



University of Pisa Summer School
Pisa, July 4th - July 9th 2022



Cardiovascular Summer School: Clinical & Experimental - VIII Edition

Course Director: Prof. Raffaele De Caterina

Scientific Committee: Dr Rosalinda Madonna, Dr Doralisa Morrone, Prof. Carlo Palombo

School of Medicine
Department of Surgical, Medical and Molecular Pathology and Critical Care Medicine
University of Pisa

VENUE: POLO CONGRESSUALE LE BENEDETTINE - PIAZZA SAN PAOLO A RIPA D'ARNO, 16
Pisa

Program

July 4th

8:00 – 8:30 Registration of participants

8:30 – 9:00 The international promotion of teaching activities at the University of Pisa
Francesco Marcelloni, Pisa

The Summer School in the Department activity
Angelo Gemignani, Pisa

Introduction to the course
Raffaele De Caterina, Pisa

INTRODUCTION to CARDIOVASCULAR MEDICINE and RESEARCH

09:00 – 10:00 Keynote Opening Lecture: Methodology of experimental and clinical medicine: evidence-based medicine, personalized medicine, systems medicine
Gian Franco Gensini, Florence

10:00 – 10:45 The global burden of cardiovascular disease in the XXI century
Aldo Pietro Maggioni, Florence

Coffee break

11:15 – 12:15 Keynote Lecture: Drug development in the COVID-19 era
Peter Ferdinandy, Semmelweis University, Budapest

12:15 – 13:15 Keynote Lecture: Current and future directions in cardiovascular research
Filippo Crea, Rome

Lunch break

PRINCIPLES in CARDIOVASCULAR PHYSIOLOGY

15:00 – 16:00 Left and right heart mechanics
Fabio Recchia, Pisa

16:00 – 17:00 Principles of myocardial metabolism
Paolo G. Camici, Milan

17:00 – 18:00 Principles of exercise physiology
Carlo Capelli, Verona

July 5th

THE CORONARY CIRCULATION and CORONARY ARTERY DISEASE (I part)

9:00 – 9:45 Pathophysiology of coronary macro- and microcirculation
Danilo Neglia, Pisa

9:45 – 10:30 Ischemic heart disease: the atherothrombotic background
Raffaele De Caterina, Pisa

Coffee break

11:00 – 12:00 Keynote Lecture: Redefining ischemic heart disease: from “coronary stenosis” to myocardial ischemia:
Mario Marzilli, Pisa

Lunch break

THE CORONARY CIRCULATION and CORONARY ARTERY DISEASE (II part)

15:00 – 15:30 Principles of diagnosis of myocardial ischemia
Doralisa Morrone, Pisa

15:30 – 16:00 Principles of treatment of acute coronary syndromes
Marco De Carlo, Pisa

16:00 – 16:30 Principles of treatment of chronic coronary artery disease
Giacinta Guarini, Pisa

16:30 – 17:30 Keynote Lecture: Antithrombotic therapy in patients with coronary artery disease
Steen Dalby Kristensen, Aarhus, Denmark

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17:30 – 18:00 The University of Pisa for foreign students
Paola Cappellini, Pisa

July 6th

ANTITHROMBOTIC DRUGS: FROM BASIC PHARMACOLOGY TO CLINICAL USE

09:00 – 09:45 Principles of hemostasis: platelets, coagulation and fibrinolysis
Rossella Marcucci, Florence

9:45 – 10:30 Antithrombotic therapy in atrial fibrillation
Raffaele De Caterina, Pisa

Coffee break

11:00 – 12:00 Keynote Lecture: Aspirin: yesterday, today and tomorrow: long life to the old lady!
Carlo Patrono, Rome

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12:30 – 13:00 The University of Pisa Museums System
Chiara Bodei, Pisa

MUSEUMS AFTERNOON

15:00 – 18:00 Guided tours of the Anatomy Museum and other museums of the University of Pisa

19:30 – 23:00 Social Dinner

July 7th

IMAGING IN CARDIOVASCULAR DIAGNOSIS AND DECISION MAKING

9:00 – 9:45 Carotid plaque vulnerability and tissue characterization by ultrasound
Isabel Gonçalves, Lund, Sweden

9:45-10:30 Imaging of the heart: nuclear cardiology from the origin to the XXI century:
Alessia Gimelli and Paolo Marzullo, Pisa

Coffee break

11:00 –11:45 Advanced imaging of the heart and coronary vessels: principles of cardiac magnetic resonance and angio-computed tomography
Dante Chiappino, Pisa-Massa

11:45 – 12:30 Thoracic ultrasound: pathophysiological background and clinical implications
Luna Gargani, Pisa

Lunch break

PERSPECTIVES in HEART FAILURE RESEARCH

14:00 –15:00 Keynote lecture: Pathophysiology and risk stratification in heart failure
Piergiuseppe Agostoni, Milan

15:00 – 15:45 Definition, classification, pathophysiology and treatment of pulmonary hypertension:
Rosalinda Madonna, Pisa

15:45 – 16:30 The cardiopulmonary exercise test: from pathophysiology to patients phenotyping and rehabilitation
Claudio Passino, Pisa

16:30 – 17:30 The cardiovascular system in obesity
Andrea Natali, Pisa

July 8th

ARTERIAL DISEASE AND HYPERTENSION

9:00 – 10:00 Assessment of large artery structure and function: from pathophysiology to clinical applications
Carlo Palombo, Pisa

10:00 – 11:00 Microvessels and endothelial dysfunction: from bench to bedside:
Agostino Virdis, Pisa and Enrico Agabiti Rosei, Brescia

Coffee break

11:30 – 12:15 Aortic disease: pathophysiology, risk stratification and management:
Riccardo Liga, Pisa

12:15 – 13:15 Seminal steps and perspectives in hypertension research: from Riva Rocci and Bjorn Folkow to the XXI century
Stefano Taddei, Pisa

Lunc break

FOCUS on CARDIOMYOPATHIES

15:00 – 15:45 Hypertrophic cardiomyopathy
Iacopo Olivotto, Florence

15:45 – 16:30 Infiltrative cardiomyopathies: the amyloidosis model
Michele Emdin, Pisa

16:30 – 17:15 Diabetic heart disease
Stefano Del Prato and Fabio Lattanzi, Pisa

17:15 – 18:00 The Cardio-Renal syndrome: a unifying paradigm for cardiometabolic disease and heart failure?
Anna Solini, Pisa

July 9th

PERSPECTIVES in ARRHYTHMIAS and VALVULAR DISEASE

9:00 – 10:00 Keynote Lecture: Risk stratification and prevention of cardiac sudden death in the young
Silvia Priori, Pavia

10:00 – 10:45 Perspectives in arrhythmia ablation research: new diagnostic tools, new devices, clinical improvement?
Giulio Zucchelli and Maria Grazia Bongiorni, Pisa

Coffee break

11:15 – 12:00 New approaches to treatment of aortic valve disease
Anna Sonia Petronio, Pisa

12:00 – 13:00 Closing Keynote Lecture: New approaches to treatment of mitral valve disease
Carlo Di Mario, Florence

13:00 Closing remarks
Raffaele De Caterina and Carlo Palombo, Pisa

The END

