

# MECHANICAL CIRCULATORY SUPPORT Masterclass 2024

TORINO-ITALY  
June 7<sup>th</sup> - 8<sup>th</sup>, 2024



**CONGRESS VENUE:** University of Turin - Department of Surgical Sciences,  
Dental School academic laboratory



UNIVERSITÀ  
DI TORINO

Endorsed by:



# MECHANICAL CIRCULATORY SUPPORT

## Masterclass 2024

### Course Overview

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*Mechanical Circulatory Support devices are currently playing an important role in the treatment of refractory advanced heart failure. Technology and surgical strategies are rapidly evolving and improving. However, knowledge transfer and methods to surmount the learning curve remain crucial to improve patients' outcomes. During the EACTS MCS masterclass course which figures as an essential part of and a practical learning/application of the knowledge gained during the annual EACTS MCS academy summit, clinicians who want to acquire more skills in this delicate area will learn key aspects and vital skills of MCS surgical procedures from an internationally recognised group of experts.*

*This course provides cardiothoracic surgeons in training or anyone wishing to enhance their experience with didactic teaching, hands on wet- and dry-lab operative experience and practical demonstrations in the surgical techniques and skills needed for successful use of short-term and durable mechanical circulatory support systems.*

*Delegates will have the opportunity to undertake LVADs, BVADs, TAH and ECMO implantation in simulators under the guidance of a faculty of experienced surgeons, anesthesiologists and intensive care specialists. Candidates will gain practical experience in cannulation for ECMO and microaxial pumps, running these devices, troubleshooting after implantation and in focused echocardiography. All technologies and devices will be also demonstrated in small groups during teaching sessions. This is an intensive two-day course of lectures, debate and practical hands-on surgical practice and opportunity.*

# MECHANICAL CIRCULATORY SUPPORT

## Masterclass 2024

### Target Audience

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*Skills Level 2 - Residents in the final years of training and surgeons at the beginning of independent practice.*

*Open for:*

*Cardiothoracic surgeons, Cardiac anesthesiologists, Cardiologists, Residents and Fellows, Perfusionists, VAD coordinators, Nurses, Technicians.*

### Learning Objectives

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- Understanding of selection of patients for durable left, right and biventricular assist device/TAH implantation, technical aspects of the surgery and clinical outcomes.*
- Understanding the application of tMCS and hands on practice of implantation of devices such as ECMO and mAFP facing with several types of cannulation and insertion.*
- Understanding the role of durable mechanical assist devices and practice of implantation of devices in the wet- and dry-lab.*
- Practicing the technique of VADs and ECMO surgery in mannequins and animal hearts.*
- Practicing (simulation) and understanding the usage and application of TEE/TTE for imaging and assessment of pts on both temporary and durable MCS.*
- Meet experts in the field and discuss important issues in your own development of a MCS program.*

# MECHANICAL CIRCULATORY SUPPORT

## Masterclass 2024

### Faculty

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ABART THEODOR, Wien - AT

BOFFINI MASSIMO, Turin - IT

DE FERRARI GAETANO MARIA, Turin - IT

FAERBER GLORIA, Homburg - DE

FECCIA MARIANO, Rome - IT

GEROSA GINO, Padova - IT

GUSTAFSSON FINN, Copenhagen - DK

KUKUCKA MARIAN, Berlin - DE

LOFORTE ANTONIO, Turin - IT

MUSUMECI FRANCESCO, Palermo - IT

NETUKA IVAN, Prague - CZ

PACE NAPOLEONE CARLO, Turin - IT

PACINI DAVIDE, Bologna - IT

PAROLARI ALESSANDRO, Milan - IT

PILATO MICHELE, Palermo - IT

POTAPOV EVGENIJ, Berlin - DE

RAME EDUARDO, Philadelphia - US

RINALDI MAURO, Turin - IT

SCANDROGLIO MARA, Milan - IT

TCHANTCHALEISHVILI VAKHTANG, Philadelphia - US

TODA KOICHI, Saitama - JP

TROMPEO ANNA CHIARA, Turin - IT

VANDENBRIELE CHRISTOPHE, London - UK

**June 7<sup>th</sup> 2024**

**Temporary-Mechanical Circulatory Support (ECMO, mAFPf, LVAD, RVAD, BVAD)**

CHAIRS: A. Loforte, E. Potapov, G. Faerber, M. Boffini, D. Pacini, M. Feccia, A.C. Trompeo, V. Tchanchaleishvili, M. Rinaldi

**9.00 Welcome, course day 1 introduction, learning objectives.**

**Welcome by European Society for Cardiothoracic Surgery (EACTS), International Society for Mechanical Circulatory Support (ISMCS) and Italian Society for Cardiac Surgery (SICCH)**

A. Loforte, G. Faerber, M. Pilato, A. Parolari

**9.15 Cardiogenic Shock: a clinical need to address soon and properly**

G.M. De Ferrari

**9.30 t-MCS as treatment of different phenotypes of Cardiogenic Shock**

M. Rinaldi

**9.45 Echo imaging pre-, peri-, and post- t-MCS**

M. Kukucka

**10.00 Haemodynamic assessment and management pre-, peri-, and post- t-MCS**

C. Vandenbriele

**10.15 Interactive Discussion I**

**10.45** Coffee break

**11.15 Indications and contraindications: how to select the right patient for type of t-MCS**

G. Faerber

**11.30 Set-up and cannulation options for t-MCS insertion**

E. Potapov

**11.45 Transport on t-MCS**

M. Boffini

**12.00 How to handle complications during t-MCS running**

E. Potapov

**June 7<sup>th</sup> 2024**

- 12.15 Myocardial function recovery after MCS: an update**  
E. Rame
  
  - 12.30 Needs, tips and tricks in pediatric t-MCS and d-MCS population**  
C. Pace Napoleone
  
  - 12.45 Interactive Discussion II**
  
  - 13.15 Lunch**
  
  - 14.15 Training dry- and wet-lab I (Rotational and alternate running)**
    - Station 1 - Echo lab**
    - Station 2 - Impella mAFP lab**
    - Station 3 - d-LVAD wet lab**
    - Station 4 - Total Artificial Heart lab**
    - Station 5 - d-LVAD wet lab**
    - Station 6 - ECMO lab**
  
  - 18.15 Closure day 1** A. Loforte, E. Potapov
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## **Durable-Mechanical Circulatory Support (LVAD, RVAD, BVAD, TAH)**

CHAIRS: A. Loforte, E. Potapov, G. Faerber, M. Boffini, F. Musumeci, M. Feccia, A.C. Trompeo, V. Tchantchaleishvili, M. Rinaldi

**8.30 Welcome, course day 1 introduction, learning objectives. Welcome by European Society for Cardiothoracic Surgery (EACTS), International Society for Mechanical Circulatory Support (ISMCS) and Italian Society for Cardiac Surgery (SICCH)**

A. Loforte, G. Faerber, M. Pilato, A. Parolari

**8.45 Chronic advanced heart failure: current treatment policy and results**

F. Gustafsson

**9.00 d-MCS as treatment of different phenotypes of chronic advanced heart failure: current and merging options**

I. Netuka

**9.15 Concomitant cardiac surgery procedures at the time of d-LVAD implantation**

A. Loforte



**June 8<sup>th</sup> 2024**

- 9.30 Echo imaging pre-, peri-, and post- d-MCS**  
M. Kukucka
- 9.45 Haemodynamic assessment and management pre-, peri-, and post- d-MCS**  
M. Scandroglio
- 10.00 smart d-MCS: how to read displays, controllers and monitors**  
T. Abart
- 10.15 Interactive Discussion III**
- 10.45 Coffee break**
- 11.15 Indications and contraindications: how to select the right patient for type of d-LVAD and TAH**  
G. Faerber
- 11.30 Implantation strategies for d-LVAD**  
E. Potapov
- 11.45 Virtual simulation and surgical implantation of TAH**  
G. Gerosa

- 12.00** **How to handle complications during d-MCS running**  
E. Potapov
- 12.15** **Current development and application of d-MCS in Japan:  
Asia-Pacific population management**  
K. Toda
- 12.30** **Interactive Discussion IV**
- 13.00** Lunch
- 14.00** **Training dry- and wet-lab II** (*Rotational and alternate running*)  
**Station 1 - Echo lab**  
**Station 2 - Impella mAFP lab**  
**Station 3 - d-LVAD wet lab**  
**Station 4 - Total Artificial Heart lab**  
**Station 5 - d-LVAD wet lab**  
**Station 6 - ECMO lab**
- 17.00** **Closure day 2** M. Boffini, E. Potapov
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## **COURSE INFORMATION:**

### **Date**

June 7<sup>th</sup> - June 8<sup>th</sup>, 2024

### **Location**

University of Turin, Department of Surgical Sciences, Dental School academic laboratory  
Via Nizza 130, Turin - Italy

### **Course Directors and Organising Committee**

A. Loforte (Turin), E. Potapov (Berlin), G. Faerber (Homburg), M. Boffini (Turin), M. Rinaldi (Turin)

### **Course Format**

In-person meeting.

Interactive Workshops including presentations and videos.

Interactive device and technology demonstrations employing simulators.

Hands-on wet- and dry-lab operative sessions.

TE echo monitoring and assessment simulations.

### **Course Fee**

**EACTS - ISMCS** Member: € 550.00

**EACTS - ISMCS** Non-Member: € 650.00

Residents, Fellows, Technicians, Perfusionists, Nurses: € 350.00

Fee includes lunch, refreshments and conference kit.

***Kindly note due to the nature of this course, registration may be limited to 60 delegates.***



**Contact details:**

[masterclass.mcs2024@gmail.com](mailto:masterclass.mcs2024@gmail.com)

[www.eventi-comunicare.it](http://www.eventi-comunicare.it)

[www.unito.it](http://www.unito.it)