



Global Neuro

# Global Neuro Neuro-Emergencies Care Course (GN-NECC)

22–23 February, 2024

Melbourne, Australia

The Alfred Innovation and Education Hub

## **Course description**

This course covers the current best strategies and considerations for managing neurological emergencies in the Emergency Department, ICU, and Operating Room. It features an international faculty of experts and is based on competencies defined in Global Neuro's curriculum.

The course content is delivered using multiple methods, including lectures, small group workshops and simulated case scenarios. Comprehensive lectures concentrate on the understanding of core material. The small group sessions deepen this, and enrich the discussion and learning.

## **Target participants**

The target audience is clinicians (medical, nursing, and allied health staff) caring for adults suffering an acute central nervous system (CNS) injury.

## **Goal of the Course**

The Global-Neuro Neuro-Emergencies Care Course covers the theoretical basis and practical principles in managing acute CNS injury in adults.

## **Learning Objectives**

By completing the course, participants will be better able to:

- Perform an appropriate initial assessment of adult patients presenting with an acute CNS injury
- Choose the appropriate investigations (including neuroradiology) and interpret the result
- Provide appropriate guideline-based patient-centered care and clinical management
- Apply and interpret intra-cranial monitoring and advanced diagnostics (e.g. EEG)
- Manage common complications, such as bleeding, swelling, infection and hydrocephalus

## Faculty

### Course Chairs

Andrew Udy	The Alfred Hospital	Melbourne	Australia
Natalie Apelbaum	The Alfred Hospital	Melbourne	Australia

### International faculty

Gentle Shrestha	Tribhuvan University Teaching Hospital	Kathmandu	Nepal
Andres Rubiano	University of El Bosque	Bogotá	Colombia
Yu-Lin Wong	Tan Tock Seng Hospital	Singapore	Singapore

### National faculty

James Anstey	The Royal Melbourne Hospital	Melbourne	Australia
Catherine Bell	The Alfred Hospital	Melbourne	Australia
Andrew Hooper	The Alfred Hospital	Melbourne	Australia
Toby Jeffcote	The Alfred Hospital	Melbourne	Australia
Rob McNamara	Royal Perth Hospital	Perth	Australia
Xiuxian Pham	Monash University	Melbourne	Australia
Mark Weeden	St George's Hospital Sydney	Sydney	Australia

## Day 1: 22 February, 2024

TIME	AGENDA	WHO
08:15–08:30	Introduction and Objectives	Andrew Udy
<b>08:30–10:30</b>	<b>Session 1</b>	<b>Moderator:</b>
08:30–09:00	The neuro exam and approach to the unconscious patient	Natalie Apelbaum
09:00–09:30	Basic extra-cranial physiological support following an acute brain insult	Gentle Shrestha
09:30–10:00	TBI assessment, resuscitation and prognostication	Andrew Hooper
10:00–10:30	Intra-cranial monitoring and personalized care following TBI	Yulin Wong
<b>10:30–11:00</b>	<b>COFFEE BREAK</b>	<b>ALL</b>
<b>11:00–12:30</b>	<b>Session 2</b>	<b>Moderator:</b>
11:00–11:30	Neuroradiology	Mark Weeden
11:30–12:30	Practical Sessions (4 groups – 30 min each) <ul style="list-style-type: none"> <li>– Intra-cranial bolt and EVD insertion, ICP/PtbO<sub>2</sub> Monitoring and post-procedure care</li> <li>– Neurological Assessment and ICM+</li> <li>– EEG / cEEG / barbiturate coma</li> <li>– Neuroradiology</li> </ul>	Andres Rubiano & Catherine Bell Rob McNamara Xiuxian Pham Mark Weeden
<b>12:30–13:30</b>	<b>LUNCH</b>	<b>ALL</b>
<b>13:30–16:00</b>	<b>Session 3</b>	<b>Moderators:</b>
13:30–14:00	Ischaemic stroke assessment and resuscitation	James Anstey

TIME	AGENDA	WHO
14:00–15:00	Practical Sessions (4 groups – 30 min each) <ul style="list-style-type: none"> <li>– Intra-cranial bolt and EVD insertion and post-procedure care (Andres / Cath Bell)</li> <li>– Neurological Assessment and ICM+ (mannequin from Alfred, laptop (1), simulated, key things you should check morning assessment, look at data from ICM+)</li> <li>– EEG / cEEG / barbiturate coma (mobile continuous EEG units (potential sponsors;))</li> <li>– Neuroradiology (run through images, standardized approach)</li> </ul>	Andres Rubiano & Catherine Bell Rob McNamara Xiuxian Pham Mark Weeden
15:00–15:20	<b>COFFEE BREAK</b>	<b>ALL</b>
15:20–15:50	Subarachnoid hemorrhage (SAH): assessment, resuscitation and ongoing care	Toby Jeffcote
15:50–16:00	<b>Day 1 Final remarks</b>	<b>ALL</b>

## Day 2: 23 February, 2024

TIME	AGENDA	WHO
08:15–08:30	Re-convene	Andrew Udy
<b>08:30–10:30</b>	<b>Session 1</b>	<b>Moderator:</b>
08:30–09:00	Status Epilepticus: Assessment and management options	Xiuxian Pham
09:00–09:30	Intracerebral haemorrhage: Management update (including minimally invasive surgery)	Andres Rubiano
09:30–10:00	Hypoxic-ischaemic encephalopathy	Gentle Shrestha
10:00–10:30	CNS Infection: Identification and treatment	Yu-Lin Wong
<b>10:30–11:00</b>	<b>COFFEE BREAK</b>	<b>ALL</b>
<b>11:00–12:30</b>	<b>Session 2</b>	<b>Moderator:</b>
11:00–11:30	Traumatic spinal cord injury – assessment, resuscitation, and ongoing care	Andres Rubiano
11:30–12:30	Simulation (4 groups – 30 min each) <ul style="list-style-type: none"> <li>– Decreased LOC</li> <li>– TBI and raised ICP</li> <li>– Status epilepticus</li> <li>– SAH (re-bleed)</li> </ul>	Andrew Udy & Catherine Bell Toby Jeffcote & Rob McNamara Nat Apfelbaum & James Anstey Andrew Hooper & Mark Weeden
<b>12:30–13:30</b>	<b>LUNCH</b>	<b>ALL</b>
<b>13:30–16:00</b>	<b>Session 3</b>	<b>Moderators:</b>
13:30–14:00	Latest advances and evidence in neurocritical care	Andrew Udy

TIME	AGENDA	WHO
14:00–15:00	Simulation (4 groups – 30 min each) <ul style="list-style-type: none"> <li>– Decreased LOC</li> <li>– TBI and raised ICP</li> <li>– Status epilepticus</li> <li>– SAH (re-bleed)</li> </ul>	Andrew Udy & Catherine Bell Toby Jeffcote & Rob McNamara Nat Apelbaum & James Anstey Andrew Hooper & Mark Weeden
15:00–15:20	<b>Course completion (questions, discussion, and evaluation)</b>	<b>ALL</b>