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### REGISTRATION FEES

€ 600 (VAT excluded)

Including:

- Admission to all theoretical and practical sessions
- Congress materials
- Lunches

€ 50 (VAT excluded)

- Social Dinner

€ 750 (VAT excluded)

Including:

- Admission to all theoretical and practical sessions
- Congress materials
- Lunches and Social Dinner
- Hotel Accommodation (1 night - March 13<sup>th</sup>)

(VAT not applied for foreigners attendees)

### FOR ITALIAN ATTENDEES

CARDIOLOGIA  
MALATTIE DELL'APPARATO RESPIRATORIO  
MEDICINA DELLO SPORT  
MEDICINA DEL LAVORO E SICUREZZA DEGLI AMBIENTI DI LAVORO  
13 crediti ECM

### OBIETTIVO FORMATIVO

Contenuti tecnico-professionali (conoscenze e competenze) specifici di ciascuna professione, di ciascuna specializzazione e di ciascuna attività ultraspecialistica

### INFO & REGISTRATION

#### Provider ECM & Organizing secretariat

LT3 s.r.l.  
Via Regina, 61 - 22012 Cernobbio (CO)  
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### SCIENTIFIC SECRETARIAT

Marco Guazzi - Centro E. Malan  
IRCCS Policlinico San Donato  
Milan University

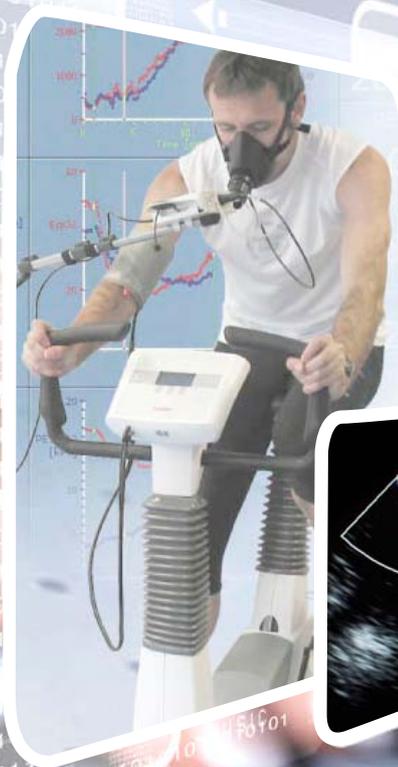
e-mail:  
marco.guazzi@grupposandonato.it

LT3

13<sup>th</sup>-14<sup>th</sup>  
MARCH  
2014

**IRCCS POLICLINICO  
SAN DONATO**  
Aula Magna  
Piazza Edmondo Malan, 2  
San Donato Milanese - MI

Course Director  
**PROF. MARCO GUAZZI**  
U.O. Insufficienza Cardiaca  
e Cardiomiopatie



Supported by  
UNIVERSITÀ DEGLI STUDI DI MILANO  
**P  
SD**  
POLICLINICO SAN DONATO  
IRCCS

FIRST ANNOUNCEMENT

2<sup>nd</sup> THEORETICAL  
AND PRACTICAL  
COURSE:

APPLICATIONS AND DEVELOPMENTS OF  
**CARDIOPULMONARY  
TEST**

AND STRESS ECHOCARDIOGRAPHY  
IN CARDIOLOGY

## Specific Course objectives will be:

1. To recognize and interpret the pathophysiological bases of functional limitation in cardiac patients
2. To combine gas exchange analysis phenotypes with left and right cardiac hemodynamics
3. To make uniform across laboratories the test interpretation and reports as proposed in the 2012 EACPR/AHA CPX Statement
4. To identify future common area of research and development

## Faculty

**FRANCESCO BANDERA**  
Heart Failure and Cardiomyopathies Unit - IRCCS Policlinico San Donato

**ROMUALDO BELARDINELLI**  
Cardiac Rehabilitation, Ospedale Lancisi, Ancona

**UGO CORRÀ**  
Cardiac Rehabilitation, Fondazione Maugeri, IRCCS, Veruno

**STEFANO GHIO**  
S.C. Cardiology, Fondazione IRCCS, Policlinico San Matteo, Pavia

**MARCO GUAZZI**  
Heart Failure and Cardiomyopathies Unit - IRCCS Policlinico San Donato

**MAURO MARZORATI**  
Institute of Bioimaging and Physiology, CNR, Segrate

**ALESSANDRO MEZZANI**  
Cardiac Rehabilitation, Fondazione Maugeri, IRCCS, Veruno

**ROBERT NAEIJE**  
Department of Physiology, Erasme Campus of The Free University of Bruxelles

**PIER LUIGI TEMPORELLI**  
Cardiac Rehabilitation, Fondazione Maugeri, IRCCS, Veruno

**WALTER ZAGGIA**  
Technical Manager, Sesto Fiorentino

## Thursday 13<sup>th</sup> MARCH

### THEORY AND PRACTICE

h 12.30 - 1.30 pm  
Buffet and Registration

h 1.30 - 1.40 pm  
Introduction to the course M. Guazzi

h 1.40 - 2.00 pm  
**Cardiopulmonary Test in Cardiology - Update 2014**  
M. Guazzi

h 2.00 - 3.40 pm  
**Principles and physiological bases of physical performance:**  
● Cardiac output and O<sub>2</sub> extraction M. Marzorati  
● LV-RV and lung interdependence: parallel vs series R. Naeije  
● The dynamic of ventilatory response and gas exchange M. Guazzi

h 3.40 - 4.00 pm  
Questions

h 4.00 - 4.30 pm  
Break

h 4.30 - 5.00 pm  
**The combination of cardiopulmonary test and stress echo: methodology and technical implications** F. Bandera

h 5.00 - 5.30 pm  
**Technical bases: principles of calibration and data validation** W. Zaggia

h 5.30 - 6.30 pm  
**Live Connection with Brigham and Woman Hospital Advanced CPET Laboratory (Boston USA): CPET-invasive hemodynamic study**  
*DISCUSSANTS* R. Naeije, M. Guazzi

h 8.30 pm  
Social Dinner

## Thursday 14<sup>th</sup> MARCH

### CLINICAL CASES

h 8.30 - 11.00 am  
**Live Connection with Cardiopulmonary Laboratory and Imaging: 2 combined CPET-Echo tests**  
*DISCUSSANTS* M. Guazzi, R. Naeije

h 3.00 - 3.20 pm  
**Cardiopulmonary testing and end-points: time for multicenter trials?**  
U. Corrà

h 3.20 - 3.40 pm  
Coffe-break

**Stress echocardiography and analysis of expired gases: a world to discover**  
*MODERATORS* P.L. Temporelli, M. Guazzi

h 3.40 - 4.00 pm  
**Determinants of functional capacity: right heart-pulmonary circulation coupling**  
R. Naeije

**MINI-SYMPOSIUM**  
**The assessment of expired gases in heart disease: future developments and applications**  
*MODERATORS* R. Belardinelli, U. Corrà

h 4.00 - 4.20 pm  
**Mitral dynamic regurgitation: how to measure it and what phenotypes**  
F. Bandera

h 2.00 - 2.20 pm  
**The test in cardiac rehabilitation: what in addition to VO<sub>2</sub>?** A. Mezzani

h 2.20 - 2.40 pm  
**Analysis of expired gases: an added value in the assessment and therapeutic approach of ischemic patient**  
R. Belardinelli

h 4.20 - 4.40 pm  
**The cardiopulmonary exercise testing combined with stress echocardiography: when the pathophysiology guides therapies in HF and COPD** P.L. Temporelli

h 4.40 - 5.00 pm  
Questions

h 5.00 - 5.20 pm  
Take home messages and closing remarks M. Guazzi

h 2.40 - 3.00 pm  
**Pulmonary arterial hypertension and cardiopulmonary exercise testing: clinical relevance and therapeutic implications** S. Ghio