

4th Edition
Sept. 23rd to the 27th 2019

MAIN TOPICS

- 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

Crash Presentations
Theory and «hands-on» practice

Day 1°

Introduction and objectives of the Course

State of the Art Clinical Evaluation of the Brain Injured Patient: beyond the GCS
First, oxygenate the Injured Brain

PUPILLOMETRY – from the prehospital setting to the ICU
PUPILLOMETRY – for pain management

Day 2°

Hands-on session
Brain Ultrasound

Transcranial Doppler

Transcranial Color Coded Duplex Doppler

You can't leave until you learn session

Day 3°

Time for Neurophysiology

Quantitative EEG
Processed EEG - in Anesthesia
Processed EEG - in ICU

Monitoring the Injured Brain

Invasive ICP and PtiO₂ monitoring by Intensivists

Day 4°

peripheral nervous system and muscles
Electromiography
Hands-on session

Day 5°

BIG DATA Processing in ICU

How to deal with the large numbers in Anesthesia & the ICU

CONTESTS and prize awards

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

• Rune Aaslid.	Bern
• Rita Bertuetti	Brescia
• Carlo Alberto Castioni	Torino
• Giuseppe Citerio	Monza
• 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
• Flavia Petrini	Chieti
• Simone Piva	Brescia
• Frank Rasulo	Brescia
• Stefano Romagnoli	Firenze
• Massimo Sorbello	Catania
• Antonio Visioli	Brescia
• Paolo Zanatta	Verona
• Werner Z'Graggen	Bern

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Spazio riservato a Mandragora

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Scientific Committee
Prof. Frank Rasulo
Prof. Nicola Latronico
Dott.ssa Rita Bertuetti

Registration

Introduction to the course:

- SIAARTI president

Prof.ssa

Objectives of the course:

Day 1° Neurological evaluation of the acutely brain injured patient

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State of the Art Clinical Evaluation of the Brain Injured Patient: beyond the GCS

PUPILLOMETRY – from the street to the ICU

PUPILLOMETRY – for pain management

Brain Oxygenation: starting from the beginning

Gaining Access: Importance of oxygenating the injured brain

Monitoring Oxygenation Invasively: Indications and Usefulness

Monitoring Oxygenation Non-Invasively: protecting the NON-injured Brain

Day 2° Brain Ultrasonology

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Transcranial Doppler – where it all began and where we're going

Transcranial Color Coded Duplex Doppler:

How to do it..now

Where and when to use it:

- Vasospasm
- Stroke Ischemico
- Optic Nerve Sheath diameter
- Intracranial Hypertension Bundle

Flavia Petrini

Frank Rasulo

Nicola Latronico

Frank Rasulo

Discussion

Coffee Break

Massimo Sorbello

Paolo Gritti

Basil Matta

Discussion

Lunch

Rune Aaslid

Simone Piva

Discussion

Coffee Break

Marina Munari

Paolo Gritti

Rita Bertuetti

Frank Rasulo

Discussion

Lunch

08:00 – 08:45

09:00 – 09:10

09:10 – 09:15

09:15 – 09:35

09:35 – 09:45

09:45 – 09:55

09:55 – 10:10

10:10 – 10:30

10:30 – 11:00

11:00 – 11:10

11:10 – 11:40

11:40 – 12:30

12:30 – 14:00

Hands-on session

10:00 – 10:30

10:30 – 10:40

10:40 – 11:00

11:00 – 11:20

11:20 – 11:30

11:30 – 11:40

11:40 – 11:50

11:50 – 12:00

12:00 – 12:30

12:30 – 14:00

Hands-on session

The participants will all have the chance to use and perform Pupillometry, Brain O₂ NIRS and difficult airway access simulator

The participants will all have the chance to use and perform Transcranial Doppler and Transcranial color coded duplex Doppler A TCD Simulator will be present.

Day 3° EEG Monitoring of the Critically Ill Patient

Introduction to the use of EEG in the critically ill patient

Processing the EEG signal: making things simpler

*Processed EEG - importance in Anesthesia
importance in ICU*

Monitoring the Injured Brain

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10 years of research in Brain Injury...any progress?

Intracranial Hypertension following brain injury how much of a problem is it ?

Invasive ICP monitoring by Intensivists

Workshop on Invasive ICP and PtiO2 Monitoring
Invasive Brain Tissue Oxygenation

Day 4° Muscle & Nerve Monitoring

The sick and the Weak

Polineuropathy or Hypokinetic Delirium?

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*Role of neurophysiological examination of the peripheral
nervous system and muscles in the ICU*

Decomposizione high-density EMG

Paolo Zanatta	09:00 – 09:20
Pierre Pandin	09:20 – 09:40
Stefano Romagnoli	09:40 – 10:00
Discussion	10:00 – 10:15
Coffee Break	10:15 – 10:30
Hands-on session	10:30 – 13:30
Lunch	13:30 – 14:30

The participants will all have the chance to apprehend and become familiar with EEG monitoring.

Giuseppe Citerio	14:30 – 14:50
Carlo Alberto Castione	14:50 – 15:00
Frank Rasulo	15:10 – 15:20
Hands-on session	

The participants will learn how to perform intracranial burholes for the insertion of invasive ICP and PtiO2 monitoring.

Frank Rasulo
Paolo Gritti

Nicola Latronico	09:30 – 10:00
Simone Piva	10:00 – 10:10
Werner Z'Graggen	10:10 – 10:40
Discussion	10:40 – 11:10
Coffee Break	11:10 – 11:30
Claudio Orizio	11:30 – 11:40
Francesco Negro	11:40 – 12:00
Discussion	12:00 – 12:30
Lunch	12:30 – 14:00
Hands-on session	

The participants will all have the chance to apprehend and become familiar with ENG and EMG monitoring.

Silvia Barbieri Elena Peli Bruno Guarneri
Claudio Orizio Francesco Negro

Day 5° Machine Learning and Artificial Intelligence in the ICU

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The importance of Collaborating with Bio Engineers and Data Analysts

BIG DATA in the ICU: How to deal with the large numbers

Closed-loop Anesthesia – Dawn or Sunset?

Workshops: an example of machine integration



Afternoon Hands-on session

Maurizio Cecconi

09:00 – 09:30

Ari Ercole

09:30 – 10:00

Discussion

10:00 – 10:30

Coffee Break 10:30 – 11:00

Antonio Visioli

11:00 – 11:30

Massimiliano Paltenghi

Hands-on session

The participants will all have the chance to apprehend and become familiar with the ICMplus® monitoring system

Contests and Prizes !!!

Spazio riservato a Mandragora

