

## Faculty

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## Registration

FULL REGISTRATION  
€ 1000,00 (VAT 22% included)

YOUNG REGISTRATION (Under 35)  
€ 700,00 (VAT 22% included)

The registration fee includes:

- Entrance
- Refreshments at breaks and light lunch
- Social Dinner
- Free membership to CPXI for 2025

[click for the online registration](#)

## “Young Investigator Abstract Competition”

During the Young Investigator Award session of the 26th Practicum on Clinical Exercise Testing, two prizes will be awarded to outstanding research projects. For this session, scientific abstracts from the field of cardiopulmonary exercise testing may be submitted by researchers of age 35 and less.

## Main sponsor

TBA

## Contacts

Organizing Secretariat



MZ Events Srl  
Via Carlo Farini, 81 – 20159 Milano  
Tel. 0266802323  
eventi@cardiologicomonzino.it

## How to reach us

### PUBLIC TRANSPORT (ATM)

#### *From the city centre*

(1) Take subway 3 (yellow line) toward San Donato up to the last station. Take bus number 45, Via Vittorini stop which is 50 m from Centro Cardiologico Monzino.

(2) Take tram number 27 to Viale Ungheria stop, then take bus number 66 or 67 toward Linate airport and get off in Via Vittorini.

#### *From the Central Station and Rogoredo*

Take subway 3 (yellow line) and follow the directions above.

### BY CAR

The Centro Cardiologico Monzino is situated 100 metres from “Via Mecenate” exit of the Tangenziale Est (bypass road).

#### *From Milan*

Enter Via Mecenate, turn left at the traffic-light just before the entrance to Tangenziale Est and follow indications for CCM (Centro Cardiologico Monzino).

#### *From the A1 (Bologna) motorway*

Take Tangenziale Est (toward Venezia) up to the exit of Via Mecenate, then follow the indication for CCM (Centro Cardiologico Monzino).

#### *From the A1 (Venezia) motorway*

Take Tangenziale Est (toward Bologna) up to the exit of Via Mecenate, then follow the indication for CCM (Centro Cardiologico Monzino).

#### *From the A4 (Torino), A8 (Varese), A7 (Genova), A9 (Como) motorways*

Take Tangenziale Ovest (toward Bologna) and then enter Tangenziale Est (toward Venezia) up to the exit “Via Mecenate” and follow the indications for CCM (Centro Cardiologico Monzino).

### MAP

You can find the map indicating how to reach us on the website [www.cardiologicomonzino.it](http://www.cardiologicomonzino.it) in the “come raggiungerci” area, then clicking on PIANTINA.

 Centro Cardiologico  
Monzino

 CPX International Inc.  
formerly ISEIRE Inc.

9-11 October 2024

# 26<sup>th</sup> European Practicum on Clinical Exercise Testing

Venue  
Centro Cardiologico Monzino  
Via C. Parea 4, Milan



## Introduction

Dear Colleagues and Friends,

The exercise is the essence of human beings. Cardiopulmonary exercise testing (CPET) is the gold standard for exercise performance evaluation.

CPET is a comprehensive clinical and scientific tool in various fields of medicine. It allows the quantification of exercise limitation, the identification of the causes of dyspnea, the risk stratification of patients with several diseases, the preoperative risk assessment and the monitoring of therapeutic responses.

In other words almost everything that is in medicine.

This 3-day course is intended to give an overview of the physiological basis of exercise performance in healthy subjects and in patients with several diseases. The course includes both lectures and interactive sessions in small groups based on participants experience. During the last day scientific abstracts will be presented by participants and the best ones will be awarded.

The course is organized by CPX international, a society started many years ago by Karlman Wasserman. The faculty is based on international recognized experts in cardiopulmonary exercise testing who will lead lectures, laboratory sessions and tutorials, and who will be available for questions and discussions during the entire course.

I cordially invite you to join the 26th European Practicum on clinical exercising testing and welcome you to Milan, the city of Duomo, our famous Cathedral, La Scala Theater, the Sforza Castle and Leonardo's Last Supper.

Piergiuseppe Agostoni (Mecki)  
Course Chair

## Programme

### Wednesday October 9<sup>th</sup>, 2024

- 08:30 Registration / Welcome
- 09:00 Physiological Basis of Exercise Performance  
A. Schmidt-Trucksäss
- 10:20 Pathophysiology of Exercise Limitation  
P.G. Agostoni
- 11:10 **Coffee Break, Refreshments**
- 11:30 Normal Values and their Pitfall  
A. Hager
- 12:00 Conducting the Clinical Study: Equipment, Calibration, Technical Troubleshooting  
E. Salvioni
- 12:30 Formatting exercise test results  
D. Dumitrescu
- 13:00 **Lunch Break**
- 14:00 Interactive Tutorial Sessions in Small Groups (Beginners, Intermediate, Advanced) - Faculty
- 15:00 Protocols: Ramp Tests, Constant Work Rate Tests  
M. Riley
- 15:30 Cardiac Output Measurements during exercise  
P.G. Agostoni
- 16:00 **Coffee Break, Refreshments**
- 16:30 Reflex regulation of ventilation during exercise  
M. Piepoli
- 17:00 Clinical Value of Exercise Hemodynamics  
G. Kovacs
- 17:30 Exercise testing in children  
T. Takken
- 18:00 Welcome Reception

### Thursday 10<sup>th</sup> October, 2024

- 08:30 Exercise Testing in Lung Disease  
F.J. Meyer
- 09:00 Exercise Testing in Pulmonary Vascular Disease  
D. Dumitrescu
- 09:30 Exercise Testing in Congenital Heart Disease  
A. Hager
- 10:00 Exercise Testing in Heart Failure with reduced Ejection Fraction  
P.G. Agostoni
- 10:30 **Coffee Break, Refreshments**
- 11:00 Exercise testing in Heart Failure with preserved ejection fraction  
M. Guazzi
- 11:30 CPET in surgery: Implications for peri- and post-operative management  
S. Jack
- 12:00 Workshop 1: Ramp Exercise Test - Faculty
- 13:00 **Lunch Break**
- 14:00 Pre-and rehabilitation concepts in malignant diseases  
D. Levett
- 14:30 Gas exchange patterns in Metabolic Disorders  
M. Riley
- 15:00 Workshop 2: Constant Workload Test - Faculty
- 16:00 **Coffee Break, Refreshments**
- 16:20 Exercise and heart failure treatment (bblockers)  
M. Contini

- 16:40 Exercise and new heart failure treatment (ARNI, Glifozinz, vericiguat)  
M. Mapelli
- 17:00 Exercise, cardiac amyloidosis and treatment  
P.G. Agostoni
- 17:20 Exercise hypertrophic cardiomyopathy and treatment  
M. Mapelli
- 17:40 Exercise and LVAD  
A. Apostolo
- 18:00 Cardiopulmonary adaptation to hypoxia in the Healthy: The Xtreme Everest Experience  
M. Grocott
- 19:30 **Course Dinner**

### Friday 11<sup>th</sup> October, 2024

- 08:30 Exercise and pacemakers  
G. Cattadori
- 08:50 CPET anemia and iron deficit  
J. Campodonico
- 09:10 Chronotropic deficit  
D. Magri
- 09:30 CPET for the evaluation of athletes  
A. Schmidt-Trucksäss
- 10:00 CPET and pulmonary hypertension treatment  
D. Dumitrescu
- 10:30 **Coffee Break, Refreshments**
- 11:00 Clinical cases  
P. Palermo, C. Vignati (Discussant the faculty)
- 12:00 Interactive Tutorial Sessions in Small Groups (Cardiac, Pulmonary, Pediatric/CHD, PH,) - Faculty
- 13:00 **Lunch Break**
- 14:00 General Assembly Meeting (CPX International) – All
- 14:15 Abstract Competition / Young Investigator Award - Faculty
- 15:30 General Discussion, Certificate Award, Concluding Remarks  
Faculty
- 15:45 **Close of course**