



BR.A.I.N. 2019

BRESCIA ANESTHESIA AND INTENSIVE CARE NEUROMONITORING SUMMER SCHOOL - 4TH EDITION

SCIENTIFIC COMMITTEE:

FRANK RASULO

RITA BERTUETTI

NICOLA LATRONICO



SIAARTI

PRO VITA CONTRA DOLOREM SEMPER



UNIVERSITÀ
DEGLI STUDI
DI BRESCIA

BRESCIA 23-27 SEPTEMBER 2019

PRESENTATION

- State of the Art Clinical Evaluation of the Brain Injured Patient;
- Oxygenating the Injured Brain;
- Pupillometry;
- Brain Ultrasound;
- Essential Neurophysiology: pEEG, qEEG - in Anesthesia & ICU;
- Monitoring the peripheral nervous system and muscles in the ICU;
- Invasive ICP monitoring by Intensivists;
- BIG DATA Processing in ICU

All topics will be coupled with theory and practice, however the main objective of the course will be the «hands-on» sessions during which all the course participants will have the chance to learn how to apply all the monitoring techniques and devices.

SCIENTIFIC PROGRAM

DAY 1

08:15-09:00 Registration

09:00-09:15 Objectives of the course
Frank Rasulo

Neurological evaluation of the acutely brain injured patient

09:15-09:35 Lectio magistralis
State of the Art Clinical Evaluation of the Brain Injured Patient: beyond the GCS
Nicola Latronico

09:35-09:45 PUPILLOMETRY – From the street to the ICU
Frank Rasulo

09:45-09:55 PUPILLOMETRY – For pain management
Frank Rasulo

09:55-10:10 Discussion
Frank Rasulo

10:10-10:30 COFFEE BREAK

Brain Oxygenation: starting from the beginning

10:30-11:00 Gaining Access: Importance of oxygenating the injured brain
Massimiliano Sorbello

11:00-11:10 Monitoring Oxygenation Invasively: Indications and Usefulness

11:10-11:40 Monitoring Oxygenation Non-Invasively: protecting the NON-injured Brain
Basil Matta

11:40-12:30 Discussion
Frank Rasulo

12:30-14:00 LUNCH

14:00- 17:30 Hands-on Session - 3 groups rotating on:
1. Difficult airway management: tracheal introducers - **Massimiliano Sorbello**
2. Pupillometry utilisation and interpretation - **Frank Rasulo**
3. NIRS utilization - **Paolo Gritti, Basil Matta**

DAY 2

Brain Ultrasonology

10:00-10:30 Lectio magistralis
Transcranial Doppler – Where it all began and where we're going
Rune Aaslid

10:30-10:40 Transcranial Color Coded Duplex Doppler: How to do it now
Simone Piva

10:40-11:00 Discussion
Frank Rasulo

11:00-11:20 COFFEE BREAK

11:20-11:30 Where and when to use it: Vasospasm
Marina Munari

11:30-11:40 Where and when to use it: Ischemic Stroke
Paolo Gritti

11:40-11:50 Where and when to use it: Optic Nerve Sheath diameter
Rita Bertuetti

11:50-12:00 Where and when to use it: Intracranial Hypertension Bundle
Frank Rasulo

12:00-12:30 Discussion
Frank Rasulo

12:30-14:00 LUNCH

14:00- 18:00 Hands-on Session - 4 groups rotating on:
1. Basic- intermediate TCCD station - **Simone Piva, Elena De Peri**
2. Advanced TCCD - **Frank Rasulo, Paolo Gritti**
3. Brain ultrasound simulator - **Nicola Zugni**
4. Continuous monitoring - **Rita Bertuetti**

DAY 3

EEG Monitoring of the Critically Ill Patient

09:00-09:20	Introduction to the use of EEG in the critically ill patient Paolo Zanatta
09:20-09:40	Processing the EEG signal: making things simple Pierre Pandin
09:40-10:00	Processed EEG - Importance in Anesthesia, importance in ICU Stefano Romagnoli
10:00-10:15	Discussion Frank Rasulo
10:15-10:30	COFFEE BREAK
10:30-13:30	Hands-on Session Processed EEG monitoring case simulator Stefano Romagnoli, Pierre Pandin
13:30-14:30	LUNCH
Monitoring the Injured Brain	
14:30-14:50	Lectio Magistralis 10 years of research on Brain Injury... any progress? Giuseppe Citerio
14:50-15:00	Intracranial Hypertension following brain injury how much of a problem is it? Carlo Alberto Castioni
15:10-15:20	Invasive ICP monitoring by Intensivists Frank Rasulo
15:20-17:30	Hands-on Session 1. ICP bolt insertion technique - Frank Rasulo 2. workshop on ICP monitoring and interpretation - Giuseppe Citerio, Carlo Alberto Castioni 3. workshop on invasive brain oxygenation monitoring and interpretation Paolo Gritti

DAY 4

Muscle & Nerve Monitoring

09:30-10:00	The sick and the Weak Nicola Latronico
10:00-10:10	Polineuropathy or Hypokinetic Delirium? Simone Piva
10:10-10:40	Lectio Magistralis Role of neurophysiological examination of the peripheral nervous system and muscles in the ICU Wermer Z'Graggen
10:40-11:00	Discussion Frank Rasulo
11:10-11:30	COFFEE BREAK
11:30-11:40	Decomposizione high-density EMG Claudio Orizio
11:40-12:00	High-density EMG Francesco Negro
12:00-12:30	Discussion Frank Rasulo
12:30-14:00	LUNCH
14:00-17:00	Hands-on Session: : simplified EMG technique and application Silvia Barbieri, Elena Peli, Bruno Guarneri, Claudio Orizio, Francesco Negro

DAY 5

Machine Learning and Artificial Intelligence in the ICU

09:00-09:30	Lectio Magistralis The Importance of Collaborating with Bio Engineers and Data Analysts Elena Bignami
09:30-10:00	BIG DATA in the ICU: How to deal with the large numbers Ari Ercole
10:00-10:30	Discussion Frank Rasulo
10:30-11:00	COFFEE BREAK
11:00-11:30	Closed-loop Anesthesia – Dawn or Sunset? Antonio Visioli
11:30-12:00	Workshops: an example of machine integration Massimiliano Paltenghi
12:00-16:00	Hands-on Session ICM plus monitoring workshop: what, when, how and why use it Ari Ercole, Rita Bertuetti
13:00-14:00	LUNCH
16:00-16:40	Closing remarks Frank Rasulo

FACULTY

Rune Aaslid (Bern)
 Rita Bertuetti (Brescia)
 Elena Bignami (Parma)
 Carlo Alberto Castioni (Torino)
 Giuseppe Citerio (Monza)
 Elena De Peri (Brescia)
 Ari Ercole (Cambridge)
 Paolo Gritti (Bergamo)
 Bruno Guarneri (Brescia)
 Nicola Latronico (Brescia)
 Basil Matta (Cambridge)
 Marina Munari (Padova)
 Francesco Negro (Brescia)
 Claudio Orizio (Brescia)
 Pierre Pandin (Bruxelles)
 Massimiliano Paltenghi (Brescia)
 Elena Peli (Brescia)
 Simone Piva (Brescia)
 Frank Rasulo (Brescia)
 Stefano Romagnoli (Firenze)
 Massimiliano Sorbello (Catania)
 Antonio Visioli (Brescia)
 Paolo Zanatta (Verona)
 Werner Z'Graggen (Bern)
 Nicola Zugni (Brescia)

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BRESCIA ANESTHESIA AND INTENSIVE CARE NEUROMONITORING

Il Corso SIAARTI “**Brescia Anesthesia and Intensive Care Neuromonitoring - Summer School - 4th edition**” è stato accreditato presso la Commissione Nazionale per la Formazione Continua con Obiettivo Formativo XXX “1 - Applicazione nella pratica quotidiana dei principi e delle procedure dell’evidence based practice (EBM - EBN - EBP)” per la figura professionale del Medico Chirurgo con specializzazione in Anestesia e Rianimazione e per un numero massimo di n. **100 destinatari** in totale.

L’evento ha ottenuto 30 crediti formativi - ID ECM: 273614 ed. 1

VENUE

Università degli studi di Brescia
Facoltà di Medicina e Chirurgia
Edificio Polifunzionale - Aula B2
Viale Europa, 11
Brescia

REGISTRATION AND COURSE FEES

Physicians: 350 €
Residents: 150 €

INFORMATION AND CONTACTS

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