# ADVANCED SIMULATION



# CHAMPIONS LEAGUE **SMART 2024**



Allianz MiCo - North Wing Milan | May 29-31, 2024





In collaboration with Accurate



## INTRODUCTION

The post-graduate training plans provided by the Italian Medical Specialization Schools, which represent the environment of professional growth for young colleagues, are currently based on a traditional teaching approach which does not provide significant technical hands-on training.

To compensate for this limitation, partly due to the unavailability of adequate contexts in the institutional training network, and to respond to the growing demand for field training by young professionals, in recent years **High Fidelity Simulation (HFS)** has taken on an important role as an integrative training path.

This educational initiative, now in its second year after the success of the 2023 edition, fits into the context described above with an engaging and dynamic formula based on an exciting team competition reserved for young professionals. Thanks to a faculty of experts in medical simulation, the use of special environments with ad-hoc setups, hyper-realistic mannequins and advanced technologies provided by the major Italian company in the field of Medical Simulation, the experience of HFS and structured debriefing will be the keystone of a high level pre-meeting full immersion experience.

Participants will be involved in a variety of scenarios representing different contexts, from the Intensive Care Unit to the Delivery Room, from the Operating Room to the Hostile Environment, training themselves in the use of new techniques, instruments and strategies in the fields of Anesthesia, Resuscitation and Intensive Care. Problem solving, decision making, the best medical technologies available today and the use of CRM 'Crisis Resource Management' will be key strategies for implementing professional skills.







### FACULTY

#### SCIENTIFIC BOARD

Elena Giovanna Bignami, Parma (I) Luca Brazzi, Torino (I) Luciano Gattinoni, Goettingen (D) Massimo Girardis, Modena (I) Salvatore M. Maggiore, Chieti (I) Stefano Romagnoli, Firenze (I)

#### INSTRUCTORS

Alberto Andreotti, Modena (I) Francesco Barbani, Firenze (I) Simone Campani, Firenze (I) Luca Carenzo, Milano (I) Davide Colombo, Novara (I) Alessandro Costa, Novara (I) Andrea Costamagna, Torino (I) Lorenzo Dall'Ara, Modena (I) Francesca Livi, Firenze (I) Francesco Petrucci, Viterbo (I)

#### **TECHNICAL MANAGER**

Massimo Giannessi, Accurate - Parma (I)

VENUE

### Allianz MiCo North Wing Gate 14 Via Gattamelata 20149 Milan Italy









# **TRAINING GOALS**

Through the team competition formula, an integrated training will be provided based on two different areas of skills:

- Technical-scientific skills to be acquired through specific workshops, the support of trainers and the application of Good Clinical Practices and Guidelines.
- Relational-managerial skills to be developed through experiences of team working, decision-making and problem solving supported by HFS and CRM.









# **COMPETITION ORGANIZATION**

The competition involves the participation of **8 teams** of medical residents (4 participants + 1 tutor per team), who will compete in 8 rounds.

The first part of the competition will take place on **Tuesday 28 May** in **Milan** in special environments with ad-hoc setup at the **Allianz MiCo North Wing**.

In the first part, the 8 teams will rotate through all the scenarios scheduled in the program (see details on the following pages), receiving a score for each scenario. At the end of the day, a final ranking will be drawn up.

The 4 teams gaining the highest scores will advance to the semi-finals which will take place on **Wednesday 29 May** during the **35th SMART** at the **Simulation Center** set up in the Exhibition Area of the **Allianz MiCo North Wing, Level 1.** 







# **COMPETITION ORGANIZATION**

The semi-finals, the final and the Award Ceremony will take place during the **35th SMART** at the **Allianz MiCo North Wing**.

### SEMI-FINALS AND FINAL SCHEDULE

	DATE	TEAMS
SEMI FINAL 1	Wednesday May 29, 2024 - Morning	Semi-finalist Team 1 vs. Semi-finalist Team 2
SEMI FINAL 2	Wednesday May 29, 2024 - Afternoon	Semi-finalist Team 3 vs. Semi-finalist Team 4
FINAL	Thursday May 30, 2024 - Morning	Finalist Teams







## **AWARD CEREMONY**

The Award Ceremony will be held during the **35<sup>th</sup> SMART** on **Thursday 30 May** in the afternoon.



### PRIZES

- Symbolic trophy awarded to the winning team

- Registration voucher for the 36<sup>th</sup> SMART 2025 awarded to all team members







- H 08:30 09:00REGISTRATION<br/>Registration of the 8 teams and Welcome CoffeeH 09:00 09:10WELCOME TO THE 2ND SIMULATION CHAMPIONS LEAGUE!<br/>Welcome from the Faculty and Scientific Board<br/>E.G. Bignami, L. Brazzi, L. Gattinoni, M. Girardis, S.M. Maggiore, S. RomagnoliH 09:10 09:20ICEBREAKER & INTRODUCE OURSELVES!<br/>Introduction of Teams and Instructors<br/>A. Andreotti, F. Barbani, L. Carenzo, D. Colombo, A. Costa, A. Costamagna, L. Dall'Ara, F. Livi
- H 09:20 09:45 KICK-OFF PLENARY SESSION What about High Fidelity Simulation, NTS & CRM? *A. Andreotti*
- H 09:45 10:00 SETUP OF SCENARIOS AND ASSIGNMENT OF THE TEAMS

#### H 10.00 – 13.15 ROUNDS ROTATION - MORNING

H 10:00 – 10:45 ROUND 1

Team A : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!"

Team B : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia"

Team C : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."

Team D : Room Meeting 6 – Escape Room "30' for Medevac"

Team E : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies"

Team F : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"

Team G : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice" Team H : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice"







#### H 10:45 – 11:30 ROUND 2

Team A : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."
Team B : Room Meeting 6 – Escape Room "30' for Medevac"
Team C : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies"
Team D : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"
Team E : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting"
Team F : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting"
Team G : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!"
Team H : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia"

#### H 11:30 – 11:45 COFFEE BREAK

#### H 11:45 – 12:30 ROUND 3

Team A : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies"
Team B : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"
Team C : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice"
Team D : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice"
Team E : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!"
Team F : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia"
Team G : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."
Team H : Room Meeting 6 – Escape Room "30' for Medevac"







#### H 12:30 – 13:15 ROUND 4

Team A : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting"
Team B : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting"
Team C : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!"
Team D : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia"
Team E : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."
Team F : Room Meeting 6 – Escape Room "30' for Medevac"
Team G : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies"
Team H : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"

- H 13:15 13:30 DEFUSING TIME
- H 13:30 14:30 LUNCH BREAK
- H 14:30 14:50 PLENARY LESSON Septic shock, biomarkers & hemoadsorber: where are we going? *M. Girardis*
- H 14:50 15:00 PROVISIONAL RANKING







H 15.00 – 18.15	ROUNDS ROTATION - AFTERNOON
H 15:00 – 15:45	ROUND 5
	Team A : Room Meeting 4 – HF Simulation #2 "So far so good…for my trauma patient undergoing blended anesthesia"
	Team B : Room Meeting 3 – HF Simulation #1 "Something goes wrongand my patient is still hypotensive!"
	Team C : Room Meeting 6 – Escape Room "30' for Medevac"
	Team D : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia"
	Team E : Room Turquoise 1 (2 <sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"
	Team F : Room Turquoise 1 (1 <sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies"
	Team G : Room Turquoise 2 — Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting""
	Team H : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting"

#### H 15:45 – 16:30 ROUND 6

Team A : Room Meeting 6 – Escape Room "30' for Medevac"
Team B : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."
Team C : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"
Team D : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies"
Team E : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice"
Team G : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia"
Team H : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!"

#### H 16:30 – 16:45 COFFEE BREAK







#### H 16:45 – 17:30 ROUND 7

Team A : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF" Team B : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation: ECLS tips & tricks and strategies" Team C : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting"" Team D : Room Turquoise 2 – Plenary Lesson #2 "Non invasive & invasive ventilation troubleshooting" Team E : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia" Team F : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!" Team G : Room Meeting 6 – Escape Room "30' for Medevac" Team H : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."

#### H 17:30 – 18:15 ROUND 8

Team A : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice"
Team B : Room Turquoise 2 – Plenary Lesson #1 "Hemodynamic monitoring & amines/inotropes – Best clinical practice"
Team C : Room Meeting 4 – HF Simulation #2 "So far so good...for my trauma patient undergoing blended anesthesia"
Team D : Room Meeting 3 – HF Simulation #1 "Something goes wrong...and my patient is still hypotensive!"
Team E : Room Meeting 6 – Escape Room "30' for Medevac"
Team F : Room Meeting 5 – HF Simulation #3 "A common pregnant patient in an ordinary childbirth epidural analgesia..."
Team G : Room Turquoise 1 (2<sup>nd</sup> half) – Workshop #2 "CRRT in the critically ill patient with ARF"
Team H : Room Turquoise 1 (1<sup>st</sup> half) – Workshop #1 "Towards resuscitation : ECLS tips & tricks and strategies"

H 18:15 – 18:30 DEFUSING TIME

Relax & Meet the Expert

#### H 18:30 – 18:45 FINAL RANKING

Final ranking and advancement of the best 4 teams to Semi finals and Final scheduled during the 35<sup>th</sup> SMART

H 18:45 – 19:00 CONCLUSIONS Closing remarks and thanks

SEMI FINALS: WEDNESDAY MAY 29 FINAL: THURSDAY MAY 30







# **DESCRIPTION OF THE SESSIONS**

### Room MEETING 3 – HIGH FIDELITY SIMULATION #1

Title: "Something goes wrong... and my patient is still hypotensive!" Setting: Intensive Care Unit HFS Instructors: Davide Colombo, Alessandro Costa

**Short description**: Patient with out-of-hospital STEMI. After a quick access to the Cath Lab for a double angioplasty + stenting procedure in a context of a triple vessel disease, the patient arrives in the ICU intubated, with a cannulated femoral artery and a IABP in situ... Will you be able to optimize the cardiopulmonary conditions while waiting for a possible cardiac surgery?

### Room MEETING 4 – HIGH FIDELITY SIMULATION #2

Title: "So far so good… for my trauma patient undergoing blended anesthesia" Setting: Operating Room HFS Instructors: Francesco Barbani, Francesca Livi

**Short description**: Approximately 2 hours after a road polytrauma, the patient undergoes thoracic surgery to stabilize a significant flail chest. Following the protocol for thoracic trauma, an epidural catheter is placed early, neuromonitoring is set up for TBI, and a "blended" anesthesia with halogenated agent and chirocaine is started... Knowing how to manage the most common "crises" under anesthesia will not be enough ...







# **DESCRIPTION OF THE SESSIONS**

### Room MEETING 5 – HIGH FIDELITY SIMULATION #3

Title: "A common pregnant patient in an ordinary childbirth epidural analgesia…" Setting: Delivery Room HFS Instructors: Alberto Andreotti, Alessandro Costa

**Short description:** Second gravida primipara woman with previous caesarean section, labor induced... Childbirth epidural analgesia started during prodromal labor. Blood pressure rises in the latest 2 hours. Problem solving, decision making and *in utero* resuscitation in a context of pathological CTGs, dystocias and organ dysfunctions in a severe preeclampsia...

### Room MEETING 6 – ESCAPE ROOM

Title: "30' for Medevac" Setting: War, Role1 Field Hospital HFS Instructors: Lorenzo Dall'Ara, Simone Campani - Francesco Petrucci (M.D. of the Italian Army

**Short description:** In a setting of hostile environment, which is more and more common nowadays, will you be able to manage the first 30 minutes of a critically ill patient with limited resources, looking for smart, effective and integrated solutions while waiting for the final evacuation? A "Big-Salad" style Time Race where participants will have to activate different technical skills and brain teasers.







# **DESCRIPTION OF THE SESSIONS**

### Room TURQUOISE 1 (1<sup>st</sup> half) – WORKSHOP #1

Title: "Towards Resuscitation: ECLS tips & tricks and strategies" Setting: Emergency Room Instructor: Andrea Costamagna

**Short description:** Rationale for the use of ECMO in patients with refractory CPA or peri-arrest, as a life-threatening strategy.

### Room TURQUOISE 1 (2<sup>nd</sup> half) – WORKSHOP #2

Title: "CRRT in the critically ill patient with ARF" Setting: Intensive Care Unit Instructor: Stefano Romagnoli

**Short description:** Rationale for the use of CRRT techniques (CVVHD, CiCa...) in the treatment of critically ill patients with ARF and multiple organ failure.

### Room TURQUOISE 2 – PLENARY LESSON #1 & #2

Lesson #1 Title: "Hemodynamic monitoring & amines/inotropes - Best clinical practice" Tutor: Elena G. Bignami

Lesson #2 Title: "Non invasive & invasive ventilation troubleshooting"

Tutor: Salvatore M. Maggiore







## SIMULATORS & TECHNOLOGIES









## **TECHNICAL EQUIPMENT**

We thank the companies for providing the technical equipment necessary for the realization of the Champions League SMART 2024.





















SONOSITE





stryker





werfen







## **PROMOTION AND DISSEMINATION**

The competition will be published on the **35<sup>th</sup> SMART** website **www.smartonweb.org** and spread on the social media platforms with mention of the Medical Specialization Schools and Sponsoring Companies involved.

During the semi-finals and the final, video recordings will be carried out in order to create a video to be published on YouTube at the end of the event. The video will show the most significant moments of the competition and the award ceremony, highlighting the Medical Specialization Schools involved and the logos of the Sponsoring Companies.











#### **ORGANIZING SECRETARIAT**

Start Promotion Srl Via Soperga, 10 - 20127 Milan Italy

Ph. +39 0267071383 Fax +39 0267072294 www.startpromotion.it | info@startpromotion.it





