

**Intraoperative Neurophysiology in Neurosurgery:
Innovation, Controversies, and Future Perspectives
14 -16 December 2017 – Verona, Italy**

Preliminary programme

Thursday 14th December

8.15-8.30 Welcome and Introduction

Introduction to IONM

8.30-8.50 Safety in IONM

8.50-9.10 Anesthesia in IONM

9.10-9.20 Discussion

Functional presurgical mapping

9.20-9.35 Tractography

9.35-9.50 Navigated TMS motor

9.50-10.05 Navigated TMS language

10.05-10.20 fMRI for motor and language localization

10.20-10.45 Discussion

10.45-11.15 Coffee Break

SUPRATENTORIAL SURGERY

Part I: Tumors

Motor areas: From bench to bedside

11.15-11.35 New frontiers in intraoperative electrophysiology of the motor system in humans

11.35-11.40 Discussion

Motor areas: Controversies in the operating room

11.40-12.00 Muscle MEP Monitoring and subcortical mapping: Warning sign hierarchy

12.00-12.15 Muscle MEP monitoring: Which threshold criteria should we use?

12.15-12.30 Subcortical mapping: How far are we?

12.30-12.45 Discussion

12.45- 13.00 Asleep versus awake: What we really do in the OR? A European survey

13.00-14.00 Lunch break

Language and cognitive areas: From bench to bedside

14.00-14.20 New insights from subcortical connectivity

Language and cognitive areas: Innovations and tricks of the trade in the operating room

14.20-14.40 Neuropsychological testing around the clock

14.40-15.00 Cortical language organization in multilingual patients undergoing awake brain

mapping
15.00-15.15 Discussion
15.15-15.35 Monitoring and mapping visual pathways
15.35-15.40 Discussion

Part II: Vascular

15.40-16.00 IONM in aneurysm clipping
16.00-16.15 IONM versus other monitoring tools during aneurysm surgery: A critical appraisal
16.15-16.30 Discussion

16.30-17.00 Coffee break

17.00-17.20 MEP warning criteria in spinal cord and brain surgeries: One size fits all?

Special Joint WFNS-ISIN Session

IONM in Neurosurgery: Challenges and perspectives around the world

17.20-17.30 India
17.30-17.40 Africa
17.40-17.50 South America
17.50-18.00 Korea
18.00-18.10 North America
18.10-18.20 Japan
18.20-18.30 Europe

18.30-19.00 Keynote Lecture 1: Global IONM in the context of global Neurosurgery

19.00-19.30 Round table discussion

19.30-20.30 Welcome cocktail

Friday 15th December

7.45-9.00 Breakfast seminar I (How I do it)

BS1 Monitoring and mapping in asleep surgery for brain tumors in motor areas

BS2 Insular glioma: Awake? Asleep?

BS3 IONM in epilepsy surgery

BS4 IONM in intramedullary spinal cord tumor surgery

BS5 How to establish awake surgery at your institution?

Part III: Epilepsy

9.05-9.25 IONM in Epilepsy Lecture I

9.25-9.45 IONM in Epilepsy Lecture II

9.45-10.05 IONM in Epilepsy Lecture III

10.00-10.20 Discussion

10.20-10.50 Coffee Break

POSTERIOR FOSSA SURGERY

Part I: Techniques

10.50-11.10 Monitoring oculomotor cranial nerves

11.10-11.20 Free-running EMG for facial nerve monitoring

11.30-11.50 Corticobulbar MEPs

11.50-12.10 Mapping the brainstem

12.10-12.20 Discussion

Part II: IONM assisted Surgery

12.20-12.40 Skull base surgery

12.40-13.00 Brainstem surgery

13.00-13.20 Vestibular Schwannoma surgery

13.20-13.30 Discussion

13.30-14.30 Lunch

SPINE AND SPINAL CORD SURGERY

Part I: Monitoring and mapping the Spinal Cord

14.30-14.45 Dorsal column mapping

14.45-15.00 Motor mapping of the spinal cord: What are we really stimulating?

15.00-15.15 Discussion

15.15-15.30 Monitoring the bulbocavernosus reflex in tethered cord surgery

15.30-15.35 Discussion and close of the session

17.30-20.00 Special Session (at the Networking dinner venue)

Special Session: Innovation and Education in IONM

17.30-17.45 Continuous dynamic mapping with a suction device during brain tumor surgery

17.50-18.05 Continuous dynamic mapping with the ultrasonic surgical aspirator during brain

tumor surgery

18.10-18.25 Continuous dynamic mapping with the ultrasonic surgical aspirator during spinal cord tumor surgery

18.30-18.45 Back to the future: New perspectives in teaching IONM in developing countries

18.50-19.20 **Keynote Lecture 2:** What young neurosurgeon should know about IONM?
A perspective from the EANS Training Committee

20.00-23.30 *Networking Dinner*

Saturday 16th December

7.45-9.00 Breakfast seminar I (How I do it)

BS1 Monitoring SEPs, MEPs and D-wave in spinal cord surgery

BS2 IONM assisted vestibular schwannoma surgery

BS3 Developing strategies to support global IONM

BS4 IONM assisted tethered cord surgery

BS5 IONM assisted brainstem surgery

Part II: Spine and spinal cord surgery

9.05-9.25 What's new in IONM for pedicle screw and other spinal procedures

9.25-9.30 Discussion

9.30-9.50 Extramedullary spinal cord tumors: Reflections on more than 100 monitored cases

9.50-9.55 Discussion

9.55-10.15 Intramedullary spinal cord tumors: Myth and reality on D-wave monitoring

10.15-10.20 Discussion

10.20-10.50 Coffee break

10.50-11.10 Neuromonitoring in Spinal Cord Injury

11.10-11.30 New perspectives in monitoring spinal cord reflexes

11.30-11.45 Discussion

11.45-12.05 Tethered cord surgery: Dutch experience

12.05-12.25 Tethered cord surgery: Indian experience

12.25-12.35 Discussion

12.35.13.35 Lunch

13.35-15.30 **Round table discussion:** *Controversies and future perspectives in neuromonitoring*
(Training, Education, Medico legal aspects, ...)

15.30 Conclusions