



## CardioLung: Updates in Cardiovascular and Pulmonary Pathophysiology - IV Edition

Program Coordinators: Prof. Carlo Palombo, Prof. Pierluigi Paggiaro, Prof. Mario Marzilli

### Program

Pisa, Historical Medical School,  
and Cardiac and Thoracic Department, University Hospital, Pisa-Cisanello

#### June 20th

##### Course Presentation and Introduction

- 8.30 - 9.30 Registration of participants
- 9.30 - 10.30 Welcome address. *Corrado BLANDIZZI, Pisa, School of Medicine Dean, Mario MARZILLI, Pisa, Chair of Cardiology, Pierluigi PAGGIARO, Pisa, Chair of Pulmonary Pathophysiology, University of Pisa*
- 10.00 - 11.00 Trends in cardiovascular disease. *Mario MARZILLI, Pisa*
- 11.00 - 12.00 WHO Global action plan 2013-2020 for the prevention and control of non-communicable diseases (NCDs): a holistic view. *Giovanni VIEGI, Palermo-Pisa*
- 12.00 - 13.00 Epidemiology of chronic respiratory diseases and cardiovascular comorbidities. *Giovanni VIEGI, Palermo-Pisa*
- 13.00 - 13.30 University of Pisa for International Students: where we are, where we are going to. *Paola CAPPELLINI, Pisa*
- Translational Lecture**
- 15.00 - 16.00 Functional imaging of brain: new perspectives for investigating the brain-heart axis. *Pietro PIETRINI, Lucca-Pisa*
- Basic Vascular Pathophysiology**
- 16.00 - 17.00 Cell-derived microparticles: signaling between endothelium, coagulation and inflammation. *Alessandro CELI, Pisa*
- 17.00 - 18.00 Macro- and microvascular dysfunction. *Alda HUQI, Pisa*

#### June 21th

##### Clinical Patterns in COPD and Ischemic Heart Disease

- 9.00 - 10.00 A network approach to the pathobiology of Chronic Obstructive Pulmonary Disease. *Alessandro CELI, Pisa*
- 10.00 - 11.00 Phenotyping Chronic Obstructive Pulmonary Disease: a New Perspective. *Pierluigi PAGGIARO, Pisa*
- 11.00 - 12.00 Rethinking ischemic heart disease: chronic ischemic syndromes. *Mario MARZILLI, Pisa*
- 12.00 - 13:00 Rethinking ischemic heart disease: acute ischemic syndromes. *Mario MARZILLI, Pisa*

##### Coronary and Myocardial Pathophysiology

- 15.00 - 16.00 Myocardial preconditioning: biological and molecular mechanisms. *Riccardo ZUCCHI, Pisa*
- 16.00 - 17.00 Mitochondrial dysfunction in cardiac disease. *Giacinta GUARINI, Volterra-Pisa*
- 17.00 - 18.00 Coupling myocardial metabolism, perfusion and function. *Daniilo NEGLIA, Pisa*

#### June 22th

##### Ageing and Cardiovascular and Pulmonary Disease

- 8.30 - 10.30 Early vascular ageing (EVA) - a new concept to understand the association between ageing and cardiovascular disease. *Peter M NILSSON, Lund, SE*
- 10.30 - 11.30 Asthma-COPD overlap syndrome. *Pierluigi PAGGIARO, Pisa*
- 11.30 - 12.30 Elderly patients with COPD Rare Cardiovascular Diseases. *Raffaele ANTONELLI INCALZI, Roma*
- Lessons from a Rare Disease**
- 14.30 - 15.30 Cardiac amyloidosis. *Claudio RAPEZZI, Bologna*
- Vascular Pathophysiology for the Clinician**
- 15.30 - 17.00 Large artery remodeling: integrating hemodynamic load, ageing and atherosclerotic disease. *Carlo PALOMBO, Pisa*
- 17.00 - 18.00 Endothelial dysfunction in atherothrombotic vascular disease. *Lorenzo GHIADONI, Pisa*

#### June 23th

##### (Not only) Heart Failure

- 8.30 - 9.30 Expanding knowledge in medicine and the impossibility of being expert. *Alan G FRASER, Cardiff, UK*
- 9.30 - 10.30 Heart Failure with preserved LV global systolic function: from research to clinical application. *Alan G FRASER, Cardiff, UK*
- 10.30 - 11.30 Heart Failure as a systemic disease. *Michele EMDIN, Pisa*
- 11.30 - 12.30 Dynamic interplay of nitric oxide, endothelins and angiotensin II in paracrine modulation of vascular function. *Vincenzo LIONETTI, Pisa*
- Heart Failure**
- 14.00 - 15.00 Assessing prognosis in heart failure with ultrasound. *Maria Chiara SCALI, Pisa*
- Practical Sessions**
- 15.00 - 18.00 Pulmonary pathophysiology. *Alessandro CELI, Elena BACCI*
- 15.00 - 18.00 The cardiopulmonary exercise test. *Dario NIERI, Barbara VAGAGGINI*
- 15.00 - 18.00 CV physiological imaging by US. *Carmela MORIZZO, Sara SBRAGI & Doralisa MORRONE*

## June 24th

### (Not only) Waves

- 8.30 - 9.30 Waves in arteries and wave intensity analysis: principles and methods. *Alun D HUGHES, London, UK*
- 9.30 - 10.30 Wave intensity analysis in the clinical setting. *Alun D HUGHES, London, UK*
- 10.30 - 11.30 The fallacy of preventive surgery in cardiovascular disease. *Roberto PEDRINELLI, Pisa*
- 11.30 - 12.30 Matching left ventricular and large artery function, *Carlo PALOMBO, Pisa*
- Students for Teaching**
- 12.45 - 13.30 "E-Schoolapius: improving learning through clinical cases simulation". *Eleonora TADDEI, Filippo QUATTRONE, Marco M GERMANI, on behalf of Scuola Superiore S. Anna and University of Pisa*
- The Heart in the Art**
- 15.00 - 16.00 Shaping the heart. *Dietrich GÖRTZ, Münster, DE*  
"My Summer School: Free Presentations from Students"
- 16.00 - 18.00 VARIOUS

## June 27th

### Cardiovascular Disease in Diabetes

- 9.00 - 10.00 Mechanisms of vascular damage in diabetes, *Raffaele DE CATERINA, Chieti*
- 10.00 - 11.00 Physical activity, disease progression and prognosis in COPD, *Benjamin WATZ, Grosshansdorf, DE*
- 11.00 - 12.00 COPD and comorbidities. *Leonardo M FABBRI, Modena*
- 12.00 - 13.00 Impact of COPD treatment on comorbidities. *Leonardo M FABBRI, Modena*
- Diabetes, Fat, and Cardiovascular Disease**
- 14.30 - 15.30 Diabetes and cardiovascular disease: What's the culprit? *Stefano DEL PRATO, Pisa*
- 15.30 - 16.30 Vascular protection by managing hyperglycemia: are we approaching the goal? *Anna SOLINI, Pisa*
- 16.30 - 17.30 Type 2 diabetes and non-alcoholic fatty liver disease: two sides of the same coin. *Amalia GASTALDELLI, Pisa*
- 17.30 - 18.30 The liver, mirror of health. *Ferruccio BONINO, Pisa*

## June 28th

### Neuroautonomic Control, Exercise, and Lifestyle

- 9.00 - 10.00 Sympathovagal balance and baroreflex sensitivity in cardiovascular regulation. *Massimo PAGANI, Milano*
- 10.00 - 11.00 Functional syndromes and stress management. *Daniela LUCINI, Milano*
- 11.00 - 12.00 Chemoreflexes in health and disease. *Claudio PASSINO, Pisa*
- 12.00 - 13.00 Principles of exercise physiology. *Claudio PASSINO, Pisa*
- Obesity, Exercise and Lifestyle**
- 15.00 - 16.00 Obesity, nutrition, and cardiovascular health. *Alfredo QUINONES GALVAN, Pisa*
- 16.00 - 17.00 Exercise in pulmonary rehabilitation. *Barbara VAGAGGINI, Pisa*
- 17.00 - 18.00 Smoking addiction and cessation in pulmonary and cardiovascular disease. *Laura CARROZZI and Francesco PISTELLI, Pisa*

## June 29th

### Cardiovascular Disease Burden in Perspective

- 9.00 - 10.00 Global cardiovascular disease burden: ethnicity, environment and genes. *Kennedy J CRUICKSHANK, London, UK*
- 10.00 - 11.00 Is type 2 diabetes a vascular disease even before hyperglycaemia? *Kennedy J CRUICKSHANK, London, UK*
- 11.00 - 12.00 Clinical approach to the "accelerated" hypertension: not always the stronger (therapy) is the better. *Stefano TADDEI, Pisa*
- Cardiopulmonary Adaptation to Extreme Conditions**
- 12.00 - 13.00 Cardiovascular effects of high altitude exposure: implications for clinical practice. *Gianfranco PARATI, Milano*
- Clinical Pharmacology and Bioengineering**
- 14.30 - 15.30 Clinical Trials in Ischemic Heart Disease: Evidence and Pitfalls. *Doralisa MORRONE, Pisa*
- 15.30 - 16.30 Wearable systems for monitoring cardiopulmonary system in daily life. *Daniilo DE ROSSI, Pisa*
- 16.30 - 17.30 Biological sensors in clinical practice. *Roger FUOCO, Pisa*
- 17.30 - 18.30 Cardiovascular simulation for training and clinical uses. *Maria Giovanna TRIVELLA, Pisa-Milano*

## June 30th

### Not Only Guidelines: from Brain to Mindlines

- 9.00 - 10.00 Insomnia and cardiovascular disorders. *Angelo GEMIGNANI, Pisa*
- 10.00 - 11.00 From Toyota production system to hospital organization. *Fabrizio GEMMI, Pisa*
- 11.00 - 12.00 From guidelines to personalized medicine: a challenge for the 21st century. *Gian Franco GENSINI, Florence*
- 12.00 - 13.00 Motivation and responsibility for a personalized medicine: a new deal. *Ferruccio BONINO, Pisa*
- Final Evaluation Test and Farewell**
- 14.30 - 16.00 Multiple choice questions written test. *Carlo PALOMBO & Alessandro CELI, Pisa*

