





European Federation of Societies for Ultrasound in Medicine and Biology

We would like to invite you to the postgraduate course on

# Ultrasound in the intensive and emergency medicine

## **Basics of the Point Of Care Ultrasound**

taking place on 4.-8.June 2018 in Olomouc, Czech Republic.

This course is endorsed by the

**EFSUMB** (European Federation of Societies for Ultrasound in Medicine and Biology)

and

ČSUM (Czech Society for Ultrasound in Medicine).



The course is intented for physicians beginning or already working with ultrasound in the ICUs, EDs, EMSs or anesthesiology departements. Our aim is to provide an introduction for the beginners as well as to improve knowledges and skills of advanced users of this modern and evolving tool in the acute medicine. We put great emphasis on practical training in small groups of participants.

Course schedule 5-6 days (see below), instructor:participant ratio of max.1:4

Venue Bea Centrum, Kosmonautů 1, 779 00 Olomouc, Czech Republic

Registration via e-mail <u>kurzy@visualmedicine.cz</u>

Fees 790 Euro (by 20 April 2018), 890 Euro (by 1 June 2018), Fee incl. VAT

The fee includes: course attendance, coffee break and lunch during the course, brief handouts with an educational abstract

Accomodation Not provided. The venue is located direct near the city centre

with a lot of accomodation facilities.

Course language English

#### **Instructors**

Volpicelli Giovanni, MD., FCCP,

Dep. of Emergency Medicine, Azienda Ospedaliero Universitaria San Luigi Gonzaga, Torino, Italy Beňačka Jozef, MD., PhD.,

Dep. of Internal Medicine, Medical Hospital Trnava, Slovakia

Milan Kocián, MD.,

Dep. of Anesthesiology and Intensive Care Medicine, Asklepios Klinik, Burglengenfeld, Germany Šimek Rastislav, MD.,

Dep. of Pulmonary Medicine, Tomas Bata Regional Hospital, Zlin, Czech Republic

Axmann Karel, MD.,

Dep. of Anesthesiology and Intensive Care Medicine, University Hospital Olomouc, Czech Republic Burša Filip, MD., PhD.,

Dep. of Anesthesiology and Intensive Care Medicine, University Hospital Ostrava, Czech Republic Doležal Ladislav, Ing., PhD.,

Dep. of Medical Biophysics, Faculty of Medicine, Palacky University, Olomouc, Czech Republic

#### Course organizer

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#### **Course Schedule**

## Day 1 Basics of the transthoracic echocardiography 1

08:30 - 08:35 introduction

08:35 - 10:15 physical principles of ultrasound, setting of the ultrasound machine

10:30 - 12:00 basic transthoracic views, identification of heart structures

12:00 - 13:00 hands-on training

13:00 - 14:00 lunch

14:00 - 14:45 systolic function of the hearth

14:45 - 17:00 hands-on training

17:00 discussion, end of the day 1

### Day 2 Basics of the transthoracic echocardiography 2

08:30 - 09:30 hearth valves, morfology and function, valve palologies

09:30 - 10:45 hands-on training

11:00 - 11:45 pericardium, great vessels - normal findings and basic patologies

11:45 - 12:30 hands-on training

12:30 - 13:30 lunch

13:30 - 14:30 diastolic function of the hearth

14:30 - 17:00 hands-on training

17:00 discussion, end of the day 2

#### Day 3 Lung ultrasound

08:30 - 09:00 principles of the lung ultrasound, setting of the ultrasound machine

09:00 - 09:15 propedeutics in lung ultrasound

09:15 - 09:45 normal findings (lung sliding, A-lines, lung puls, no-PLAPS)

09:45 - 10:15 hands-on training

10:30 - 11:30 patological findings (B-lines, C-lines, shred sign)

11:30 - 12:00 hands-on training

12:00 - 13:00 lunch

13:00 - 13:45 patological findings (pneumothorax)

13:45 - 14:15 hands-on training

14:30 - 15:30 patological findings (PLAPS, bronchograms)

15:30 - 17:00 hands-on training

17:00 discussion, end of the day 3

#### Day 4 Hemodynamic monitoring using ultrasound

- 08:30 09:45 basic pathophysiology of hemodynamics, measurement of cardiac output, fluid responsiveness
- 10:00 12:00 hands-on training
- 12:00 12:30 FEEL protocol
- 12:30 13:00 lunch
- 13:15 14:00 schock states and fluid responsiveness displayed by ultrasound, FALLS protocol

#### Basics of the vascular ultrasound and Ultrasound guided vascular accesses

- 14:10 15:00 vascular ultrasound in the ICU normal findings, venous thrombosis
- 15:00 16:00 hands-on training
- 16:15 16:45 ultrasound guided puncture and cathetrisation of central vein, periphery vein and artery
- 16:45 18:30 hands-on training manual skills
- 18:30 end of the day 4

#### Day 5 FAST and Basics of abdominal ultrasound in acute medicine

- 08:30 09:30 normal findings in the abdominal ultrasound, identification of structures FAST (Focused Assessement with Sonography in Trauma)
- 09:30 11:30 hands-on training
- 11:30 12:30 presentation of the main abdominal patologies
- 12:30 13:30 lunch

#### Diferencial diagnosis of dyspnea using ultrasound

- 13:30 14:30 diferencial diagnosis of dyspnea using ultrasound , BLUE protocol diagnosis of pulmonary embolism
- 14:30 16:50 hands-on training (sonography in dyspnea)
- 16:50 17:00 discussion, end of the course

#### Day 6 The sixth day

We offer the sixth day (Saturday, 9 June 2018, 8:30 - 14:30) with **whole day hands-on training** in small groups for participants wanting to train new skills in order to repeat main topics presented in previous days.

The participation on this day is not included in the course fee. The sixth day fee does 150 Euro incl.VAT.

If you were interested in the sixth day, please tell it us by your course registration.