

November 22<sup>nd</sup> – 23<sup>th</sup> , 2019

**C.L.U.E.**  
**CARDIO-LUNG ULTRASOUND  
AND HEMODYNAMICS  
IN CRITICAL CARE  
(Level 1 Workshop)**

## FACULTY&TUTORS

F. Barra (Humanitas, Milano)  
R.M. Bragato (Humanitas, Milano)  
S. Brusa (Humanitas, Milano)  
M. Cecconi (Humanitas-Hunimed, Milano)  
E. Costantini (Humanitas, Milano)  
M. Curzi (Humanitas, Milano)  
F. Fazzari (Humanitas, Milano)  
N. Fusilli (Humanitas, Milano)  
E. Giustiniano (Humanitas, Milano)  
Y. Gollo (Humanitas, Milano)  
M. Greco (Humanitas, Milano)  
F. Guarracino (University of Pisa)  
R. Lungu (Humanitas, Milano)  
G. Maggio (University of Pavia)  
M. Meco (Humanitas, Bergamo)  
A. Messina (Humanitas, Milano)  
F. Piccirillo (Humanitas, Milano)  
G. Tavazzi (University of Pavia)

## INTRODUCTION:

CLUE is a course that wants to give delegates bedside ultrasound skills to assess, monitor and treat patient during hemodynamic instability. While focused on the cardiovascular function (i.e. the heart) the course takes a 360-degree approach to the problem. Clinical assessment as well as the importance of heart lung interactions are explained in detail. Practical ultrasound skills are taught in very interactive way over the two days. On top of this CLUE gives the participants the extra skill to

learn and integrate advanced hemodynamic monitoring in between echocardiographic assessments. In this way a patient can be assessed, treated and monitored continuously during the different phases of his/her resuscitation and stabilization. World experts in the field, a high degree of interaction with a 1 to 2 ratio between tutors and delegates for the hands on and simulation parts makes this one of the most practical courses on the topic in Europe. Do not miss it!

## PROGRAMME

### 1<sup>st</sup> DAY

- 09.30** Registration
- 10.00** Welcome and Presentation of the course and students-groups setting  
*Enrico Giustiniano*
- THE CLINICAL PROBLEM AND HOW TO APPROACH IT.**  
*Chairmen: Fabio Guarracino*
- 10.15** Basic Heart Ultrasound in ICU patient  
*Fabio Guarracino*
- 10.35** Respiratory Failure: how it can impair hemodynamics?  
*Alessandro Protti*
- 10.55** Coffee break
- 11.20** Heart-Lung interaction  
*Guido Tavazzi*

- 11.40** Advanced Hemodynamic Monitoring in High Risk surgical patient (partially interactive)  
*Enrico Giustiniano*
- 12.00** The US and the main TT-echo windows  
*Mirko Curzi*
- 12.20** Lung Ultrasounds in ICU  
*Giuseppe Maggio*
- 12.45** Lunch

### BASIC-ECHO AFTERNOON

Orario	STATION 1 Echo-Lung Live	STATION 2 Live session (Echocardiography)	Station 1 bis Echo Lung Live	Station 2 bis Cardiac Echo Live
13.45-14.45	A	B	C	D
15.00-15.45	D	A	B	C
16.00-17.00	C	D	A	B
17.15-18.15	B	C	D	A
Tutor Supervisor Giustiniano	Costantini Gollo	Bragato Curzi Fazzari	Maggio Brusa	Fazzari Messina

Out-of-Room Coord. Tutor: Fusilli

- 18.30** End of the day and "see you at restaurant" (20.30)

### 2<sup>nd</sup> DAY

#### The basic-ultrasound and Hemodynamics in ICU

Chairmen: R.M. Bragato

- 08.30** Septic Shock: clinical case and interactive discussion with groups  
*Maurizio Cecconi - Enrico Giustiniano*
- 09.20** Recognising Shock and the patient that requires further monitoring  
*Maurizio Cecconi*
- 09.40** ARDS: clinical case and interactive discussion with groups  
*Guido Tavazzi - Giuseppe Maggio*
- 10.30** Coffee break
- 10.50** My monitoring strategy in different types of shock  
*Fabio Guarracino*
- 11.10** Assessing Adequacy of Perfusion and Treatments  
*Maurizio Cecconi*
- 11.30** Echocardiography during cardiac arrest  
*Elena Costantini*
- 11.50** Cardiogenic Shock: clinical case and interactive discussion with groups  
*Antonio Messina - Fabio Fazzari*
- 12.10** Question time and "Take home message"  
*Stefania Brusa*

- 12.30** Presentation of the following session at Simulation Center  
*Federico Barra*

- 12.40** Lunch

Orario	Station 1	Station 2	Station 3	Station 4	Station 5
13.30-14.30	A	E	D	C	B
14.15-15.15	B	A	E	D	C
15.30-16.30	C	B	A	E	D
fast coffee break					
16.45-17.45	D	C	B	A	E
18.00-19.00	E	D	C	B	A
Tutor Supervisor Bragato	Costantini Gollo	Curzi Fazzari	Barra Greco Messina	Fusilli Giustiniano	Meco Lungu

Out-of-Room Coord. Tutor: Brusa

- 16.30** Conclusion of the course (Customer satisfaction form) and delivery of the certification
- 16.45** Faculty/Tutors Debriefing

**STATION 1**  
Lung ultrasound: Hands on

**STATION 2**  
Echocardiography: Hands on

**STATION 3**  
Clinical cases: FloTrac/EV 1000 Monitoring and Heart&Lung US

**STATION 4**  
Test: multiple choice questions and interactive discussion

**STATION 5**  
Clinical cases: "What do you see?" and Hemodynamic diagnosis in ICU and OR

## MODALITÀ D'ISCRIZIONE

E' necessario il pagamento della quota d'iscrizione

Medici: 320,00 € (IVA incl.)

Specializzandi: 160,00 € (IVA incl.)  
su [humanitasedu.it](http://humanitasedu.it)

La quota d'iscrizione dà diritto alla frequenza delle sessioni teoriche e a quelle pratiche, catering, ECM ed attestato di frequenza a fine corso.

## EDUCAZIONE CONTINUA IN MEDICINA

E' stato richiesto l'accREDITAMENTO del corso al sistema ECM (Educazione Continua in Medicina) della Regione Lombardia

## SEDE

Humanitas University  
Mario Luzzatto Simulation Center  
Via Rita Levi Montalcini, 4  
Pieve Emanuele MI

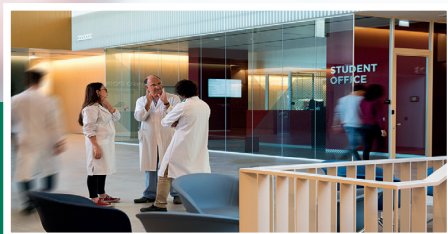
## SEGRETERIA ORGANIZZATIVA

Mario Luzzatto Simulation Center

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[luzzattosimcenter@hunimed.eu](mailto:luzzattosimcenter@hunimed.eu)



## LA SIMULAZIONE AL SERVIZIO DELL'EDUCATION

Il Centro dispone di **3 sale di simulazione ad alta fedeltà**, **2 per la simulazione a media e bassa fedeltà**, **4 sale multifunzione**, **3 sale regia**, **1 laboratorio di fisioterapia** e un **wet lab** interamente allestito come una moderna sala chirurgica e dotato di tutte le tecnologie e gli equipaggiamenti per lo sviluppo di attività educative in ambito medico-chirurgico e per lo studio dell'anatomia. Sono inoltre presenti **3 distinte sale plenarie** con capienze variabili da 25 a 45 posti e un Auditorium che può accogliere, comodamente sedute, da 150 a 240 persone, oltre a varie sale più piccole per debriefing e riunioni. Tutte le sale di simulazione, il wet lab, le sale plenarie e l'Auditorium sono equipaggiate con i più moderni sistemi audio-video e connesse tra loro, garantendo così la massima interattività tra i vari ambienti, durante lo svolgimento dei lavori.