



Global Neuro

Preliminary event program
Global Neuro Advanced Course—
Neurotrauma

**Shaping the Future of Neurotrauma Monitoring and
Management from its Origins**

November 10–11, 2023 | Edinburgh, UK

Course description

This course covers the current best strategies and considerations for managing neurotrauma patients with a special emphasis on advanced surgical treatment and neuromonitoring. The course is based on competencies defined in Global Neuro's curriculum. The content is delivered using multiple methods. Comprehensive lectures concentrate on the understanding of core material. Interactive case presentations further deepen this knowledge and enrich the discussion in trauma management. Practical sessions teach the application of Global Neuro principles to the management of common injuries. Case-based discussions link the lecture material and practical skills with the clinical problems encountered in clinical practice.

Target participants

The Global Neuro Advanced Course has been developed for trainee, surgeons, and physicians who are interested in the management of cranial and spinal neurotrauma and who have a strong interest in complex patient care, clinical research, and an interdisciplinary approach.

Goal of the course

The Global Neuro Advanced Neurotrauma Course covers the management of complex cranial neurotrauma using advanced monitoring, devices, and techniques. There will also

be a focus on current research and the management of challenging clinical scenarios and complications.

Learning objectives

By completing this advanced course, participants will be better able to:

- Apply current classification systems, guidelines and recommendations in neurotrauma
- Name new trends and future topics in neurotrauma care
- Manage complex neurotrauma, including penetrating injuries, vascular injuries, skull base fractures and spinal cord injuries with an interdisciplinary approach
- Conduct and interpret advanced imaging and neuromonitoring
- Plan and perform the following operative techniques: multifunctional probes, complex cranial reconstruction, and dural repair
- Manage complex complications such as metabolic disturbances, CSF leaks, coagulopathy, and cranial neuropathies
- Discuss and conduct state-of-the-art clinical research

Faculty

Course chair

Andreas Demetriades	Royal Infirmary of Edinburgh	Edinburgh	United Kingdom
Andrés Rubiano	University El Bosque	Cali	Colombia

Invited faculty

David Adelson	Rockefeller Neuroscience Institute at WVU Medicine		
	Morgantown	United States	
Michael Buchfelder	University of Erlangen-Nueremberg	Erlangen	Germany
Randall Chesnut	University of Washington	Seattle	United States
Gregory Hawryluk	Cleveland Clinic	Cleveland	United States
Nicolo Marchesini	University of Verona	Verona	Italy
Wilco Peul	University Neurosurgical Center Holland	Leiden	Netherlands
Edoardo Piccetti	Parma University Hospital	Parma	Italy
Jonathan Rhodes	University of Edinburgh	Edinburgh	United Kingdom
Shelly Timmons	Indiana University	Indianapolis	United States

Friday, November 10, 2023

TIME	SUBJECT	SPEAKER
08:00–08:30	Registration and Continental Breakfast	
08:30–08:40	Welcome Remarks / Course Introduction	Andreas Demetriades
08:40–08:50	Global Neuro Remarks	Andres Rubiano
Module 1	Developing of Fundamental Concepts in Neurotrauma	Andreas Demetriades / Gregory Hawryluk
08:50–09:10	Monroe, Kellie, and Abercrombie: The Fundamentals of ICP Concepts in Edinburgh	
09:10–09:30	From Lundberg ICP Work to the Lund Protocol in TBI Care	
09:30–09:50	The Glasgow Experience and their Contributions to the Modern TBI Care	
09:50–10:10	J. Douglas Miller: Concepts of the Impact of ICP and CSF Dynamics in TBI Care	
10:10–10:30	Contributions of TBI Care from Rotterdam and the Netherlands	
10:30–10:50	The Cambridge Experience on TBI Care: Monitoring, Surgery and Global Research	
10:50–11:05	Q&A Session for Module 1	Moderators
11:05–11:20	COFFEE BREAK	
Module 2	Modern TBI Concepts in Guidelines, Consensus and Protocols	Shelly Timmons / Andres Rubiano
11:20–11:40	The CREVICE Protocol: TBI Care in Absence of Advanced Neuromonitoring	
11:40–12:00	The SIBICC I Protocol: How to Deal with TBI Based on Invasive ICP Monitoring	
12:00 – 12:20	The SIBICC II Protocol: How to Deal with TBI Based on Dual Invasive Monitoring	
12:20–12:40	The BTF Pediatric TBI Guidelines	
12:40–13:00	The WSES Consensus: An Algorithm for Polytrauma and TBI Care	
13:00–13:15	Q&A Session for Module 2	Moderators
13:15–14:15	LUNCH	
Module 3	Modern Trends and Concepts in SCI Diagnosis and Management	Andreas Demetriades / Wilco Peul
14:15–14:35	The Concepts of Advanced Spinal Monitoring in SCI	
14:35–14:50	The AO Guidelines for Spinal Cord Injury	
14:50–15:10	The WFNS Guidelines for SCI Diagnosis and Management	

15:10–15:30	The WSES Consensus: An Algorithm for Polytrauma and SCI Care	
15:30–15:50	The Bootstrap Protocol: A New Perspective for Managing SCI in Different Contexts	
15:50–16:05	Q&A Session for Module 3	Moderators
16:05 – 16:20	COFEE BREAK	
Module 4	Case Discussions: Managing Complex Cases in Neurotrauma	Randall Chesnut
16:05–17:05	Case 1: Acute Subdural Hematoma and Anticoagulation in Young Populations (10m) Case 2: Acute Traumatic Brain Edema with Brain Hypoxia (10m) Case 3: Acute SCI with Anterior Thoracic Compression and Partial Deficit (10m) Case 4: Acute Cervical SCI with Posterior Compression and Complete Deficit (10m) Case 5: Severe TBI with Concurrent Thoracic and Abdominal Injuries (10m) Case 6: Acute Spinal Cord Injury with Thoracic and Abdominal Injuries (10m)	
17:05–17:20	Q&A Session for Module 4	Moderators
17:20–17:30	Closing Remarks Day 1	

Saturday, November 11, 2023

Time	Agenda item	FACULTY
8:00–08:10	Introduction to Day 2	Andreas Demetriades / Andrés Rubiano
Module 5	Case Discussions: Neurotrauma Care in Special Populations	Michael Buchfelder / David Adelson
08:10–08:50	Case Discussions in TBI	
	Case 1: TBI and Pituitary Dysfunction (15m Case + 5m Discussion)	
	Case 2: Pediatric Neurotrauma and Posttraumatic Epilepsy (15m Case + 5m Discussion)	
08:50–09:30	Case Discussions in SCI	
	Case 1: Craniovertebral Junction Trauma (15m Case + 5 Discussion)	
	Future Clinical Trials in SCI Surgical Care	
Module 6	Hands-On Stations: Advanced Monitoring and Management in Neurotrauma	Andreas Demetriades/ Andres Rubiano
09:30–11:30	Traumatic Brain Injury	
	1. Decompressive Craniectomy and Cranial Reconstruction (40m)	
	2. Invasive Dual Neuromonitoring (ICP + PTiO2) (40m)	
	3. Non-Invasive Neuromonitoring (TCD/ONUS/Pupillometry) (40m)	
11:30–11:45	COFFEE BREAK	
11:45–13:45	Spinal Cord Injury	Andreas Demetriades
	1. Cervical Decompression and Fixation (40m)	
	2. Thoraco-Lumbar Decompression and Fixation (40m)	
	3. Advanced Spinal Cord Monitoring (40m)	
13:45–14:45	LUNCH	
Module 7	Shaping the Future of Care	Jonathan Rhodes
14:45 – 15:05	Future of TBI Monitoring and Medical Care	
15:05 – 15:25	Future Clinical Trials in Surgical Care of TBI	
15:25 –15:45	Future of SCI Monitoring and Medical Care	
15:45 – 16:05	Future Clinical Trials in Surgical Care of SCI	

16:05 – 16:25	Integration of Invasive and Non-Invasive Neuromonitoring in TBI Care	
16:25 – 16:45	The Role of Machine Learning and Artificial Intelligence in Neurotrauma	
16:45 – 17:00	Q & A Session for Module 7	
17:00 – 17:15	Closing Remarks Day 2 and Final Certification	Andreas Demetriades / Andres Rubiano

Event organization

Global Neuro Foundation

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Event organizer

Jenny Cheng

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Global Neuro funding sources

Unrestricted educational grants from different sources are collected and pooled together centrally or for specific events by the Global Neuro Foundation. All events are planned and scheduled by local and regional Global Neuro surgeon groups based on local needs assessment. We rely on commercial partners for in-kind support to run simulations/skills training if educationally needed.

General information

Event fee

Global Neuro Seminar—Neurotrauma
€ 500 (£430).–

20% off for resident and LMICs

Included in the course fee are course material, coffee breaks, lunch, and course certificate.

Registration

Please click on the registration link below to register for the Global Neuro Course—Advanced Neurotrauma:
<https://globalneuro.org/EN/education/event-detail/61.html>

European CME Accreditation

An application has been made to the UEMS—EACCME® in Brussels for CME accreditation of this event.

Course certificate

The course certificates can only be provided if the participant attends the entire event (100%) and will be available at the end of the event.

Evaluation guidelines

All Global Neuro events apply the same evaluation process, either online (pre- and post-event evaluation) and/or onsite by paper and pencil questionnaires. This helps Global Neuro to ensure that we continue to meet your training needs.

Dress code

Casual

Language

English

No insurance

The event organization does not take out insurance to cover any individual against accidents, theft, or other risks.

Security

Security checks may be conducted at the entrance of the building. Wearing a name tag is compulsory during lectures, practical exercises, and group discussions.

Mobile phone use

Use of mobile phones is not allowed in the lecture halls and in other rooms during educational activities. Please be considerate of others by turning off your mobile phone.

Intellectual property

Event materials, presentations, and case studies are the intellectual property of the event faculty. All rights are reserved. Check hazards and legal restrictions on

www.globalneuro.org/legal

Recording, photographing, or copying lectures, practical exercises, case discussions, or any course materials is strictly forbidden. Participants violating intellectual property will be dismissed.

The Global Neuro Foundation reserves the right to film, photograph, and audio record during their events. Participants must understand that in this context they may appear in these recorded materials. The Global Neuro Foundation assumes participants agree that these recorded materials may be used for

Global Neuro marketing and other purposes and made available to the public.

Global Neuro Foundation—Principles of Educational Events

1) Academic independence

Development of all curricula, design of scientific event programs, and selection of faculty are the sole responsibilities of volunteer surgeons from the Global Neuro network. All education is planned based on needs assessment data, designed and evaluated using concepts and evidence from the most current medical education research, and involving the expertise of the Global Neuro Education Institute (www.globalneuro.org).

Industry participation is not allowed during the entire curriculum development and planning process to ensure academic independence and to keep content free from bias.

2) Compliance to accreditation and industry codes

All planning, organization, and execution of educational activities follow existing codes for accreditation of high-quality education:

- Accreditation Criteria of the Accreditation Council for Continuing Medical Education, USA (www.accme.org)
- ACCME Standards for Commercial Support: Standards to Ensure Independence in CME Activities (www.accme.org)
- Criteria for Accreditation of Live Educational Events of the European Accreditation Council for Continuing Medical Education (www.uems.eu)
- Events that receive direct or indirect unrestricted educational grants or in-kind support from industry also follow the ethical codes of the medical industry, such as:
 - Eucomed Guidelines on Interactions with Healthcare Professionals (www.medtecheurope.org)
 - AdvaMed Code of Ethics on Interactions with Health Care Professionals (www.advamed.org)
 - Mecomed Guidelines on Interactions with Healthcare Professionals (www.mecomed.org)

3) Branding and advertising

No industry logos or advertising (with the exception of the Global Neuro Foundation) are permitted in the area where educational activities take place.

Sponsors providing financial or in-kind support are allowed to have a promotional booth or run activities outside the educational area with approval from the event chairperson.

4) Personnel

Industry staff are not allowed to interfere with the educational content or engage in educational activities during the event.