiative 16:30 - 18:00
17:00
17:30
18:00 — Poster Mixer
18:00 - 19:00
18:30
19:00
19:30
20:00
20:30
21:00
21:30
22:00

Tuesday August 14

07:00
07:30 — Breakfast Symposium
European Neurotrauma Network
7:30 - 8:20
08:00
08:30 — **P3** Advances in CNS Regeneration and Plasticity
08:30 - 10:15
09:00
09:30
10:00
10:30 — Poster Session, Coffee Break and Exhibits
10:15 - 11:15
11:00
11:30 — **S7** Clinical Biomarkers and Trials for TBI and SCI 11:15 - 12:45 | **S8** Inflammation and Its Role in Injury/Recovery 11:15 - 12:45 | Open Communication Data Blitz 11:15 - 12:45
12:00
12:30
13:00 — Lunch Symposium
AOSpine
13:00 - 14:00
13:30
14:00
14:30 — Networking and Free Time
15:00
15:30 — Chinese Neruotrauma Scholar Association (CNSA) 8th Annual Symposium *(everyone is welcome)*
15:30 - 18:00
16:00
16:30
17:00
17:30
18:00
18:30 — CNSA Group Dinner *(everyone is welcome)*
18:30 - 21:00
19:00
19:30
20:00
20:30
21:00
21:30
22:00

Program at a Glance

Plenary Sessions | Scientific Sessions | Symposiums | Social Events | Poster / Breaks | Pre-Congress Courses

Wednesday August 15

- 08:30 - 10:15 — **P4** Advanced/Multimodal Imaging in Injury Diagnosis for SCI and TBI
- 10:15 - 11:15 — Poster Session, Coffee Break and Exhibits
- 11:15 - 12:45 — **S9** Cell Replacement in SCI and TBI
- 11:15 - 12:45 — **S10** Preclinical Models of Neuro-rehabilitation for TBI
- 11:15 - 12:45 — Open Communication Data Blitz
- 13:00 - 14:00 — Lunch Symposium Ontario Neurotrauma Foundation & Rick Hansen Institute
- 14:15 - 16:00 — **P5** Advances in Neurorehabilitation: Bench to Bedside
- 16:00 - 16:30 — Coffee Break and Exhibits
- 16:30 - 18:00 — **S11** Neurotrauma Across the Lifespan
- 16:30 - 18:00 — **S12** Update on Clinical Trails in SCI
- 16:30 - 18:00 — Patient Perspective
- 18:00 - 19:00 — Poster Mixer
- 19:30 - 21:30 — NeuroTrauma 2018 Gala & Awards Dinner
- After Party starting at 21:30

Thursday August 16

- 08:30 - 10:15 — **P6** Challenges in Managing Neurotrauma in the Developing World
- 10:15 - 11:15 — Poster Session, Coffee Break and Exhibits
- 11:15 - 12:45 — **S13** Oxidative Stress and CNS Trauma
- 11:15 - 12:45 — **S14** Diagnosis and Management of Concussion/ Biomarkers
- 11:15 - 12:45 — **S15** Glucose and Insulin in TBI
- 13:00 - 14:00 — Lunch Break
- 14:15 - 16:00 — **P7** Perspectives on SCI and TBI Research: Going from NeuroTrauma 2018 to the Future
- 16:00 - 16:30 — Closing & Handover Ceremony
- 16:30 - 18:00 — **S16** Drug Discovery and Development to Advance Preclinical to Clinical Translation
- 16:30 - 18:00 — **S17** Bioengineering Strategies for Acute SCI
- 16:30 - 18:00 — **S18** Minding the 3R's: Maximizing Use and Quality of Data in Preclinical

Scientific Program
Saturday, August 11

07:00 - 17:30
PSC1 Pre-Symposium Course - 8.5 CME
Room: Pier 3
State of the Art on the Clinical Management of Brain and Spine Trauma: What we know? What should we do?

07:00 - 08:00
Registration, Coffee and Course Introduction

08:00 - 08:15
Welcome from Global Neuro, AONA, AOSpine and NREF

08:15 - 12:30
Traumatic Brain Injury and Cranial Trauma – Module 1
Chair: **Geoffrey Manley**, United States

08:15 - 08:45
Basic Science of Traumatic Brain Injury: State of the Art
John Povlishock, United States

08:45 - 09:15
Clinical Translational Advances in Traumatic Brain Injury
Geoffrey Manley, United States

09:15 - 09:45
Advanced Techniques in Cranial Reconstruction
Paul Manson, United States

09:45 - 10:15
Decompressive Craniectomy
Peter Hutchinson, United Kingdom

10:15 - 10:30
Coffee and Networking Break

10:30 - 11:00
Critical Care of Traumatic Brain Injury in Adults and Children
Andrew Baker, Canada &
Jamie Hutchison, Canada

11:00 - 11:30
Management of Traumatic Brain Injury in Children
Anthony Figaji, South Africa

11:30 - 12:30
Case-based Panel Discussion with a focus on Neurocritical Care Decision Management
Moderator: **Shelly Timmons**, United States

12:30 - 12:45
Networking Break and Pick Up
Boxed Lunch

12:45 - 13:30
Lunch Seminars

12:45 - 13:00
An International Perspective on Traumatic Brain Injury Biomarkers for Spinal Cord Injury
Andrew Maas, Belgium

13:00 - 13:15
Biomarkers for Spinal Cord Injury
Brian Kwon, Canada

13:15 - 13:30
Discussion

Scientific Program
Saturday, August 11

13:30 - 15:30
Spine Trauma and Spinal Cord Injury – Module 2
Chair: **Michael G. Fehlings**, Canada

13:30 - 14:00
Basic Science of SCI: State of the Art
Dalton Dietrich, United States

14:00 - 14:30
Clinical Translational advances in Spinal Cord Injury
Michael G. Fehlings, Canada

14:30 - 15:00
Assessment & Management of Spinal Cord Injury
James Harrop, United States

15:00 - 15:30
Critical Management of Spinal Cord Injury (including a review of the AOSpine Guidelines)
Greg Hawryluk, United States

15:30 - 15:45
Coffee and Networking Break

15:45 - 17:30
Panel Discussions

15:45 - 16:30
Role and Timing of Surgery in Spinal Cord Injury
Chair: **Michael G. Fehlings**, Canada

Faculty Panel:
Bizhan Aarabi, United States
James Harrop, United States
Eve C. Tsai, Canada
Jefferson Wilson, United States
Brian Kwon, Canada
Mark Kotter, United Kingdom
Shekar Kurpad, United States

16:30 - 17:30
Management of Complex Thoracolumbar Spine Trauma
Chair: **James Harrop**, United States

Faculty Panel:
Jefferson Wilson, United States
Bizhan Aarabi, United States
Brian Kwon, Canada
Mark Kotter, United Kingdom
David Okonkwo, United States
Eve C. Tsai, Canada

Scientific Program
Sunday, August 12

AANS/CNS Section On NEUROTRAUMA & CRITICAL CARE
American Association of Neurological Surgeons
CNS

07:30 - 16:30
PSC2 Pre-Symposium Course - 6.5 CME
Room: Pier 4+5
AANS/CNS Neurotrauma and Critical Care Section Pre-course

07:30 - 08:30
AANS/CNS Breakfast

08:30 - 10:00
Neurotrauma History and Guidelines Updates – Module 1
Chair: **Eve C. Tsai**, Canada

08:30 - 08:50
Brain Injury Guidelines History and Update
David Okonkwo, United States

08:50 - 09:10
Spinal Cord Injury History
Charles Tator, Canada

09:10 - 09:30
Spinal Cord Injury Trials and Guidelines Update
Michael G. Fehlings, Canada

09:30 - 09:50
Pediatric Trauma History and Guidelines Update
David Adelson, United States

09:50 - 10:00
Questions

10:00 - 10:30
Coffee Break

10:30 - 11:00
Should ICP Monitoring be Continued?
Chair: **Allan Hoffer**, United States

10:30 - 10:35
Case Presentation
Allan Hoffer, United States

10:35 - 10:45
Pro
Greg Hawryluk, United States

10:45 - 10:55
Con
Daniel Michael, United States

10:55 - 11:00
Discussion and Verdict

11:00 - 11:30
Surgical treatment of elderly with odontoid fracture
Chair: **Allan Hoffer**, United States

11:00 - 11:05
Case Presentation
Jamie Wilson, Canada

11:05 - 11:15
Pro
Jeff Wilson, Canada

11:15 - 11:25
Con
James Harrop, United States

11:25 - 11:30
Discussion and Verdict

11:30 - 12:00
Stem Cells for Clinical Neural Repair: Ready for Prime Time?
Chair: **Allan Hoffer**, United States

10:30 - 11:35
Case Presentation
Stephanie de Vere, Canada

11:35 - 11:45
Pro
Ann Parr, United States

11:45 - 11:55
Con
Eve C. Tsai, Canada

11:55 - 12:00
Discussion and Verdict

12:00 - 13:00
Lunch

Scientific Program
Sunday, August 12

12:00 - 13:00
LS1 Lunch Symposium: Brain Tissue Oxygenation BOOSTS - Outcome After Traumatic Brain Injury - Codman

For the detailed program, please refer to **page 38.**

13:00 - 14:40
Cutting Edge Trauma Management of Brain and Spinal Injuries
Chair: **Tuan V. Bui**, Canada

13:00 - 13:20
Military Management of Brain and Spinal Injuries
Christopher Neal, United States

13:20 - 13:40
Intraspinal Monitoring and Dural Decompression for Spinal Cord Injury
Marios Papadopoulous, United Kingdom

13:40 - 14:00
Anticoagulation and Trauma
Suzanne Tharin, United States

14:00 - 14:20
Machine Learning to Improve Neurosurgery
Uzma Samadani, United States

14:20 - 14:40
Questions

14:40 - 15:00
Coffee Break

15:00 - 15:30
Treatment of Chronic Subdural Hematoma with Steroids

15:00 - 15:05
Case Presentation
Kevin Kwan, United States

15:05 - 15:15
Pro
Roxanne Todor, United States

15:15 - 15:25
Con
Jamie Ullman, United States

15:25 - 15:30
Discussion and Verdict

15:30 - 16:00
Management of a Thoracolumbar Burst Fracture
Chair: **Fahad Alkherayf**, Canada

15:30 - 15:35
Case Presentation
Mohammed Alswat, Canada

15:35 - 15:45
Non Surgical
Brian Kwon, Canada

15:45 - 15:55
Surgical
Paul Arnold, United States

15:55 - 16:00
Discussion and Verdict

16:00 - 16:30
Is Decompressive Craniotomy Beneficial?
Chair: **Fahad Alkherayf**, Canada

16:00 - 16:05
Case Presentation
Ziyad Makoshi, Canada

16:05 - 16:15
Pro
Peter Hutchinson, United Kingdom

16:15 - 16:25
Con
Shelly Timmons, United States

16:25 - 16:30
Discussion and Verdict

Scientific Program
Monday, August 13

07:30 - 08:20
BS1 Breakfast Symposium: Direct cell reprogramming technology and its potential in the treatment of Neurotrauma - Fortuna Fix

For the detailed program, please refer to **page 38.**

08:30 - 10:45
P1 State of the Art in Neurotrauma: From Cell to Community
Room: Frontenac Ballroom
Chair: **Michael G. Fehlings**, Canada

08:30 - 08:56
P1.01 Repair and Regeneration of the Injured Spinal Cord: Clinical Translation Advances
Michael G. Fehlings, Canada

08:56 - 09:22
P1.02 Rescuing the Injured Brain
Peter Hutchinson, United Kingdom

09:22 - 09:48
P1.03 Recent advances in protection and repair after Spinal Cord Injury
Dalton Dietrich, United States

09:48 - 10:15
P1.04 Evidence for Neocortical Circuit Disruption following Mild Traumatic Brain Injury
John T. Povlishock, United States

10:45 - 11:15
Poster Session, Coffee Break and Exhibition
Room: Metropolitan Ballroom

Posters from Group A will be available for viewing at this time. Full poster session details can be found in the NeuroTrauma 2018 Mobile App.

11:15 - 12:45
S01 Outcomes Assessment in TBI and SCI
Room: Harbour Ballroom A+B
Chair: **Andrew Maas**, Belgium

11:15 - 11:37
S1.01 Approaches to outcome assessment in TBI: Challenges and opportunities
Andrew Maas, Belgium

11:37 - 12:00
S1.02 Outcome after TBI across Europe
Nicole von Steinbuchel, Germany

12:00 - 12:22
S1.03 Sensitive Assessment after Traumatic Tetraplegia with a focus on the Upper Limb: Do we Really Understand the Natural History of Disease?
Sukhvinder Kalsi-Ryan, Canada

12:22 - 12:45
S1.04 Outcomes and prediction in acute spinal cord injury
Armin Curt, Switzerland

11:15 - 12:45
S2 Electrical Stimulation and Repair in SCI
Room: Harbour Ballroom C
Chair: **Susan Harkema**, United States

11:15 - 11:37
S2.01 Functional Electrical Stimulation Therapy for Improving Voluntary Grasping Function Following SCI
Milos Popovic, Canada

11:37 - 12:00
S2.02 A continuum of strategies for neuroplasticity and recovery using epidural stimulation after spinal cord injury
Susan Harkema, United States

Scientific Program
Monday, August 13

12:00 - 12:22
S2.03 Activation of Spinal Networks for Improving Mobility after Spinal Cord Injury
Vivian Mushawar, Canada

12:22 - 12:45
S2.04 Presentation details can be found in the NeuroTrauma 2018 Mobile App.

11:15 - 12:45
S3 Major Ongoing Studies in TBI
Room: Pier 2+3
Chair: **David Okonkwo** United States

11:15 - 11:37
S3.01 Presentation details can be found in the NeuroTrauma 2018 Mobile App.
Michael J. Bell MD, United States

11:37 - 12:00
S3.02 TEAM-TBI: Targeted Evaluation, Action and Monitoring of Traumatic Brain Injury
David Okonkwo, United States

12:00 - 12:22
S3.03 Track-TBI
Geoffrey Manley, United States

12:22 - 12:45
S3.04 Presentation details can be found in the NeuroTrauma 2018 Mobile App.
Andrew Maas, Belgium

13:00 - 14:00
LS2 Lunch Symposium: TEAM - NINDS Strategies to Enhance Diversity of Neuroscience Researchers

For the detailed program, please refer to **page 38.**

14:15 - 16:00
P2 Acute and Chronic Stress After Central Nervous System Injury
Room: Frontenac Ballroom
Chair: **David Morilak**, United States
& **Patricia de la Tremblaye**, United States

14:15 - 14:41
P2.01 Stress-related cognitive impairment and therapeutic response may influence the course of decline and recovery from TBI
David Morilak, United States

14:41 - 15:07
P2.02 Interaction of brain trauma and chronic unpredictable stress on cognition, anxiety, and markers of neurotransmission and neuroinflammation
Corina Bondi, United States

15:07 - 15:34
P2.03 Early life stress increases vulnerability to experimental brain injury
Naima Lajud, Mexico

15:34 - 16:00
P2.04 Presentation details can be found in the NeuroTrauma 2018 Mobile App
Fiona Crawford, United States

16:00 - 16:30
Coffee Break and Exhibition
Room: Metropolitan Ballroom

Scientific Program
Monday, August 13

16:30 - 18:00
S4 Dietary Fat in CNS Trauma and Repair
Room: Harbour Ballroom A+B
Chair: **Isobel A. Scarisbrick**, United States

16:30 - 16:53
S4.01 Ketogenic diet for acute spinal cord injury
Wolfram Tetzlaff, Canada

16:53 - 17:16
S4.02 Metabolic Links Between Exercise and Dietary Fat Regulate Myelin in the Adult CNS: Implications for Recovery after SCI
Isobel A. Scarisbrick, United States

17:16 - 17:38
S4.03 Axon-myelin Interactions in Traumatic White Matter Injury
Regina Armstrong, United States

17:38 - 18:00
S4.04 The interplay between brain and gut in the pathophysiology of brain trauma
Fernando Gomez-Pinilla, United States

16:30 - 18:00
S5 Modulators of Tissue Scarring and Extracellular Matrix Remodeling in SCI
Room: Harbour Ballroom C
Chair: **Jerry Silver**, United States

16:30 - 16:53
S5.01 Rapid and robust recovery of breathing long after spinal cord injury
Jerry Silver, United States

16:53 - 17:16
S5.02 Rescuing the Fate of Neural Progenitor Transplants in Spinal Cord Injury Niche via Attenuation of Notch Signaling with GDNF
Mohammad Khazaei, Canada

17:16 - 17:38
S5.03 Directly reprogrammed human oligodendrogenic neural progenitor cells delivered with chondroitinase ABC facilitate functional repair of chronic spinal cord injury
Satoshi Nori, Japan

17:38 - 18:00
S5.04 Enhancing plasticity for functional recovery after spinal cord injury
Jessica Kwok, United Kingdom

16:30 - 18:00
S6 The International TBI Initiative
Room: Pier 2+3
Chair: **Ramona Hicks**, United States

16:30 - 16:48
S6.01 The International TBI Research Initiative - Five Years On!
Ramona Hicks, United States

16:48 - 17:06
S6.02 Historical and Future Perspectives on InTBIR
Andrew Maas, Belgium

17:06 - 17:24
S6.03 Neuroimaging Biomarkers: The power of standardization and collaboration
Stephen Strother, Canada

17:24 - 17:42
S6.04 Genomics and Proteomics: The power of standardization and collaboration
Ramon Diaz-Arrastia, United States

17:42 - 18:00
S6.05 Translating Knowledge to Practice: Scenarios for Sustained International Cooperation in TBI Research
Elizabeth Theriault, Canada

18:00 - 19:00
PM1 Poster Mixer 1
Room: Metropolitan Ballroom

Scientific Program
Tuesday, August 14

07:30 - 08:20
BS2 Breakfast Symposium: ERA-NET Neuron – European interdisciplinary multi-site studies for Translational Research in Traumatic Brain Injury

For the detailed program, please refer to **page 39.**

08:30 - 10:15
P3 Advances in CNS Regeneration and Plasticity
Room: Frontenac Ballroom
Chair: **Samuel David**, Canada

08:30 - 08:56
P3.01 Injury dependent and independent signalling for the control of axonal regeneration
Simone di Giovanni, United Kingdom

08:56 - 09:22
P3.02 Biomaterial bridge-mediated facilitation of axonal regeneration and recovery in acute and chronic spinal cord injury
Aileen Anderson, United States

09:22 - 09:48
P3.03 RGMa neutralization promotes functional recovery following spinal cord injury
Philippe Monnier, Canada

09:48 - 10:15
P3.04 dI3 interneurons: a target for neuroplasticity and regeneration for recovery of locomotor function
Tuan V. Bui, Canada

10:15 - 11:15
Poster Session, Coffee Break and Exhibition
Room: Metropolitan Ballroom

Posters from Group A will be available for viewing at this time. Full poster session details can be found in the NeuroTrauma 2018 Mobile App.

11:15 - 12:45
S7 Clinical Biomarkers and Trials for TBI and SCI
Room:Harbour Ballroom A+B
Chair: **Brian Kwon**, Canada

11:15 - 11:37
S7.01 An update on Diagnostic and Prognostic Biomarkers for Traumatic Brain injury
Kevin K.W. Wang, United States

11:37 - 12:00
S7.02 Biomarkers of Acute Spinal Cord Injury
Brian Kwon, Canada

12:00 - 12:22
S7.03 MicroRNA Biomarkers Predict Degenerative Cervical Myelopathy Severity and Surgical Outcome
Alex Laliberte, Canada

12:22 - 12:45
S7.04 Moving from Estimates to Clinical Impact: a Systematic Analysis of the Use of Blood-based Biomarkers in the Field of Traumatic Brain Injury
Stefania Mondello, Italy

Scientific Program
Tuesday, August 14

11:15 - 12:45
S8 Inflammation and its Role in Injury/Recovery
Room: Harbour Ballroom C
Chair: **Alan Faden**, United States

11:15 - 11:37
S8.01 New immunomodulatory targets for spinal cord injury
Soheila Karimi, Canada

11:37 - 12:00
S8.02 Sustained Neuroinflammation and Progressive Neurodegeneration after TBI or SCI: Mechanisms and Modulation
Alan Faden, United States

12:00 - 12:22
S8.03 Age-dependent neuroinflammation: The role of macrophages in SCI recovery
John C. Gensel, United States

12:22 - 12:45
S8.04 Matrix metalloproteinases and Spinal Cord Injury: Deciphering their complex roles in neurological and urological recovery
Linda Noble, United States

11:15-12:45
DB1 Open Communication Data Blitz
Room: Pier 2+3
Chair: **Bevan Main**, United States

11:15 - 11:20
DB1.01.01 Direct Comparison of Adult Human and Rat Spinal Cord Stem/Progenitor cell Response to Inflammatory and Regenerative Cues
Ahmad Galuta, Canada

11:20 - 11:25
DB1.02.01 Molecular Pain Targets In Rodent and Human Spinal Cord: Implications for Translation of Novel Therapies for Traumatic Pain
Chaya Kandegedara, Canada

11:25 - 11:30
DB1.03.01 AMPA Receptor Modulation as a Therapeutic Strategy to Enhance Survival of Spinal Cord Neural Stem Cells
Laureen Hachem, Canada

11:30 - 11:35
DB1.03.02 IP3R-mediated intra-axonal Ca2+ release contributes to secondary axonal degeneration following contusive SCI.
Nicolas Pelisch, United States

11:35 - 11:40
DB1.03.03 Naltrexone amplifies disruption in locomotor function following hindlimb stretching in rats with spinal cord injuries
Gregory States, United States

11:40 - 11:45
DB1.03.04 Regional and Institutional Practice Variations in Penetrating Spinal Cord Injury in the United States
Pranay Soni, United States

11:45 - 11:50
DB1.03.05 Oligogenic Directly Reprogrammed NPCs Combine with Affinity-Release ChABC to Regenerate the Chronically Injured Spinal Cord
Christopher Ahuja, Canada

11:50 - 11:55
DB1.04.01 DNA damage induces early brain aging after traumatic brain injury
Nicole Schwab, Canada

11:55 - 12:00
DB1.04.02 A New Class of Carbon Antioxidants Restored Cerebral Perfusion in Traumatic Brain Injury Complicated by Systemic Hypotension
Kimberly Mendoza, United States

12:00 - 12:05
DB1.04.03 ENIGMA Military Brain Injury: Framework and Preliminary dMRI Meta-analysis
Emily Dennis, United States

Scientific Program
Tuesday, August 14

12:05 - 12:10
DB1.04.04 Effects of pituitary function on long-term health outcomes following mTBI in service members treated at the CRCC
Stephanie Ciarlone, United States

12:10 - 12:15
DB1.04.05 CLARITY reveals less disconnection of axons than previously thought and a more prolonged process of degeneration after TBI
Maura Weber, United States

12:15 - 12:20
DB1.04.06 Characterization of EPO/EPOr expression and activation before and after TBI with delayed hypoxemia
Marta Celorrio, United States

12:20 - 12:25
DB1.04.07 High-G head collisions are associated with short-term white matter microstructural deficits in high school football athletes
Yukai Zou, United States

12:25 - 12:30
DB1.04.08 Inhibition of TLR4 with C34 attenuates the neuroinflammatory response to traumatic brain injury
Young Chun, United States

12:30 - 12:35
DB1.04.09 Acute mitochondrial impairment underlies prolonged cellular dysfunction after repeated mild traumatic brain injuries
W Hubbard, United States

12:35 - 12:40
DB1.04.10 GABAergic synapse degeneration after mild traumatic brain injury in mice
Michal Vascak, United States

12:40 - 12:45
DB1.04.11 Sex differences in acute neurodegeneration and sustained impairment of axonal function following diffuse TBI in mice
Jennifer Creed, United States

13:00 - 14:00
LS3 Lunch Symposium: Update on AOSpine Guidelines for Traumatic SCI

For the detailed program, please refer to **page 39.**

15:30 - 18:00
Chinese Neurotrauma Scholar Association (CNSA) 8th Annual Symposium
Room: Pier 4
Theme: Global Trends in Translational Neurotrauma Research

15:30 - 15:35
Welcome Remark
Ping Wu, Texas

Introduction of speakers
Shuxin Li & **Dong Sun**, United States

15:35 – 16:05
Electrical signals in controlling cell migration and stem cell behavior for SCI
Bing Song, United Kingdom

16:05 – 16:35
Translational cell-based therapies from animal models to human TBI and SCI: Practical considerations
Wai S. Poon, Hong Kong

16:35 – 17:05
Chinese Technical Guidelines for Large Decompressive Craniectomy in Adult Patients with Severe Traumatic Brain Injury
Baiyun Liu, China

17:05 – 17:35
Management of Blast-Related Traumatic Brain Injury with a Review of Combat Neurosurgical Experience
Jason Huang, United States

17:35 – 17:40
Closing Remark
Kevin Wang & **Xiaoming Xu**, United States

17:40 – 18:00
CNSA Business Meeting
Ping Wu, United States

18:30
CNSA Networking Dinner
**all are welcome, pay on your own*

Scientific Program
Wednesday, August 15

08:30 - 10:15
P4 Advanced/Multimodal Imaging in Injury Diagnosis for SCI and TBI
Room: Frontenac Ballroom
Chair: **Virginia Newcombe**, United Kingdom

08:30 - 08:56
P4.01 Standardization of acquisition and data processing in spinal cord MRI: Application in degenerative cervical myelopathy
Julien Cohen-Adad, Canada

08:56 - 09:22
P4.02 Presentation details can be found in the NeuroTrauma 2018 Mobile App.
David Menon, United Kingdom

09:22 - 09:48
P4.03 Advanced imaging methods: what is on the horizon?
Virginia Newcombe, United Kingdom

09:48 - 10:15
P4.04 Early MRI after TBI: more than an image
Claudia Wheeler-Kingshott, United Kingdom

10:15 - 11:15
Poster Session, Coffee Break and Exhibition
Room: Metropolitan Ballroom

Posters from Group B will be available for viewing at this time. Full poster session details can be found in the NeuroTrauma 2018 Mobile App.

11:15 - 12:45
S09 Cell Replacement in SCI and TBI
Room: Harbour Ballroom A+B
Chair: **Mark Kotter**, United Kingdom

11:15 - 11:37
S9.01 Cell transplantation for Spinal Cord Injury - an overview of clinical Trials
Mark Kotter, United Kingdom

11:37 - 12:00
S9.02 Mesenchymal stem cells in a nanofiber-hydrogel composite matrix for spinal cord repair
Martin Oudega, United States

12:00 - 12:22
S9.03 Stimulating endogenous neural precursors to promote self repair of the injured CNS
Cindi Morshead, Canada

12:22 - 12:45
S9.04 Application of human neural precursor cells for spinal cord injury – from bench to bedside
Narihito Nagoshi, Japan

11:15 - 12:45
S10 Preclinical Models of Neurorehabilitation for TBI
Room: Harbour Ballroom C
Chair: **Corina Bondi** PhD

11:15 - 11:37
S10.01 Does Brain Stimulation Enhance Rehabilitation Efficacy after TBI?
DeAnna L. Adkins, United States

11:37 - 12:00
S10.02 Exercise after TBI: Lessons from rodent studies
Grace Griesbach, United States

12:00 - 12:22
S10.03 Optimizing environmental enrichment to model preclinical neurorehabilitation
Jeffrey Cheng, United States

12:22 - 12:45
S10.04 Neural Plasticity and Neurorehabilitation following TBI in the Rat: Translation to the Clinic?
Dorothy Kozlowski, United States

Scientific Program
Wednesday, August 15

11:15 - 12:45
DB2 Open Communication Data Blitz
Room: Pier 2+3
Chair: **Chris Ahuja**, Canada

11:15 - 11:18
DB2.03.01 Projection specific mechanisms of auditory sensitivity that contribute to enhanced fear after TBI
Ann Hoffman, United States

11:18 - 11:22
DB2.03.02 5-HT1f receptor agonists induce mitochondrial biogenesis and promote recovery from spinal cord injury
Epiphani Simmons, United States

11:22 - 11:25
DB2.03.03 Pathological patterns of spinal cord blood flow after injury visualised with laser speckle contrast imaging
Mathew Gallagher, United Kingdom

11:25 - 11:29
DB2.03.04 Drug Re-purposing: High Dose Human Immunoglobulin G for Treatment of Traumatic Cervical Spinal Cord Injury
Jonathon C. T. Chio, Canada

11:29 - 11:32
DB2.03.05 MIS416 enhances recovery from traumatic spinal cord injury (SCI) in mice by regulating the innate immune response
Masoud Hassanpour Golakani, Australia

11:32 - 11:36
DB2.04.01 Associations of Head Injury with Risk of Mortality, Incident Coronary Heart Disease, Stroke, and Heart Failure
Andrea Schneider, United States

11:36 - 11:39
DB2.04.02 Sensory Hypersensitivities in Patients with Persistent Post-Traumatic Headache vs. Migraine
Jeffery Hanna, United States

11:39 - 11:43
DB2.04.03 Cognitive training improves neural efficiency in TBI
Kihwan Han, United States

11:43 - 11:47
DB2.04.04 Investigating the Neurological Effects of Sleep Deprivation on Post Concussion Symptomology in Adolescent Rats
Sabrina Salberg, Canada

11:47 - 11:51
DB2.04.05 Traumatic brain injury-induced neuronal damage induces cortical rod microglia that promote persistent neuroinflammation
Kristina Witcher, United States

11:51 - 11:55
DB2.04.06 Prognostic inflammatory biomarkers for traumatic brain injury: A TRACK-TBI Pilot Study
Margalit Haber, United States

11:55 - 11:59
DB2.04.07 Individualized brain network architecture distinguishes TBI-associated depression from TBI, major depression, and PTSD
Shan Siddiqi, United States

11:59 - 12:03
DB2.04.08 Catastrophic disruption of the blood-brain barrier in pediatric TBI
Josie Fullerton, United Kingdom

12:03 - 12:07
DB2.04.09 Reprogramming Monocyte-Derived Macrophages to Mitigate Secondary Injury Pathology Following Traumatic Brain Injury
Kathryn Wofford, United States

12:07 - 12:11
DB2.04.10 Diagnostic utility of GFAP for identifying TBI patients with MRI abnormalities despite normal head CT: A TRACK-TBI study
John K. Yue, United States

Scientific Program
Wednesday, August 15

12:11 - 12:15
DB2.04.11 Repetitive Transcranial Magnetic Stimulation with Resting State Network Targeting for Treatment-Resistant Depression in TBI
Shan Siddiqi, United States

12:15 - 12:19
DB2.04.12 Variation in Structure and Process of Care in Traumatic Brain Injury: Provider Profiles in the CENTER-TBI Study
Maryse Cnossen, Netherlands

12:19 - 12:23
DB2.04.13 Temporal lobe contusions are associated with impaired six-month functional recovery after mild TBI: A TRACK-TBI study
John Yue, United States

12:23 - 12:27
DB2.04.14 Multimodal assessment of behavioral flexibility after frontal brain trauma: beneficial effects of milnacipran
Timothy Craine, United States

12:27 - 12:31
DB2.04.15 Three-dimensional interrogation of traumatic axonopathy in the brain identifies SARM1 as major driver of axonal degeneration
Nikolaos Ziogas, United States

12:31 - 12:35
DB2.04.16 Sleep-wake cycle deregulation despite normal circadian clock signal in acute traumatic brain injury
Catherine Duclos, Canada

12:35 - 12:40
DB2.04.17 Evaluation and evolution of the olfactory system within the first 24 hours after a mild traumatic brain injury (mTBI).
Fanny Lecuyer Giguere, Canada

12:40 - 12:45
DB2.04.18 Modeling of Traumatic Brain Injury (TBI) due to Head Impacts with Unmanned Aircraft Systems (UAS)
Anna Marie Dulaney, United States

13:00 - 14:00
LS4 Lunch Symposium: Spinal Cord Injury – Ontario Neurotrauma Foundation / Rick Hansen Institute

For the detailed program, please refer to **page 39.**

14:15 - 16:00
P5 Advances in Neurorehabilitation: Bench to Bedside
Room: Frontenac Ballroom
Chair: **Ross Zafonte**, United States

14:15 - 14:41
P5.01 Control of Reaching and Grasping following SCI
Monica Perez, United States

14:41 - 15:07
P5.02 The placebo response: the role of the rouse in rehabilitation
Ross Zafonte, United States

15:07 - 15:34
P5.03 Neural control of locomotor outcomes in human SCI
Armin Curt, Switzerland

15:34 - 16:00
P5.04 Post-Traumatic Epilepsy: Personal Biology, Clinical Predictors, and Disability Burden
Amy Wagner, United States

16:00 - 16:30
Coffee Break and Exhibition
Room: Metropolitan Ballroom

Scientific Program
Wednesday, August 15

16:30 - 18:00
S11 Neurotrauma Across the Lifespan
Room: Harbour Ballroom A+B
Chair: **Robert Clark**, United States

16:30 - 16:53
S11.01 Neuroinflammation: how aging impacts microglial function following acute brain trauma
David Loane, United States

16:53 - 17:16
S11.02 Frequency-Dependent Changes in Resting State EEG Functional Networks in Piglets after Rapid Head Rotations - Implications for Identifying Mild Brain Injury Across the Lifespan
Susan Margulies, United States

17:16 - 17:38
S11.03 Progressive neuropathology and the emergence of behavior deficits after pediatric TBI
Bridgette Semple, Australia

17:38 - 18:00
S11.04 Gut microbiota are disease modifying factors after spinal cord injury
Kristina Kigerl, United States

16:30 - 18:00
S12 Update on Clinical Trials in SCI
Room: Harbour Ballroom C
Chair: **Greg Hawryluk**, United States

16:30 - 16:53
S12.01 Presentation details can be found in the NeuroTrauma 2018 Mobile App.
Jan Schwab, United States

16:53 - 17:16
S12.02 Role of Baseline Magnetic Resonance Imaging in Clinical Decision Making and Outcome Prediction (clinical update)
Bizhan Aarabi, United States

17:16 - 17:38
S12.03 The SPRING Study: A Phase 2b/3 Study of the Efficacy and Safety of VX-210 in Subjects with Acute Cervical Spinal Cord Injury: Study Design, Status, and Baseline Characteristics
Marco Rizzo, United States

17:38 - 18:00
S12.04 Translation of self-delivering RNA to silence PTEN and promote axon regeneration after neurotrauma
Lisa Mckerracher, United States

16:30 - 18:00
PP1 Patient Perspective
Room: Pier 2+3

18:00 - 19:00
PM2 Poster Mixer 2
Room: Metropolitan Ballroom

19:30 - 23:00
NeuroTrauma 2018 Gala & Awards Dinner
Room: Harbour Ballroom, Foyer & Terrace

Scientific Program
Thursday, August 16

08:30 - 10:15
P6 Opportunities for Neurotrauma in the Developing World
Chair: **Anthony Figaji**, South Africa

08:30 - 08:56
P6.01 Challenges in Managing Neurotrauma in the Developing World
Vafa Rahimi, Iran

08:56 - 09:22
P6.04 Challenges in Managing Neurotrauma in the Developing World – The Ethiopian Experience
Sarah Woodrow, Canada

09:22 - 09:48
P6.03 Opportunities for Neurotrauma in the Developing World
Anthony Figaji, South Africa

09:48 - 10:15
P6.02 Current management and outcome of spinal trauma in Tanzania
Roger Hartl, United States

10:15 - 11:15
Poster Session, Coffee Break and Exhibition
Room: Metropolitan Ballroom

Posters from Group B will be available for viewing at this time. Full poster session details can be found in the NeuroTrauma 2018 Mobile App.

11:15 - 12:45
S13 Oxidative Stress and CNS Trauma
Room: Harbour Ballroom A+B
Chair: **Edward Hall**, United States

11:15 - 11:37
S13.01 Oxidative Damage is Higher in Hemorrhagic TBIs: Explanation for Selective Benefit of Tirilazad in tSAH Patients
Edward Hall, United States

11:37 - 12:00
S13.01 Regulatory Role of Thioredoxin in autophagy-apoptosis cross talk
Eftekhar Eftekharpour, Canada

12:00 - 12:22
S13.03 Oxidative Lipid Signaling in Neuronal Death Programs in Brain Trauma
Hülya Bayİr, United States

12:21 - 12:43
S13.04 Aldehyde-mediated neuropathic pain in CNS trauma
Riyi Shi, United States

11:15 - 12:45
S14 Diagnosis and Management of Concussion/Biomarkers
Room: Harbour Ballroom C
Chair: **Charles Tator**, Canada

11:15 - 11:37
S14.01 Presentation details can be found in the NeuroTrauma 2018 Mobile App.
Christopher Giza, United States

11:37 - 12:00
S14.02 Management of the Sequelae of Repetitive Concussions: Second Impact Syndrome and Postconcussion Syndrome
Charles Tator, Canada

12:00 - 12:22
S14.03 The utility of biomarkers: From the field to the clinic
Jonathan Oliver, United States

12:22 - 12:45
S14.04 Delayed effects of multiple concussions and potential biomarkers of chronic traumatic encephalopathy
Camela Tartaglia, Canada

Scientific Program
Thursday, August 16

11:15 - 12:45
S15 Glucose and Insulin in TBI
Room: Pier 2+3
Chair: **Mayumi Prins**, United States

11:15 - 11:33
S15.01 Fueling the TBI Brain
Mayumi Prins, United States

11:33 - 11:51
S15.02 Non-invasive imaging of brain glucose after TBI
Reed Selwyn, Mexico

11:51 - 12:09
S15.03 Intranasal insulin in the treatment of CNS disorders
Kimberly Byrnes, United States

12:09 - 12:27
S15.04 Insulin Sensitivity after TBI: Implications for Vulnerability to Cerebral Ischemia
Zach Weil, United States

12:27 - 12:45
S15.05 Glucose metabolism in the injured brain
Antonio Belli, United Kingdom

13:00 - 14:00
Networking Break and Exhibition
Room: Metropolitan Ballroom

14:15 - 16:00
P7 Perspectives on SCI and TBI Research Going from INTS 2018 to the Future
Room: Frontenac Ballroom
Chair: **Patrick Kochanek**, United States

14:15 - 14:36
P7.01 Prospects for Axonal Recovery and/or Axonal Regeneration after Spinal Cord Injury
Charles Tator, Canada

14:36 - 14:57
P7.02 What the present informs us of the future of SCI research - reasons to be optimistic
Samuel David, Canada

14:57 - 15:18
P7.03 Mitochondrial-targeted pharmacotherapeutics and biopharmaceuticals for spinal cord injury
Alexander G. Rabchevsky, United States

15:18 - 15:39
P7.04 Optimizing the chance for a future therapeutic breakthrough in the golden age of TBI research
Patrick Kochanek, United States

16:00 - 16:30
Closing & Handover Ceremony
Room: Frontenac Ballroom

Scientific Program
Thursday, August 16

16:30 - 18:00
S16 Drug Discovery and Development to Advance Preclinical to Clinical Translation
Room: Harbour Ballroom A+B
Chair: **Samuel Poloyac**, United States

16:30 - 16:53
S16.01 Moving from Disease Target to Lead Compound: Examples in 20-HETE Inhibitor Drug Development
Samuel Poloyac, United States

16:53 - 17:16
S16.02 Pharmacokinetic modeling and neurometabolomics to ensure target engagement
Philip Empey, United States

17:16 - 17:38
S16.03 Using Brain Injury Biomarkers to Indentify Potential Drug Targets
Gretchen Brophy, United States

17:38 - 18:00
S16.04 Interspecies scaling and Dose optimization: Challenges with Minocycline in acute stroke
Dave Edwards, Canada

16:30 - 18:00
S17 Bioengineering Strategies for Acute SCI
Room: Harbour Ballroom C
Chair: **Eve C. Tsai**, Canada

16:30 - 16:53
S17.01 Optimizing the extracellular matrix for neural stem cell-based regeneration in traumatic spinal cord injury
Christopher Ahuja, Canada

16:53 - 17:16
S17.02 Can we bioengineering a human spinal cord repair based on rats?
Eve C. Tsai, Canada

17:16 - 17:38
S17.03 Bioengineering scaffolds for cell transplantation after spinal cord injury
Shelly Sakiyama-Elbert, United States

17:38 - 18:00
S17.04 Self-assembling peptides (QL-6) or physical training foster NPC treatment in cervical spinal cord injury
Klaus Zweckenberger, Germany

16:30 - 18:00
S18 Minding the 3R's: Maximizing Use and Quality of Data in Preclinical SCI Research
Room: Pier 2+3
Chair: **Lyn Jakeman**, United States

16:30 - 16:52
S18.01 Recycle- Resources and tools to enable new knowledge from open data
Adam Ferguson, United States

16:52 - 17:14
S18.02 Reuse- Challenges and opportunities in harmonizing legacy data
Jessica Neilson, United States

17:14 - 17:36
S18.03 Reduce- Developing laboratory processes to facilitate data sharing
David S. K. Magnuson, United States

17:36 - 17:58
S18.04 Join the movement! - Current status of ODC-SCI
Abel Torres-Espin, Canada

Information for Invited Speakers and Abstract Presenters

Speaker Ready Room

Room Wellington (Street Level) at the Westin Harbour Castle Conference Centre is the designated Speaker Ready Room. All presenters are required to submit and/or preview their slides at least 3 hours prior to their scheduled presentation to ensure compatibility with the Conference AV Equipment.

Computers are available to upload and preview presentations. **Speakers are required to report to the Speaker Ready Room at least 3 hours prior to their scheduled presentations.** Changes can be made until 90 minutes prior to your presentation. Presenters should make sure all fonts appear as expected and all sound/video clips are working properly. The final version must be submitted to the Speaker Ready Room, **no file submissions are accepted in the Session Rooms.**

Opening Hours

Sunday, August 12 .....14:00 – 19:30
Monday, August 13 ..... 07:00 – 16:30
Tuesday, August 14 ..... 07:00 – 14:00
Wednesday, August 15 .... 07:00 – 16:30
Thursday, August 16 ..... 07:00 – 16:30

Oral Abstract Presenters

Oral Abstract Presenters are required to prepare a PowerPoint Presentation for their 3 minute didactic presentation (max. 3 slides not including title, author and disclosure slides). Please make sure that you stick to your allocated time. The Session Chair will cut you off after your allocated 3 minutes time slot!

Poster Presenters

All Poster Presentations/Boards are located in the Metropolitan Ballroom (Second Floor) at the Westin Harbour Castle Conference Centre. A sign identifies each Poster Board with the assigned Poster Number and the Presenter's Name. The Poster Board Number corresponds with the pre-assigned Final Presentation Number provided in your confirmation letter and used in the Abstract Book and this Onsite Program.

Poster Set-Up Time:

Group A
Monday, August 13 ..... 07:00 – 10:00
Group B
Wednesday, August 15 .... 07:00 – 10:00

Group A Poster Presentation Hours:

Monday, August 13
Poster Display Hours: .....10:45 – 19:00
Mixer and Discussion: .....18:00 – 19:00
Tuesday, August 14
Poster Display Hours: .....08:00 – 14:00

Group B Poster Presentation Hours

Wednesday, August 15
Poster Display Hours: .....10:00 – 19:00
Mixer and Discussion: .....18:00 – 19:00
Thursday, August 16
Poster Display Hours: .....08:00 – 14:00

Poster Take-Down Time:

Group A
Tuesday, August 14 .....14:00 – 15:00
Group B
Thursday, August 16 .....14:00 – 15:00

Any posters not removed after Take-Down Time will be removed and discarded by management.

Side Meetings

Saturday, August 11
08:00 - 17:00
4 Corners Youth Concussion Consortium
Room: Yonge

08:00 - 20:00
University of California San Francisco Department of Neurosurgery
Room: Pier 3

Sunday, August 12
9:30 - 12:00
KFSCI & RISCIS Meeting
Room: Richmond

12:00 - 13:00
TEAM Business Meeting
Room: Yonge

12:30 - 14:00
JON Editorial Board Meeting
Room: Richmond

14:00 - 16:00
TEAM Council Meeting
Room: Yonge

16:30 - 18:00
NNS Council Meeting
Room: Yonge

Monday, August 13
07:00 - 08:00
NNS Business Meeting
Room: Yonge

Tuesday, August 14
14:00 - 16:00
Imaging Genetics Center, USC Mark and Mary Stevens Neuroimaging and Informatics Institute Meeting
Room: Richmond

14:00 - 17:00
Fortuna Fix Meeting
Room: Bay

14:30 - 16:30
University of Cambridge Meeting
Room: Yonge

16:30 - 18:30
NIH Meeting
Room: Richmond

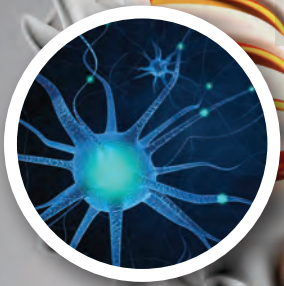
17:00 - 19:00
NeuroVive Meeting
Room: Yonge

Wednesday, August 15
07:00 - 08:00
NNS 2019 Planning Meeting
Room: Yonge

Thursday, August 16
13:00 - 14:00
INTS Board Meeting
Room: Richmond

Now Recruiting

SPRING Trial: Acute Spinal Cord Injury



Come visit us at our booth & find out more about our Phase 2b/3 VX-210 Trial

Booth #203

VERTEX

Exhibit Hours

Monday, August 13
10:00 am – 4:45 pm

Tuesday, August 14
10:00 am – 2:30 pm

Wednesday, August 15
10:00 am – 4:45 pm

Thursday, August 16
10:00 am – 12:00 pm

For more information
www.vertexscitrial.com
NCT02669849

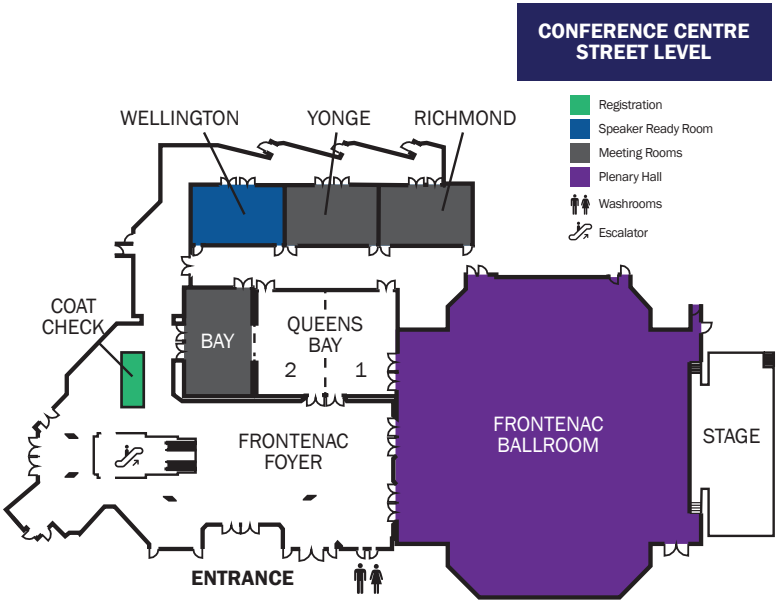
CONFERENCE INFORMATION

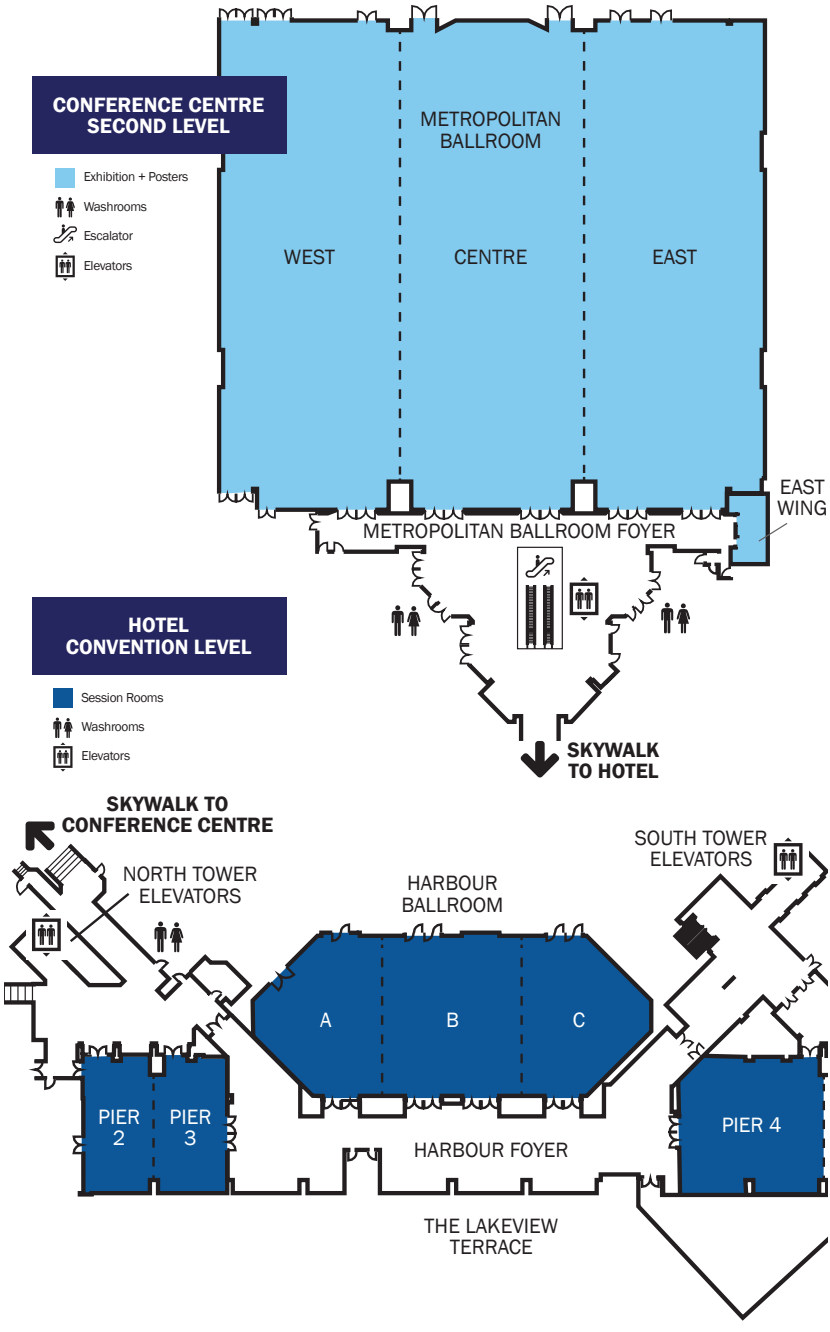
Conference Venue

The Westin Harbour Castle in Toronto
1 Harbour Square,
Toronto ON, M5J 1A6 Canada

www.westinharbourcastletoronto.com/?SWAQ=958P

All NeuroTrauma 2018 Symposium Session Rooms as well as Exhibits, Posters and Registration are located in the Westin Harbour Castle.




CONFERENCE CENTRE
SECOND LEVEL
Exhibition + Posters
Washrooms
Escalator
Elevators
METROPOLITAN
BALLROOM
WEST
CENTRE
EAST
EAST
WING
METROPOLITAN BALLROOM FOYER
HOTEL
CONVENTION LEVEL
Session Rooms
Washrooms
Elevators
SKYWALK
TO HOTEL
SKYWALK TO
CONFERENCE CENTRE
NORTH TOWER
ELEVATORS
HARBOUR
BALLROOM
SOUTH TOWER
ELEVATORS
A
B
C
PIER
2
PIER
3
PIER 4
HARBOUR FOYER
THE LAKEVIEW
TERRACE

FortūnaFix

UNRAVELING THE POWER OF REGENERATION

Direct cell reprogramming for restoring functionality in neurotrauma and neurodegeneration

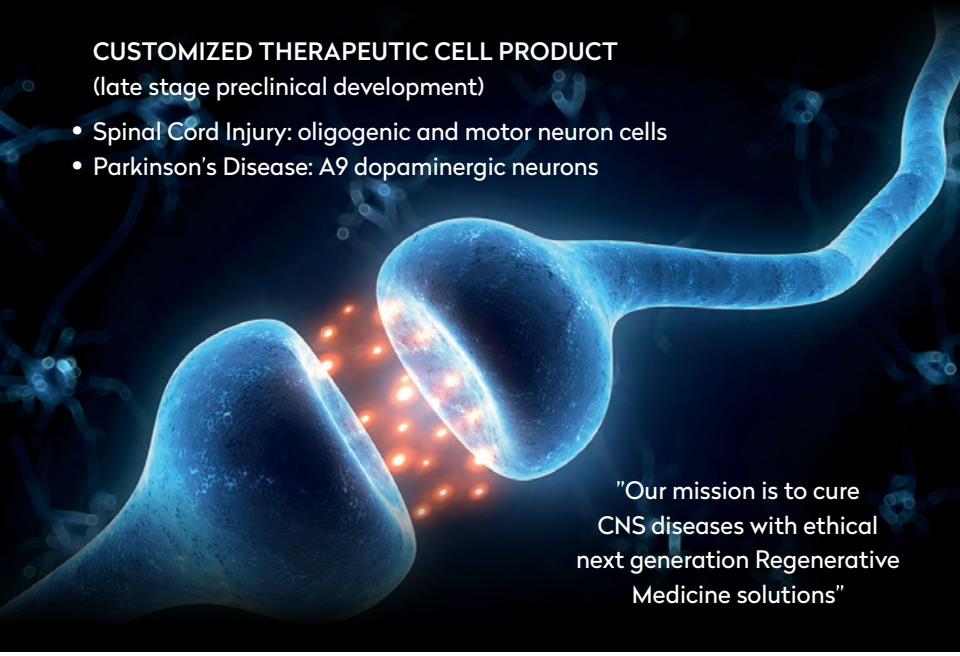
AUTOLOGOUS CELLS

- Personalized treatment
- No immune suppression needed
- Functional integration

LARGE-SCALE MANUFACTURING

CUSTOMIZED THERAPEUTIC CELL PRODUCT
(late stage preclinical development)

- Spinal Cord Injury: oligogenic and motor neuron cells
- Parkinson's Disease: A9 dopaminergic neurons



"Our mission is to cure CNS diseases with ethical next generation Regenerative Medicine solutions"

www.fortunafix.com

Codman®
SPECIALTY SURGICAL

A DIVISION OF INTEGRA LIFESCIENCES

Visit us at Booth #408

Advanced Monitoring in the Neuro ICU

When Flexibility and Accuracy Matter

3T MR Conditional Codman Microsensor®
ICP Transducers

DirectLink®
Implants and Services

ICP Express®
Monitoring System

Licox®
Brain Tissue Oxygen Monitoring System

1005419-1-EN

Some products may not be licensed for sale in Canada.

INTEGRA®

General Information from A to Z

Abstract Book
All accepted and confirmed abstracts are available in the Journal of Neurotrauma as well as in the Mobile App.

Badges
Your personalized badge is your admission card to the Symposium. For organizational and security reasons, badges must be worn at the congress venue at all times. In case of loss, a replacement badge will be provided at an administrative charge of $25.00 USD.

Toronto Information
A Tourism Toronto desk will be located in the registration area. They will be able to provide you with maps and answer any questions about the city of Toronto.

Cameras and Cell Phones
No cameras or video cameras are allowed in any event during NeuroTrauma 2018. As a courtesy to fellow delegates, please turn off cell phones during scientific sessions.

Certificate of Attendance
To obtain CME credits for your attendance at NeuroTrauma 2018, please visit the accrediting body's website.

You will receive an email at the end of the symposium from us asking you to fill out a brief survey to receive your certificate of attendance.

CME Credit Allowance
NeuroTrauma 2018 is being planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME). The VCU Health Continuing Medical Education is accredited by the ACCME to provide continuing medical education for physicians.
NeuroTrauma 2018 will be accredited with 37.5 AMA PRA Category 1 Credits by the Virginia Commonwealth University (VCU). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity. Each hour of scientific content is equal to one CME.

Delegate Help Desk
If you require assistance or any information regarding the Symposium, see the staff at the Registration Desk.

Exhibition
The Exhibition is located in the Metropolitan Ballroom, Conference Centre, Level 2 at The Westin Harbour Castle, Toronto. Please find a floor plan of the exhibition on page 48-49 and a detailed list of all exhibitors on page 51.

Exhibition Opening Hours
Monday, August 13 .....10:00 – 16:30
Tuesday, August 14 .....10:00 – 14:00
Wednesday, August 15 ....10:00 – 16:30
Thursday, August 16 .....10:00 – 14:00

Lost and Found
Lost and Found items should be returned/claimed at the Registration and Foyer Area at the Westin Harbour Castle.

Networking Breaks – Metropolitan Ballroom (Exhibits & Posters)
During the Symposium, refreshments and snacks will be provided for registered delegates in the Metropolitan Ballroom.

Monday, August 13
Poster Session, Coffee Break and Exhibits .....10:15 – 11:15

Supported by

LEARNING & KNOWLEDGE BIOMED
L&K BIOMED

Networking Break.....12:45 – 14:15
Coffee and Exhibits.....16:00 – 16:30

Tuesday, August 14
Poster Session, Coffee Break and Exhibits .....10:15 – 11:15
Networking Break.....12:45 – 14:15

General Information from A to Z

Wednesday, August 15
Poster Session, Coffee Break and Exhibits .....10:15 – 11:15
Networking Break.....12:45 – 14:15
Coffee and Exhibits.....16:00 – 16:30

Thursday, August 16
Poster Session, Coffee Break and Exhibits .....10:15 – 11:15
Networking Break.....12:45 – 14:15

Onsite Mobile Application

Plan your personalized NeuroTrauma 2018 schedule. Browse sessions by track, date, and time. The mobile application includes all abstracts submitted and accepted for the NeuroTrauma 2018 Symposium. Sync with your Outlook calendar and many more. Get local information and the weather forecast for the next 5 days. Available for iPhone, iPad, Android. Download the app from www.neurotrauma.com

Parking

For all delegates arriving at the Westin Harbour Castle by car, there is parking available for $50 CAD a night. There is also the option of public parking around the hotle for $15-$50 per day throughout downtown Toronto.

Public Transportation

By Public Transit
There is the Union Pearson Express (UP Express) that connects Toronot Pearson International Airport to downtown Toronto in 25 minutes. Trains depart every 15 minutes. There is an elaborate metro and bus system to help you get around downtown Toronto.

By Car
Toronto's city centre is partially pedestrianised and has several unintuitive one-way systems. Expect to pay $15-$50 per day in Pay & Display areas and $4 per hour on street meters. Parking attendants patrol popular areas regularly, so expect a fine if you return late or a clamp if you're parked illegally.

By Taxi
Toronto has an abundance of taxis that are easy to find, but you should exercise caution and not get into an unmarked car or one you haven't booked. Toronto also supports Uber and Lyft.

By Foot
Toronto's City Centre is pedestrian friendly, there are a lot things to see and do that can be reached on foot.

Registration Counter Hours

Located in the Cloak Room on the Lower Level of the Conference Centre at the Westin Harbour Castle.

Sunday, August 12 .....14:00 – 19:30
Monday, August 13 ..... 07:00 – 16:30
Tuesday, August 14 ..... 07:00 – 14:00
Wednesday, August 15 .... 07:00 – 16:30
Thursday, August 16 ..... 07:00 – 16:30

Smoking

Smoking is prohibited in all areas of the Westin Harbour Castle.

Staff and Volunteers

Volunteers are happy to assist with any questions delegates may have regarding the Symposium or the Westin Harbour Castle.

Wireless Internet

Wireless Internet is available throughout the Westin Harbour Castle.

Network: **Westin-MeetingRoom**
Access Code: **Neurotrauma2018**

Symposia Sessions

Sunday, August 12 | 12:00 - 13:00
LS1 Lunch Symposium
Brain Tissue Oxygenation BOOSTS - Outcome After Traumatic Brain Injury
Invitation Only

Speaker:
Dr. Uzma Samadani, MD, PhD
Rockswold Kaplan Endowed Chair for Traumatic Brain Injury Research, Hennepin County Medical Center, Associate Professor University of Minnesota Department of Neurosurgery

Supported by

Codman SPECIALTY SURGICAL

Monday, August 13 | 7:30 – 08:20
BS1 Breakfast Symposium
Direct cell reprogramming technology and its potential in the treatment of Neurotrauma

Chair: Dr. **Masha Stromme**, Salamander Invest AS, Lead Investor and Co-Founder of Fortuna Fix
Invitation Only

Speakers:
Jan-Eric Ahlfors, Inventor, CEO and CSO of Fortuna Fix
Dr. Michael Fehlings, Chairman of the SAB of Fortuna Fix
Dr. Dallas Hack, Member of the SAB of Fortuna Fix

Supported by

FørtUna Fix
UNRAVELING THE POWER OF REGENERATION

Monday, August 13 | 13:00 – 14:00
LS2 Lunch Symposium
NINDS Strategies to Enhance Diversity of Neuroscience Researchers
Ticket Required

Speaker:
Dr. Michelle D. Jones-London serves as chief in the Office of Programs to Enhance Neuroscience Workforce Diversity (OPEN) at the National Institute of Neurological Disorders and Stroke (NINDS), NIH. Jones-London provides leadership for the establishment of meaningful networks and partnerships to increase neuroscience workforce diversity by developing and implementing specific funding opportunities (individual and institutional) and works across the NINDS scientific portfolio to promote inclusion. She earned her PhD at Pennsylvania State University College of Medicine and then received postdoctoral training as a research fellow at University of Pennsylvania in the department of psychiatry. She has performed duties across the Department of Health and Human Services including the Center for Scientific Review, FDA Office of Women's Health Science Program, and the Immediate Office of the Secretary, Intergovernmental/Tribal Affairs Office. Jones-London directs programs at NINDS which include Diversity and Re-Entry Supplements, Predoctoral Fellowships to Promote Diversity in Health-Related Research (F31), Career Development Awards to Promote Diversity (K22 and K01) and Diversity Research Education Grants (R25) (including the Neuroscience Scholars Program with SfN). Her trans-NIH efforts include oversight for the NIH Blueprint ENDURE program and D-SPAN (F99/K00).

Synopsis:
The goal of session is to provide a summary of NINDS resources regarding diversity and to identify opportunities and share successful approaches for effective recruitment, training, and retention of diverse individuals within the neuroscience community.

Supported by

EDUCATION & TRAINING MENTORING
TEAM Neurotrauma

Symposia Sessions

Tuesday, August 14 | 07:30 – 08:20
BS2 Breakfast Symposium
ERA-NET Neuron – European interdisciplinary multi-site studies for translational research in traumatic brain injury

Chair: **Nikolaus Plesnila**, Munich, Germany

Speakers & Speaker Topics:
Jerome Badaut, Bordeaux, France
Morpho-functional changes in neurovascular unit after juvenile mild-traumatic brain injury

Inga Körte, Munich/Boston, Germany/USA
Repetitive Subconcussive Head Impacts – Brain Alterations and Clinical Consequences (RepImpact)

Juan M Encinas, Leioa, Spain
Reactive Neurogenesis in the Hippocampus after Traumatic Brain Injury

Nikolaus Plesnila, Munich, Germany
Long-term histopathological and functional outcome after severe experimental TBI
Speakers

Supported by

neuron
Network of European Funding for Neuroscience Research

Tuesday, August 14 | 13:00 – 14:00
LS3 Lunch Symposium
Update on AO Spine Guidelines for Traumatic

Welcome - **Michael Fehlings**
Introduction of the AOSpine Guidelines issue - **Michael Fehlings**
Role and timing of surgical intervention including central cord injury - **Brian Kwon**
Role of methylprednisolone - **Jeff Wilson**
Role of MR imaging - **Shekar Kurpad**
Panel discussion - all faculty
Closing remarks - **Michael Fehlings**

Supported by

AOSPINE
NORTH AMERICA

Wednesday, August 15 | 13:00 – 14:00
LS4 Lunch Symposium
Research, Innovation, and Translation in SCI

Speakers:
Kent Bassett-Spiers CEO, Ontario Neurotrauma Foundation

Michael Fehlings, MD, PhD, FRCSC, FACS
Professor of Neurosurgery
Vice Chair Research Department of Surgery
Halbert Chair in Neural Repair and Regeneration

Eve Tsai MD, PhD
Assistant Professor Neurosurgery
Suruchi Bhargava Chair in Spinal Cord and Brain Regeneration Research

Brain Kwon MD, PhD, FRCSC
Professor of Orthopaedics, University of British Columbia
Associate Scientific Director, Rick Hansen Institute

Bill Barrable, CEO, Rick Hansen Institute

Supported by

Ontario Neurotrauma Foundation
Fondation ontarienne de neurotraumatologie

Rick Hansen Institute
Institut Rick Hansen

SILVER SPONSOR

A proud sponsor of NEUROTRAUMA 2018

Ontario Neurotrauma Foundation

Fondation ontarienne de neurotraumatologie

CHANGING LIVES FOR 20 YEARS

Rick Hansen Institute
Institut Rick Hansen

www.onf.org

@OntNeurotrauma

Mission Connect®
a program of TIRR Foundation

TIRR FOUNDATION

Mission Connect, a program of TIRR Foundation,
is pleased to announce a
Spinal Cord Injury Hiring Initiative
partnership with **Texas A&M University** and
The University of Texas Medical Branch at Galveston.

SCI Initiative recruits are:

Jennifer Dulin, Ph.D.
Texas A&M University

Cedric G. Geoffroy, Ph.D.
Texas A&M Health Science Center

Hangue Park, Ph.D.
Texas A&M University

Qing Yang, M.D., M.S.
The University of Texas Medical Branch

Awards

NeuroTrauma 2018 Travel Grant Awards

Stephanie Agtarap
University of California San Diego

John Arena
University of Pennsylvania

Isabel Bleimeister
University of Pittsburgh

Randhall Carteri
Federal University of Rio Grande do Sul

Ann Hoffman
University of California Los Angeles

Ryan Holden
Southern Illinois University Carbondale

Wouter Hoogenboom
Albert Einstein College of Medicine

Catherine Jutzeler
University of British Columbia

Akshata Korgaonkar
Washington University

Javier Allende Labastida
University of Texas Medical Branch

Amanda Lee
ICORD/University of British Columbia

Ryan O'Hare Doig
South Australian Health and Medical Research Institute

Ashley Russell
Uniformed Services University of the Health Sciences

Maha Saber
University of Arizona

Andrea Schneider
Johns Hopkins University

Brandy Schneider
John D Dingell VAMC/Wayne State University

Christopher Watson
University of Texas Health Science Center at Houston

Amanda White
Penn State University College of Medicine

Allen Yu
Duke University

Zhendan Zhu
Menzies Institute for Medical Research

EBIC Travel Awards

Evgenia Alexandrova
Burdenko NSI

Randhall Bruce Carteri
Federal University of Rio Grande do Sul

Shuoqiu Gan
Xi'an Jiaotong University

Katrin Rauen
University of Zurich

Dig Vijay Thakur
Indira Gandhi Medical College

NeuroTrauma 2018 Diversity Grant Awards

Asma Bashir
University of British Columbia

Arturo Diaz Chavez
Instituto Mexicano del Seguro Social

Anna Iouchmanov
University of Pittsburgh

Erica Littlejohn
University of Kentucky
Kimberly Mendoza
Rice University

J. Bryce Ortiz
University of Arizona - College of Medicine

Samantha Ridgway
University of Arizona

Natalie Scholpa
University of Arizona

Rafael Veraza
UTHSCSA

Victor Wong
Burke Medical Research Institute/Weill Cornell Medicine

TEAM VISA Award Winner

Ursula Rohlwink
University of Cape Town

AANS/CNS Poster Finalists

Details can be found on the NeuroTrauma 2018 website.

2018 TEAM-VISA Award Winner: Dr. Ursula Rohlwink

Dr. Ursula Rohlwink is a Neuroscience Lecturer and Fellow in the Neuroscience Instiute and Division of Neurosurgery at the University of Cape Town (UCT), South Africa. She focusses on translational neuroscience research that is driven by clinical imperatives. Under the mentorship of Professor Anthony Figaji, Head of the Paediatric Neurosurgery Unit at UCT and President of the International Neurotrauma Society (INTS), her work has examined the cerebral immune response, perturbations in intracranial dynamics following injury, and biomarkers of brain injury. The NNS TEAM Visa Award will offer Dr Rohlwink the exciting opportunity to learn novel skills and gain further insights into neuroinflammation at a cellular level. Dr Sujatha Kannan's Lab at John's Hopkins Medical Institute has a strong foundation in basic science research of various paediatric neuropathologies, including traumatic brain injury (TBI). There Dr Rohlwink will learn techniques to isolate and stimulate monocytes derived from paediatric TBI patients to elucidate mechanistic data behind the immune and cell death responses. Microglia, the resident immune cells in the brain, stem from the same lineage as monocytes, which are the key first line immune responders. Isolation and study of monocyte responses is a great opportunity to examine the early peripheral immune response, as well as gain insight into how microglia are likely to respond. Furthermore, these techniques will offer new avenues of research in other forms of brain injury. As an emerging career researcher and newly appointed Fellow of the UCT Neuroscience Institute this award will enable Dr Rohlwink to build capacity within her research group, to strengthen existing collaborations with John's Hopkins University and open doors for further work and cross-pollination in neurotrauma and other mutual research areas.

Trainee Poster Competition Finalists

Finalist posters are displayed for the full length of the NeuroTrauma 2018 Symposium.

Final Competition Judging:
Monday from 10:15 - 11:15

PCF1.03.01
Mabel Terminel, Texas A&M Health Science Center
Opioid-Immune Interactions after SCI

PCF1.03.02
Laureen Hachem, University of Toronto
AMPA Receptor Modulation as a Therapeutic Strategy to Enhance Survival of Spinal Cord Neural Stem Cells

PCF1.03.03
Masoud Hassanpour Golakani, The Westmead Institute for Medical Research
MIS416 enhances recovery from traumatic spinal cord injury (SCI) in mice by regulating the innate immune response

PCF1.04.01
Emily Dennis, University of Southern California
ENIGMA Military Brain Injury: Framework and Preliminary dMRI Meta-analysis

PCF1.04.02
Sabrina Salberg, University of Calgary
Investigating the Neurological Effects of Sleep Deprivation on Post Concussion Symptomology in Adolescent Rats

PCF1.04.03
Jeffery Hanna, University of Arizona
Sensory Hypersensitivities in Patients with Persistent Post-Traumatic Headache vs. Migraine

PCF1.04.04
Kimberly Mendoza, Rice University
A New Class of Carbon Antioxidants Restored Cerebral Perfusion in Traumatic Brain Injury Complicated by Systemic Hypotension

PCF1.04.05
Anna Marie Dulaney, Mississippi State University
Modeling of Traumatic Brain Injury (TBI) due to Head Impacts with Unmanned Aircraft Systems (UAS)

PCF1.04.06
Margalit Haber, University of Pennsylvania
Prognostic inflammatory biomarkers for traumatic brain injury: A TRACK-TBI Pilot Study

PCF1.04.07
Andrea Schneider, Johns Hopkins University
Associations of Head Injury with Risk of Mortality, Incident Coronary Heart Disease, Stroke, and Heart Failure

PCF1.04.08
Yukai Zou, Purdue University
High-G head collisions are associated with short-term white matter microstructural deficits in high school football athletes

PCF1.04.09
Stephanie Ciarlone, Naval Medical Research Center, Henry Jackson Foundation
Effects of pituitary function on long-term health outcomes following mTBI in service members treated at the CRCC

PCF1.04.10
John Yue, University of California San Francisco
Diagnostic utility of GFAP for identifying TBI patients with MRI abnormalities despite normal head CT: A TRACK-TBI study

PCF1.04.11
Catherine Duclos, Hôpital du Sacré-Coeur de Montréal
Sleep-wake cycle deregulation despite normal circadian clock signal in acute traumatic brain injury

PCF1.04.12
William Hubbard, University of Kentucky
Acute mitochondrial impairment underlies prolonged cellular dysfunction after repeated mild traumatic brain injuries

PFC1.04.13
Ann Hoffman, University of California Los Angeles
Projection specific mechanisms of auditory sensitivity that contribute to enhanced fear after TBI

PCF1.04.14
Josie Fullerton, University of Glasgow
Catastrophic disruption of the blood-brain barrier in pediatric TBI

PCF1.04.15
Kathryn Wofford, Drexel University
Reprogramming Monocyte-Derived Macrophages to Mitigate Secondary Injury Pathology Following Traumatic Brain Injury

PCF1.04.16
Maura Weber, University of Pennsylvania
CLARITY reveals less disconnection of axons than previously thought and a more prolonged process of degeneration after TBI

PCF1.04.17
Nikolaos K. Ziogas, Johns Hopkins University School of Medicine
Three-dimensional interrogation of traumatic axonopathy in the brain identifies SARM1 as major driver of axonal degeneration

Official Networking Events

Welcome Reception
Date: Sunday, August 12
Time: 18:30 – 20:00
Location: Harbour Ballroom + Terrace
Dress Code: Casual
Included in the registration fee for delegates.

Join us for the Welcome Reception and to mix and mingle with sponsors & exhibitors, colleagues and friends while enjoying local wines, beers and small snacks.

Supported by

Mission Connect
a program of TIRR Foundation

Poster Mixer
Date: Monday, August 13
& Wednesday, August 15
Time: 18:00 – 19:00
Location: Exhibition & Poster Area
(Metropolitan Ballroom)

Join our Poster Mixers and discuss the latest research and innovations with your fellow colleagues and friends. Enjoy a drink and small snacks while networking.

NeuroTrauma 2018 Gala & Awards Dinner
Date: Wednesday, August 15
Time: 19:30 – 21:30
Location: Harbour Ballroom + Terrace
Dress Code: Business Casual
$100USD for Non-Member
$75USD for Member

Supported by

VERTEX

After Party & Dancing
Date: Wednesday, August 15
Time: 21:30 – 23:00
Location: Harbour Ballroom + Terrace
Dress Code: Business Casual

Enjoy an evening with your friends and fellow colleagues. Don't miss the cocktail reception accompanied by a jazz quartet followed by a 3-course meal. We will also honor our Award Winners during this festive evening. Last, but not least, we would like to invite you to shake a leg to the tones of a rock and pop after dinner.

ANY-maze

Behavioral Tracking Software

ANY-maze Version 6

Designed with a familiar, user-friendly interface, version 6 is full of enhanced features sure to improve overall efficiency in your laboratory! See details and download a FREE trial of ANY-maze version 6 at www.anymaze.com now!

SCIENTIST PREFERRED SOFTWARE!

New AMi-2 interfaces

The new AMi-2 family of low-cost interfaces make it even easier to connect to a wealth of equipment typically found in behavioural labs, such as optogenetic lasers, shockers, pellet dispensers, levers, running wheels, gas analysers, lickometers, photobeams, levers, cue-lights... you get the idea!

Outstanding value for money

At US$ 5,995.00 ANY-maze offers the best value for money of any video tracking system.
Not only do you get all the features for a single price - that's right, no modules or add-ons - but lifetime support is free!

True flexibility

ANY-maze will happily track a single mouse in a radial arm maze, or simultaneously track sixteen rats in their home cages for a week.
And ANY-maze isn't limited to tracking rodents - users track quails, marmosets, zebra-fish, goats...

Download for free

Download ANY-maze right now and try it for free. No fuss, forms or bureaucracy - you can be testing ANY-maze in your own apparatus in five minutes time.
Got questions? Just email us - we support everyone, forever, for free.

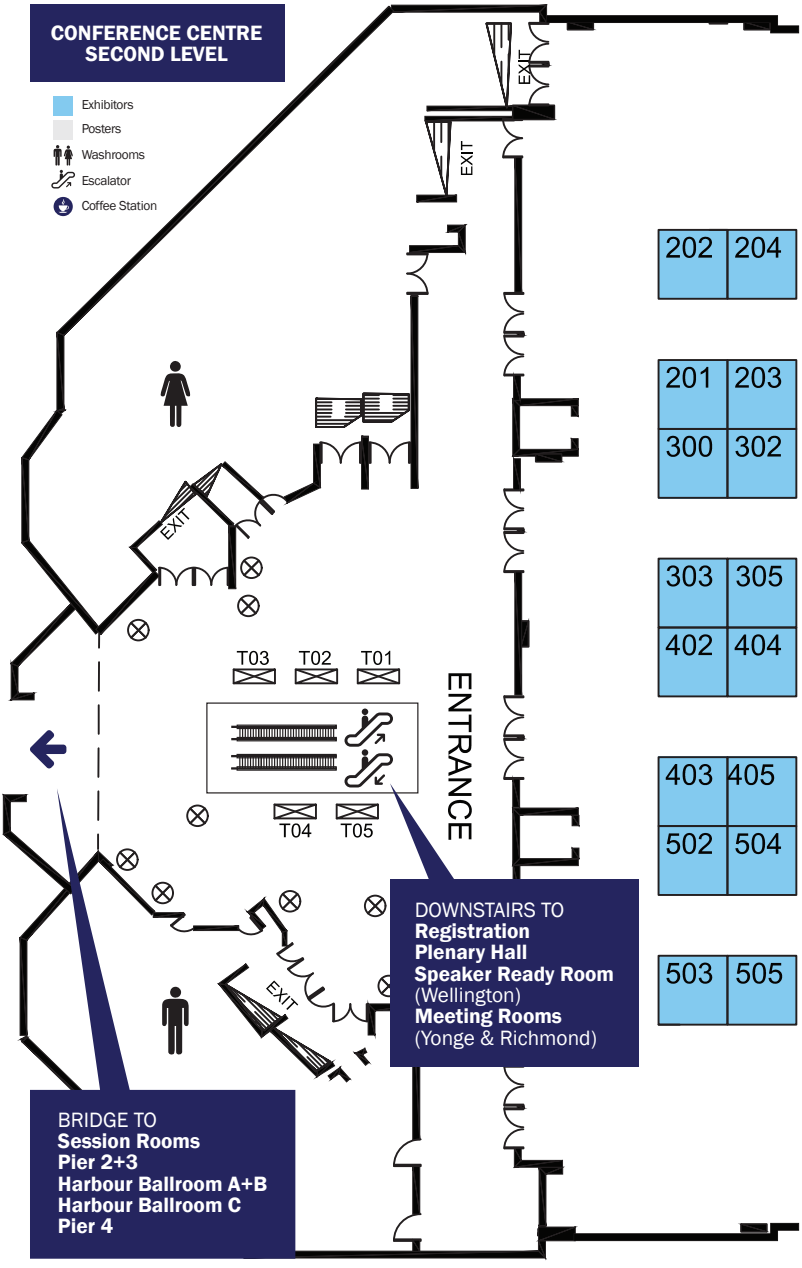
Stoelting SINCE 1886

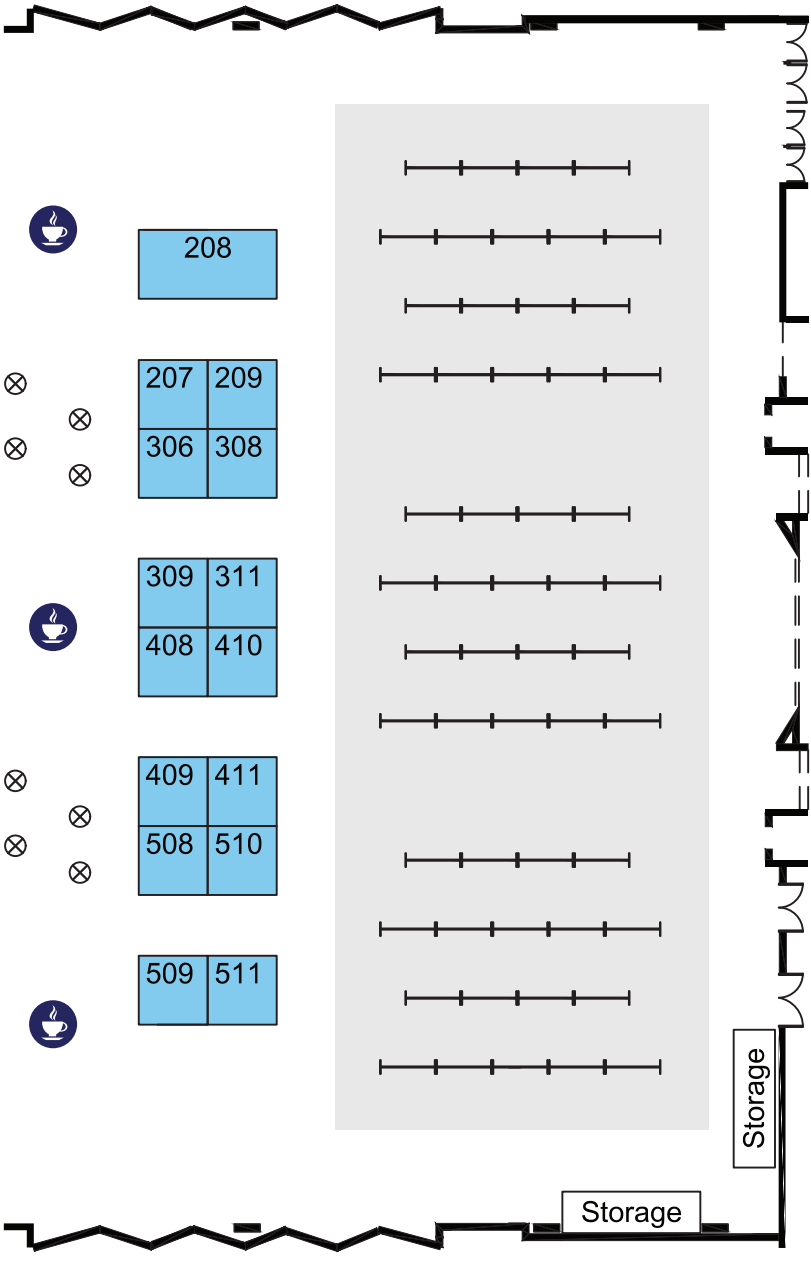
ANY-maze is a product of Stoelting Co. 620 Wheat Lane, Wood Dale, IL 60191 USA • 1-800-860-9775 • www.StoeltingCo.com

Call or email sales@anymaze.com for pricing!

EXHIBITION INFORMATION

Exhibition Floor Plan




208
207
209
306
308
309
311
408
410
409
411
508
510
509
511
Storage
Storage

We are SCoBIRC,

13 Primary Faculty, in a contiguous shared open concept lab space.

Our mission is to be an unparalleled neurotrauma research and training center.

Become part of our team.

For more info: www.scobirc.med.uky.edu

Spinal Cord & Brain Injury Research Center

SCoBIRC was established in 1999 to promote individual and collaborative studies on CNS injuries resulting in a loss of neurological function. Our exciting advances have demonstrated the potential of protection, regeneration, and repair from injury, and have driven improvements in the diagnosis and treatment of spinal cord and brain injury. We have a strong record of training the next generation of neurotrauma researchers and continue to foster that tradition.

Exhibitor Listing

Alphabetical

Numerical

Sponsor & Exhibitor Biographies

7D Surgical
Booth # 508
www.7dsurgical.com
7D Surgical is a Toronto based company that develops advanced optical technologies and machine vision-based registration algorithms to improve surgical workflow and patient care. 7D Surgical's Machine-vision Image Guidance System (MvIGS) delivers profound improvement to workflows in spine surgery, providing the promise of future advancements in other surgical specialties.

AANS/CNS Section on Neurotrauma & Critical Care
Booth # 204
www.neurotraumasection.org
The purpose of American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS) Section is to provide a forum for education and research on trauma and critical care of the nervous system, to coordinate activities and programs relating to trauma, critical care and sports medicine for the AANS/CNS and other societies, committees and agencies, to represent the parent organizations, at their discretion, at any organization or group on matters relating to trauma, critical care and sports medicine, to advice the AANS/CNS of activities which relate to nervous system trauma and critical care by other individuals, group and/or agencies.

AOSpine North America
AOSpine is an international community of spine surgeons generating, distributing, and exchanging knowledge to advance science and the spine care profession through research, education, and community development. With this collaborative approach AOSpine continues to advance spine care worldwide.

AOSpine Knowledge Forum
The Knowledge Forums are expert surgeon-driven working groups in five spine pathologies: tumor, deformity, spinal cord injury, trauma, and degenerative disease. They identify knowledge gaps, assess the best evidence for current practices, developing AOSpine classifications, staging of the disease, guidelines, and outcome measures.

Arkis BioSciences®
Booth # 300
www.arkisbiosciences.com
Arkis BioSciences® provides advanced medical technology used in treating hydrocephalus, pain management, and other treatment areas. Arkis BioSciences introduces the CerebroFlo™ EVD Catheter with Endexo® Technology, demonstrating 99% reduction in thrombus accumulation in-vitro. Arkis' minimally-invasive Tunneling Guidewire™ reduces the number of surgical sites, lessens trauma, and shortens surgical duration.

Blusson Integrated Cures Partnership
www.rickhanseninstitute.org | www.icord.org
Established by the Rick Hansen Foundation, the Blusson Integrated Cures Partnership (BICP) is a collaboration between ICORD and the Rick Hansen Institute that works to improve outcomes and health of people living with SCI by advancing research and improving the kind and quality of care available for people with SCI.

Sponsor & Exhibitor Biographies

Canadian/American Spinal Research Organization
Booth # 202
www.csro.com
The Canadian/American Spinal Research Organization (CSRO/ASRO) is committed to fund targeted spinal cord injury research to maximize functional recovery, while unifying the community to advocate for a cure. Through our many fundraising initiatives and strategic partnerships the CSRO/ASRO has raised nearly 30 million dollars for spinal cure research since 1984.

Center for Neuroscience and Regenerative Medicine
Booth # 504
www.usuhs.edu/cnrm
CNRM is a collaborative military traumatic brain injury research group established to address the needs of the medical community to better diagnose and improve outcomes of Service Members who suffer with the long-term consequences resulting from Traumatic Brain Injury.

Codman Specialty Surgical
Booth # 408
www.integralife.com
Codman Specialty Surgical, a Division of Integra LifeSciences is a global leader in neurosurgery that combines the renowned brand of Codman with Integra's leading advanced technologies. Our portfolio includes world-recognized brands such as Certas® and Hakim® valves, Licox® Brain Tissue Oxygen Monitoring System, ICP Express® and Directlink®, CUSA® tissue ablation platform, DuraGen® and DuraSeal®, Mayfield®, Jarit® and MicroFrance® surgical instruments and Integra® lighting.

Craig H. Neilsen Foundation
www.chnfoundation.org
The Craig H. Neilsen Foundation's funding is dedicated to supporting both programs and scientific research to improve the quality of life for those affected by and living with spinal cord injury. The vision of the Foundation is such that individuals with spinal cord injuries, and those who care for them, live full and productive lives as active participants in their communities.

DePuys Synthes
Booth # 409
www.depuysynthes.com
DePuy Synthes, part of Johnson & Johnson Medical Device Companies, offers the most comprehensive portfolio of products for Spine, Cranio-Maxillofacial, Trauma, Joint Reconstruction, Sports medicine, Neurovascular, power tools and biomaterials. Our innovative products have made us a leader in the management of spine and cranial trauma pathologies.

DP Clinical
Booth # 302
www.dpclinical.com
DP Clinical is a privately held Contract Research Organization specializing in CNS (including spinal cord injury), cardiology, infectious disease, oncology, ophthalmology, and vaccine Phase I-IV clinical programs. We provide a full complement of clinical services including trial management, monitoring, data management, biostatistics, regulatory, safety, and medical writing.

Sponsor & Exhibitor Biographies

European Brain Injury Consortium (EBIC)
www.ebic.nl
The European Brain Injury Consortium (EBIC) is a collaborative group of European researchers and Centres that aims to provide a strong, independent clinical perspective in promoting and conducting research aimed at improving outcome of patients with acute brain injury. Over the last few years EBIC has concentrated on the CENTER-TBI study (www.center-tbi.eu) and on global collaborations, including partners in low and middle-income countries.

European Neurotrauma Network
The ERA-NET NEURON is a trans-national European funding network that supports basic, clinical and translational research in the diverse fields of disease-related neuroscience. Funding organizations across Europe, Israel, Turkey and Canada have joined forces to conquer diseases of the brain and the nervous system. The current symposium will give an overview over four ERA-Net Neurons funded research consortia investigating the pathophysiology of TBI.

FITBIR
Booth # 410
www.fitbir.nih.gov
The Federal Interagency Traumatic Brain Injury Research (FITBIR) informatics system was developed to share data across the entire TBI research field and to facilitate collaboration as well as interconnectivity with other informatics platforms. Sharing data, methodologies, and associated tools, rather than summaries or interpretations of this information, can accelerate research progress by allowing re-analysis of data, as well as re-aggregation, integration, and rigorous comparison with other data.

Fortuna Fix
www.fortunafix.com
Fortuna is a regenerative medicine company focused on direct cell reprogramming (drNPC) for CNS diseases. The approach is personalised and customised to address the underlying neuropathology: drNPC-O2 biased to motor neuron and oligodendrocyte lineages for Spinal Cord Injury; drNPC-A9 to replace A9 dopaminergic cells in Parkinson's. Fortuna has a fully automated manufacturing system for the production of autologous drNPCs.

FUJIFILM VisualSonics, Inc.
Booth # 403
www.visualsonics.com
FUJIFILM VisualSonics, the world leader in real-time, in vivo, high-resolution, micro-imaging systems, providing modalities designed for preclinical research. These cutting edge technologies allow researchers to conduct research in cardiovascular, cancer and neurobiology areas. VisualSonics platforms combine high-resolution, real-time in vivo imaging at a reasonable cost with ease-of-use and quantifiable results.

Global Neuro
www.globalneuro.org
Founded in the 2000s by the AO Foundation, Global Neuro is an independent, medically guided non-profit organization whose vision is to improve neurosurgical patients' quality of life worldwide. Through excellence in education, training, research and consulting, we have established ourselves as a trusted resource for leaders in the neurosurgical field and are consistently recommended internationally as a leading course.

Global Spine Congress 2019
Booth # 511
www.gsc2019.org
The Global Spine Congress (GSC) provides a unique approach to sharing knowledge and developing new approaches to the treatment of spinal disorders to help advance spinal care and improve patient care. The congress is open to all surgeons, spine practitioners, allied health care professionals and researchers.

Sponsor & Exhibitor Biographies

Hemedex Inc
Booth # 405
www.hemedex.com
Hemedex's technology provides early warning of tissue ischemia, helps target therapy, monitors real-time response to intervention, and provides prognostic information. Hemedex provides a complete solution for continuous, real-time measurement of cerebral perfusion in absolute units by offering the Bowman Perfusion Monitor, perfusion probe, titanium bolts and cranial drill bits.

International Brain Injury Association (IBIA)
Booth # 209
www.internationalbrain.org
Through conferences, publications and special interest groups, the International Brain Injury Association (IBIA) serves as an educational platform for multidisciplinary professionals involved in the research and treatment of brain injury. IBIA organizes the biennial World Congress on Brain Injury, which will next be held in March of 2019 in Toronto, Canada.

Journal of Neurotrauma
Booth # 208
www.liebertpub.com/neu
Journal of Neurotrauma is the only peer-reviewed journal focused exclusively on the clinical and laboratory investigation of traumatic brain and spinal cord injury. The Journal focuses on the basic pathobiology of injury to the central nervous system, while considering preclinical and clinical trials targeted at improving both the early management and long-term care and recovery of traumatically injured patients.

Karger Publishers
www.karger.com
Karger Publishers in Basel, Switzerland, is a globally active medical and scientific publishing company. The publication program comprises 50 new books per year and 105 peer-reviewed journals with a growing number of open-access publications, covering all fields of medical science.

KING-DEVICK technologies, Inc.
Booth # 502
www.kingdevicktest.com
King-Devick Technologies, Inc. offers evidence-based integrated technology solutions for concussion management and indicators of neurological function. King-Devick products, including the King-Devick Test in association with Mayo Clinic sideline concussion screening are scientifically validated in over 110 peer-reviewed, elite medical journal articles. King-Devick Recovery Acceleration Program won 2017's VA Innovation Award.

L&K BIOMED CANADA
Booth # 201
www.lnkbiomed.com
L&K BIOMED is a global spinal medical device company delivering high quality, innovative medical devices to contribute to healthier lives. L&K's mission is to provide extremely dependable implants and instruments healthcare professionals and patients can trust. This is possible due to continual effort in innovation, sustainable growth, and product diversification.

Sponsor & Exhibitor Biographies

Login Canada
Booth # 509
www.lb.ca
Login Canada is the Canadian Book Industry's largest source of Scientific, Technical and Medical books. This proudly Canadian company has been serving the health sciences community for over 25 years. They bring quality publishers and exceptional customer service together.

M Dialysis Inc
Booth # 305
www.mdialysis.com
M Dialysis, Inc. develops and markets clinical microdialysis solutions for advanced clinical research and general intensive care usage. Our microdialysis solutions monitor tissue chemistry and diagnosis based on changes in the local metabolism, offering windows of opportunity that may lead to improved quality of life.

Medtronic
Booth # 207
www.medtronic.com
As a global leader in medical technology, services and solutions, Medtronic helps to improve the lives and health of millions of people each year. We use our deep clinical, therapeutic, and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together.

Mission Connect, a program of TIRR Foundation
www.tirrfoundation.org
The Institute for Rehabilitation and Research (TIRR) Foundation, created, directs, and funds Mission Connect, a collaborative neurotrauma research project. Mission Connect is focused on supporting the discovery of preventions, treatments, and cures for central nervous system damage caused by brain injuries, spinal cord injuries, and neurodegenerative diseases.

Moberg ICU Solutions
Booth # 303
www.moberg.com
The Moberg Component Neuromonitoring System (CNS) integrates physiological and medical information to support decision-making that transforms neurocritical care. Using time-synchronized multimodal monitoring to collect, display and store data from multiple sources, including Moberg cEEG, our system shows the dynamic functioning of the brain, enabling individualized care of brain-injured patients.

National Institute of Neurological Disorders and Stroke
Funding made possible by Grant #R13NS108672

National Neurotrauma Society
Booth # 208
www.neurotrauma.org
The National Neurotrauma Society is committed to the promotion of neurotrauma research by enhancing communications, providing a forum, and increasing support on the national and international level. The National Neurotrauma Society seeks to accelerate research that will provide answers for clinicians and ultimately improve the treatments available to patients.

Sponsor & Exhibitor Biographies

Natus Neuro
Booth # 402
www.natus.com
Natus Neuro is a global market leader that provides diagnostic, therapeutic and surgical solutions built on a strong heritage in neurodiagnostics, neurocritical care and neurosurgery. Natus Neuro delivers clinician-led products that improve outcomes and enhance care for neuro patients through leading-edge equipment, service, education and supplies.

Neural Outcomes
www.neuraloutcomes.com
Neural Outcomes Consulting Inc. (NOCI) is a health and research consulting company that combines skills and expertise in knowledge generation, synthesis, and translation. Comprised of clinical education leaders related to clinical trials implementation and outcomes, NOCI works with pharmaceutical companies enhancing trial designs through development and implementation of endpoints for FDA approval.

Neuro Kinetics, Inc.
Booth # 411
www.neuro-kinetics.com
Neuro Kinetics, Inc. (NKI), the world leader in clinical eye-tracking and non-invasive neuro-functional diagnostic testing, has the Science to See™ neuro-functional biomarkers invisible to the naked eye. For over three decades, NKI has supplied comprehensive neuro-functional diagnostic and assessment tools to neurologists, audiologists, neurotologists. neuro-ophthalmologists, physical therapists, and others worldwide.

NeuroScience Associates Inc.
Booth # 306
www.nsalabs.com
Proprietary MultiBrain® and MultiCord® technologies enable simultaneous sectioning and staining of up to 40 neuronal tissues, achieving uniform processing across treatment groups. Coupling mass production neurohistology with staining expertise including standard stains, immunohistochemistry and specialty stains for disintegrative degeneration and Alzheimer's pathology, Neuroscience Associates significantly reduces client's R&D cycle times.

Neuroscience Tools
Booth # 311
www.neurosciencetools.com
Neuroscience Tools will display a new model impactor for CCI, for impacts to open or closed skull. The Neuropactor is a refined instrument, correcting issues in the competing model. Ask for details. Mounts on a stereotaxic instrument for precise positioning and impact depth control.

Ontario Institute for Regenerative Medicine
www.oirm.ca
The Ontario Institute for Regenerative Medicine (OIRM) is a non-profit stem cell institute funded by the Ontario government and dedicated to transforming discoveries into clinical trials and cures. Through our commitment to collaboration and partnerships, we leverage our resources to fund and support promising advances.

Sponsor & Exhibitor Biographies

Ontario Neurotrauma Foundation and Rick Hansen Institute
www.onf.org | www.rickhanseninstitute.org
The partnership between the Ontario Neurotrauma Foundation and the Rick Hansen Institute is funded by the Ontario Ministry of Research, Innovation and Science to conduct research and implement results that improve care and quality of life for individuals living with spinal cord injury.

OssDsign
Booth # 404
www.ossdsign.com
OssDsign is an innovator, designer and manufacturer of personalized bone replacement technology for cranial repair. We are committed to improving outcomes in cranioplasty. By combining clinical insight with proprietary material technology and patient-adapted design, OssDsign supplies an expanding range of tailored solutions for cranial repair and facial bone reconstruction

PMT Corporation
Booth # 505
www.pmtcorp.com
PMT Corporation, established in 1979, is a US company dedicated to the research, development, manufacture and distribution of quality medical devices addressing Neurosurgery and Neurotrauma. PMT is committed to bringing the best innovations to market both throughout the US and internationally.

QuesGen Systems, Inc.
Booth # 309
www.quesgen.com
QuesGen Systems, Inc. is a leader in services and support to studies focusing on Brain Health research with a specific focus on Traumatic Brain Injury research. The QuesGen platform has been used for TRACKTBI (18 centers across the US), CENTERTBI (60+ across europe) and the DOD CARE Consortium (a prospective study of 30,000 college athletes tracking sports-related injuries).

Sophysa USA
Booth # 510
www.sophysa.com
Sophysa is dedicated to delivering advanced CSF management solutions, with an intense focus on adjustable shunting technologies, intrathecal access devices, and integrated intracranial monitoring, providing proven performance, with sophisticated safety, simplicity, and value... at the heart of the brain.

Spinal Cord & Brain Injury Research Center (SCoBIRC)
www.scobirc.med.uky.edu
The Spinal Cord and Brain Injury Research Center at the University of Kentucky houses researchers and clinicians from a variety of disciplines, working next to each other to promote the cross-fertilization of ideas and multidisciplinary interactions. The studies range from fundamental neuroscience research to clinical applications.

Sponsor & Exhibitor Biographies

Stoelting Co.
Booth # 308
www.stoeltingco.com
Stoelting Co. is an innovator in producing neuroscience research equipment. Stoelting has manufactured stereotaxic instruments for the past 50 years; you will find the Stoelting brand in laboratories all over the world. Visit Stoelting's booth for a demonstration of the Just for Mouse Stereotaxic with new digital display and built-in warming base.

Surgi-One
Booth # 503
www.surgi-one.com
Surgi-One is partnering with Cerapedics to bring i-FACTOR™ Peptide Enhanced Bone Graft to Canadian surgeons. i-FACTOR™ has been clinically proven in a number of Level-1 studies to provide safe, effective and early fusion across a number of spine and general orthopaedic indications.

TEAM
Booth # 208
www.nationalneurotraumasociety.org/team
TEAM is an organization established to promote international gender equality in neurotrauma research. It is an organization for all individuals interested in these aims regardless of gender. We appreciate a wide diversity of ideas and opinions to help the organization successfully meets its goals.

University of Pittsburgh
The mission of the University of Pittsburgh School of Medicine is to improve the health and well-being of individuals and populations through cutting-edge biomedical research, innovative educational programs in medicine and biomedical science, and leadership in academic medicine. The School, together with the Departments of Physical Medicine & Rehabilitation (www.rehabmedicine.pitt.edu) and Critical Care Medicine (www.ccm.pitt.edu), are happy to provide support for this important conference.

Vertex Pharmaceuticals
Booth # 203
www.vrtx.com
Vertex is a global biotechnology company that invests in scientific innovation to create transformative medicines for people with serious and life-threatening diseases. In addition to clinical development programs in CF, Vertex has more than a dozen ongoing research programs focused on the underlying mechanisms of other serious diseases. Founded in 1989 in Cambridge, Mass., Vertex's headquarters is now located in Boston's Innovation District. Today, the company has research and development sites and commercial offices in the United States, Europe, Canada and Australia. Vertex is consistently recognized as one of the industry's top places to work, including being named to Science magazine's Top Employers in the life sciences ranking for eight years in a row.

Wings for Life
www.wingsforlife.com
A personal stroke of fate provided the impetus for establishing the research foundation Wings for Life. The goal: a cure for people living with the lifelong consequences of a spinal cord injury. To this end, the foundation funds top-class scientific projects and clinical studies worldwide.

Exhibition Information

Exhibition Location and Hours

The NeuroTrauma 2018 Exhibition is located in the Metropolitan Ballroom, Conference Centre Level 2 of The Westin Harbour Castle, Toronto.

Exhibition Hours:

Monday, August 13 .....10:00 – 16:30
Tuesday, August 14 .....10:00 – 14:00
Wednesday, August 15 ....10:00 – 16:30
Thursday, August 16 .....10:00 – 14:00

Exhibition Highlights

Refreshment Breaks

Coffee will be offered in the Exhibition Hall during the Symposium days.

Monday, August 13

Coffee Break.....10:15 – 11:15
Networking Break.....12:45 – 14:15
Coffee Break.....16:00 – 16:30

Refreshments Supported by

L&K BIOMED

Tuesday, August 14

Coffee Break.....10:15 – 11:15
Networking Break.....12:45 – 14:15

Wednesday, August 15

Coffee Break.....10:15 – 11:15
Networking Break.....12:45 – 14:15
Coffee Break.....16:00 – 16:30

Thursday, August 16

Coffee Break.....10:15 – 11:15
Networking Break.....12:45 – 14:15

Poster Sessions

The Poster Sessions will be held in the Exhibit Area. For detailed information on Posters displayed please refer to the Programpages.

Group A Poster Presentation Hours:

Monday, August 13

Poster Display Hours: .....10:45 – 19:00
Mixer and Discussion: .....18:00 – 19:00

Tuesday, August 14

Poster Display Hours: .....08:00 – 14:00

Group B Poster Presentation Hours

Wednesday, August 15

Poster Display Hours: .....10:00 – 19:00
Mixer and Discussion: .....18:00 – 19:00

Thursday, August 16

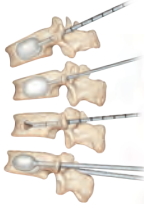
Poster Display Hours: .....08:00 – 14:00

HEALTH CARE IS CHANGING
SO ARE WE.

DePuy Synthes

PART OF THE Johnson & Johnson FAMILY OF COMPANIES

Come visit us at booth #409. Let us show you our CLEAR innovation and VERSE® atility.



SCI experts positioned to help you with your next clinical trial.

DPClinical

DP Clinical offers:

- A full service contract research organization (CRO) with over 25 years of experience conducting neurotrauma clinical research with a focus on acute and chronic spinal cord injury (SCI) trials
- SCI work started on the benchmark study of Sygen® (GM1) – the gold standard SCI trial
- Expertise includes drugs, devices, autologous and stem cells
- Strong relationships with neurotrauma/SCI leaders and rehabilitation facilities
- A team that will be a strategic partner, knowledgeable in SCI clinical outcomes and efficacy assessments

If you are looking for an experienced SCI partner to help you with your next clinical trial, contact DP Clinical.

Your Partner in Success

9201 Corporate Blvd, Rockville, MD 20850 ~ 301.294.6226 ~ mtowle@dpclinical.com
www.dpclinical.com

neural outcomes consulting Inc.

www.NeuralOutcomes.com

Dr. Kalsi-Ryan
CSO and CEO of
Neural Outcomes

NOCI is a health and research consulting company that brings skills in knowledge generation, synthesis and translation together. We support oncology, neurological and musculoskeletal trials and have specialized insupporting Neurotrama since 2011.

- Medical Science Liaison
- Outcome Measures
- Clinical Research
- Neurotrama Endpoint Design

CAPABILITY	CAPACITY
to advance frontline clinical care, clinical trials and studies, implementing our expertise in rehabilitation and clinical research specific to neurological diseases.	to assist in protocol development, research implementation, synthesis, dissemination and knowledge mobilization.

Manufacturer of GRASSP

Versions 1, 2, and Myleopathy

CLIENTS

ASUBIO
DAIICHI SANKO
VERTEX PHARMACEUTICALS
INVIVO THERAPEUTICS
NISCI CLINICAL TRIAL

RENETX
ASTERIAS BIOTHERAPEUTICS
ACCORDA PHARMACEUTICALS
Neurological Health Charities of Canada
STEM CELLS INC.

A Center of Excellence at The University of Miami Miller School of Medicine

Our multidisciplinary team of over 200 scientists and investigators are conducting cutting-edge basic science, translational, and clinical research targeting brain and spinal cord injury. Areas of research include neural protection, regeneration, repair, modulation, and replacement, as well as cardiometabolic physiology, pain, and fertility.

Training opportunities available:

- Undergraduate students
- Graduate students
- Postdoctoral fellows
- Visiting scholars

www.themiamiproject.org

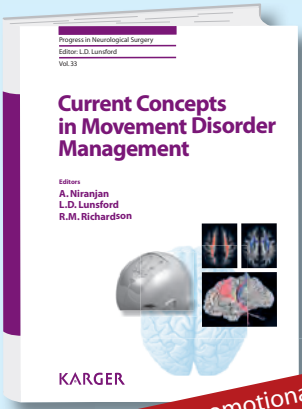
Karger Journals

Gain new insights into the mechanisms of normal and abnormal brain development

More information:
www.karger.com/DNE

Focused, thought-provoking and independent

More information:
www.karger.com/PNE



New Book

Progress in Neurological Surgery, Vol. 33

Current Concepts in Movement Disorder Management

More information:
www.karger.com/PNS

Use the promotional code **INTS18** and profit from a **35%** discount!

KARGER
Medical and Scientific Publishers

For more information about related publications, please go to
www.karger.com/neurology

KI18285

NeuroTrauma 2019

The 37th Annual Symposium of the National Neurotrauma Society

June 30-July 3
Pittsburgh, PA

Call for Proposals:
October 1, 2018

Call for Abstracts:
Jan 15-Apr 01, 2019

WWW.NEUROTRAUMA.ORG

Neuro Trauma 2020

29 March - 2 April 2020
Melbourne, Australia

SAVE THE DATE
29 MARCH–2 APRIL 2020

WELCOME

Come to Melbourne, Australia, for the 14th International Neurotrauma Symposium! An outstanding scientific program is being developed and will include chronic neuroinflammation and neurodegeneration, new technologies for CNS regeneration, fact versus fiction in sports-related concussion, microRNAs as biomarkers and therapeutic targets, advances in neuroimaging, and latest updates on clinical interventions in TBI and SCI. Why not combine your trip with the Formula 1 Australian Grand Prix, the Melbourne Comedy Festival, or the Melbourne Food and Wine Festival? And of course, enjoy some of Australia's famous hospitality at Neurotrauma 2020!

To receive updates, please register your interest at:
@ ints2020@arinex.com.au
neurotrauma2020.com

KEY DATES:

Abstract submission open:	**June 2019**
Abstract submission close:	**September 2019**
Early bird registration deadline:	**November 2019**

Hosted by: INTS, International Neurotrauma Society

University of South Australia

arinex

INTS 2020 Symposium Managers:
Arinex Pty Ltd. 91-97 Islington St, Collingwood, VIC 3066 Australia Tel: +61 3 8888 9500

Supported by: Melbourne Victoria Australia, Melbourne Convention Bureau

#INTS2020
neurotrauma2020.com

NeuroTrauma2018

AUGUST 11-16, 2018

TORONTO, CANADA