



NeuroTrauma 2024

CAMBRIDGE · UNITED KINGDOM

2024 meeting of the International NeuroTrauma Society

Cerebral Microdialysis Satellite Symposium

Crausaz Wordsworth Building, Robinson College, Cambridge

Sunday 1st September 2024

09:00 – 09:30

Arrival - Tea and Coffee - Registration (30 mins)

09:30 – 09:40

Welcome - Introduction (10 mins)

Peter Hutchinson / Ibrahim Jalloh / Keri Carpenter

★ **SESSION I – Clinical experiences & protocols**

CHAIRS - Ibrahim Jalloh and Keri Carpenter

09:40 - 10:05

TALK (20 mins + 5 mins Q&A) #1 Helmy / Baker (UK/USA)

Helmy (Prof Adel) / **Baker** (Mr Michael) – “Protocol for tiered management strategy for TBI patients based on multimodality monitoring including microdialysis, and multidimensional cerebral microdialysis data in TBI: new paths for clinical intervention”.

10:05 – 10:20

TALK (10 mins + 5 mins Q&A) #2 Chen (USA)

Chen (Prof Jefferson) – “Innovations in the Implementation of Cerebral Microdialysis at a Level I Trauma Center: an 8-year Experience”.

10:20 – 10:35

TALK (10 mins + 5 mins Q&A) #3 Sultan (Pakistan)

Sultan (Prof Kashif Ali) – “Analysis of cerebral Microdialysis in patients with traumatic brain injury: relation to Intracranial Pressure and Cerebral Compliance”.

10:35 – 10:50

TALK (10 mins + 5 mins Q&A) #4 Mangat (USA)

Mangat (Prof Halinder) – “Case series”.

10:50 – 11:20

COFFEE (30 mins)

★ **SESSION II – Continuous metabolic monitoring**

CHAIRS - Jefferson Chen and Ibrahim Jalloh

11:20 – 11:40

TALK (15 mins + 5 mins Q&A) #5 Puccio (USA)

Puccio (Prof Ava) “Real-time measurement of potassium and glucose by cerebral microdialysis in severe TBI patients: a pilot study”.

11:40 – 12:00

TALK (15 mins + 5 mins Q&A) #6 Strong (UK)

Strong (Prof Anthony) - “Brain glucose and spreading depolarisations: review and update, with some first lessons from the Loke”.

12:00 – 12:20

TALK (15 mins + 5 mins Q&A) #7 Boutelle (UK)

Boutelle (Prof Martyn) – “Using online cerebral microdialysis to monitor the brain during cardiac arrest and subsequent advanced life support”.

12:20 – 12:50

TALK (25 mins + 5 mins Q&A) #8 Zimphango / Carpenter (UK)

Zimphango (Mr Chisomo) / **Carpenter** (Dr Keri) – “Integration of cerebral microdialysis with sensor technology for continuous brain metabolic monitoring – the COMMIT project”.

12:55 – 13:00

Conclusion of morning session and announcements (5 mins)

13:00 – 14:00

LUNCH (60 mins)

🌟 **SESSION II – Continuous metabolic monitoring (continued)**

CHAIRS - Jefferson Chen and Ibrahim Jalloh

14:00 – 14:15

TALK (10 mins + 5 mins Q&A) #9 Svedung Wettervik (SWEDEN)

Svedung Wettervik (Prof Teodor) – “Validation of the Loke Microdialysis in an experimental model: Are we ready for continuous monitoring of brain energy metabolism?”

🌟 **SESSION III – Emerging applications**

CHAIRS - Ava Puccio and Ursula Rohlwick

14:15 – 14:30

TALK (10 mins + 5 mins Q&A) #10 Burns group (USA)

Burns (Prof Terry) group: talk to be presented by **Ha** (Ms Yooree) – “Human glioma microdialysate: an intersecting signature of malignancy, BBB disruption, and CNS injury”.

14:30 – 14:45

TALK (10 mins + 5 mins Q&A) #11 Stovell (UK)

Stovell (Dr Matthew) – “Characterising cerebral microdialysis sampling region and retromicrodialysis delivery in-vitro and in-vivo with gadolinium contrast agents and MRI”.

14:45 – 15:00

TALK (10 mins + 5 mins Q&A) #12 Mazzeo (ITALY)

Mazzeo (Prof Anna Teresa) – “Microdialysis in transplant medicine and relevance to brain”.

15:00 – 15:15

TALK (10 mins + 5 mins Q&A) #13 Rostami (SWEDEN)

Rostami (Prof Elham) – “Uncovering the impact of genetic variations in TBI via microdialysis and proteomics: a path to personalized care”

15:15 – 15:45

TALK (25 mins + 5 mins Q&A) #14 Figaji (RSA)

Figaji (Prof Anthony) – “Paediatric microdialysis”.

15:45 – 16:05

TEA (20 mins)

🌟 **SESSION IV – Microdialysis directions**

CHAIRS - Elham Rostami and Martyn Boutelle

16:05 – 16:35

TALK (25 mins + 5 mins Q&A) #15 Hutchinson (UK)

Hutchinson (Prof Peter) – Microdialysis overview: present and future.

16:35 – 17:00

Panel Discussion (25 mins) Peter Hutchinson and other Session Chairs, with the audience.

17:00 – 17:10

Closing Remarks (10 mins) Peter Hutchinson.

17:10 – 18:00

Drinks Reception