

University of Pisa Summer School Pisa, July 1st – July 5th 2024

Cardiovascular Summer School: Clinical & Experimental – IX Edition

Course Director: **Prof. Raffaele De Caterina**

Scientific Committee: **Prof. Rosalinda Madonna, Prof. Doralisa Morrone,
Prof. Marco De Carlo, Prof. Carlo Palombo,
Dr. Luna Gargani, Dr. Riccardo Liga, Dr. Gabriele Masini,
Dr. Alessandro Sticchi, Dr. Matteo Mazzola**

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

VENUE:

Polo Didattico Piagge, University of Pisa
Via Giacomo Matteotti 11, 56124

Day 1 – July 1st 2024

- 8:30-9:30 Registration of participants
- 9:30-10:00 The international dimension of the University of Pisa concerning teaching activities
Giovanni Federico Gronchi, University of Pisa
- EPIDEMIOLOGY, RISK STRATIFICATION AND PREVENTION OF CARDIOVASCULAR DISEASE**
- 10:00-10:30 Introduction to the course. The global burden of cardiovascular disease
Raffaele De Caterina, University of Pisa
- 10:30-11:00 Coffee break
- 11:00-11:45 Keynote lecture: Central nervous oscillators, sleep and sleep apnea: which impact on the CV system?
Gianfranco Parati, University of Milano-Bicocca
- 11:45-12:30 Coronary artery disease: atherosclerosis as an inflammatory disease
Raffaele De Caterina, University of Pisa
- 12:30-13:30 Lunch
- PRINCIPLES OF CARDIOVASCULAR PHYSIOLOGY AND PATHOLOGY**
- 13:30-14:30 Left and right heart mechanics
Fabio Anastasio Recchia, Institute of Clinical Physiology, National Research Council, Pisa
- 14:30-15:30 Cardiogenic shock
Gian Giacomo Galeotti, Azienda Ospedaliero-Universitaria Pisana
- 15:30-16:00 Tea break
- 16:00-17:00 Keynote Lecture. Microvessel structure and function: from bench to bedside
Enrico Agabiti Rosei, University of Brescia
- 17:00-18:00 Exercise physiology: integrative mechanisms and impact on health assessment and cardiovascular rehabilitation
Claudio Passino, Scuola Superiore S. Anna, Pisa

Day 2 – July 2nd 2024

- ISCHEMIC HEART DISEASE: STATE OF THE ART, DIAGNOSIS AND PERSPECTIVES**
- 9:00-10:00 Keynote Lecture. Redefining ischemic heart disease: from “coronary stenosis” to myocardial ischemia
Mario Marzilli, University of Pisa
- 10:00-11:00 Myocardial ischemia beyond coronary stenosis
Doralisa Morrone, University of Pisa
- 11:00-11:30 Coffee break
- 11:30-12:30 Principles of diagnosis and risk stratification of chronic ischemic heart disease
Danilo Neglia, Fondazione Toscana Gabriele Monasterio, Pisa
- 12:30-13:30 Advanced imaging of the heart and coronary vessels: principles of cardiac magnetic resonance and angio-computed tomography
Giovanni Donato Aquaro, University of Pisa
- 13:30-14:30 Lunch
- THERAPY OF ACUTE AND CHRONIC ISCHEMIC HEART DISEASE**
- 14:30-15:30 Robotic and MIDCAB surgery for coronary artery disease
Andrea Colli, University of Pisa
- 15:30-16:30 From the IV Universal Definition of Myocardial Infarction to treatment of acute coronary syndromes
Marco De Carlo, University of Pisa
- 16:30-17:00 Tea break
- 17:00-18:00 Chronic ischemic heart disease in heart failure: medical therapy is all we need?
Pietro Ameri, University of Genoa

Day 3 – July 3rd 2024

PERSPECTIVES IN HEART FAILURE RESEARCH

- 9:00-10:00 Phenotypes and new therapies in heart failure: sacubitril-valsartan, SGLT2 inhibitors, vericiguat
Riccardo Liga, Azienda Ospedaliero-Universitaria Pisana
- 10:00-11:00 New approaches to treatment of mitral and tricuspid valve disease
Marco De Carlo, University of Pisa
- 11:00-11:15 Coffee break
- 11:15-12:00 Renal denervation for treatment of hypertension
Stefano Taddei, University of Pisa
- 12:00-12:45 Lung ultrasound: pathophysiological background and clinical implications
Luna Gargani, University of Pisa
- 12:45-13:30 Cardiopulmonary support in acute heart failure
Fabio Guarracino, Azienda Ospedaliero-Universitaria Pisana
- 13:30-14:30 Lunch
- 15:00-18:00 **MUSEUM AFTERNOON**
Guided tours of the Human Anatomy Museum
- 20:00 Social Dinner

Day 4 – July 4th 2024

UPDATES IN CARDIOVASCULAR THERAPY

- 9:00-10:00 Keynote lecture. Promoting health and longevity through diet – the pathophysiological background of the CAMP-ACTIVE study
Luigi Fontana, University of Sydney
- 10:00-11:00 Keynote Lecture. Aspirin: yesterday, today and tomorrow
Carlo Patrono, Catholic University, Roma
- 11:00-11:30 Coffee break
- 11:30-12:30 Adiposity and the cardiovascular system: not only matter of fat
Ferruccio Santini, University of Pisa
- 12:30-13:30 Iron therapy in heart failure: what evidence so far?
Gabriele Masini, University of Pisa

13:30-14:30 LUNCH



THE HEART IS NOT AN ISLAND

- 14:30-15:30 “Frailty” in cardiovascular health and disease
Andrea Ungar, University of Florence
- 15:30-16:30 Carotid plaque vulnerability: the Carotid Artery Multi-modality imaging Prognostic (CAMP) study
Luna Gargani, University of Pisa
- 16:30-17:00 Tea break
- 17:00-17:40 Cardio-renal damage in type 2 diabetes
Stefano Del Prato, University of Pisa

Day 5 – July 5th 2024

FOCUS ON VALVULAR HEART DISEASE AND CARDIOMYOPATHIES

9:00-09:45 Transcatheter aortic valve implantation (TAVI): to whom, when and why
Alessandro Sticchi, University of Pisa

09:45-10:30 Keynote Lecture. Atrial cardiomyopathy
Lin Yee Chen, University of Minnesota, USA

10:30-11:00 Coffee break

11:00-12:00 Restrictive cardiomyopathies: diagnosis and treatment
Michele Emdin, Scuola Superiore Sant'Anna, Pisa

12:00-13:00 Pulmonary hypertension: definition, classification, pathophysiology and treatment
Rosalinda Madonna, University of Pisa

13:00-14:30 Lunch

FOCUS ON SURGICAL TREATMENT OF VALVULAR HEART DISEASE

14:30-15:15 Should we forget about surgical aortic valve replacement in the era of TAVI? Residual concerns
Umberto Benedetto, University of Chieti

PERSPECTIVES IN ARRHYTHMIAS

15:15-16:00 Risk stratification and prevention of cardiac sudden death in the young
Stefano Viani, Azienda Ospedaliero-Universitaria Pisana

16:00-16:45 Perspectives in arrhythmia ablation research: new diagnostic tools, new devices, clinical improvement
Giulio Zucchelli, Azienda Ospedaliero-Universitaria Pisana

16:45-17:30 Atrial fibrillation and stroke: a complex relationship
Raffaele De Caterina, University of Pisa

CLOSING REMARKS

Raffaele De Caterina, Carlo Palombo, University of Pisa

Faculty

Raffaele De Caterina (Pisa)

Rosalinda Madonna (Pisa)

Doralisa Morrone (Pisa)

Marco De Carlo (Pisa)

Carlo Palombo (Pisa)

Luna Gargani (Pisa)

Riccardo Liga (Pisa)

Gabriele Masini (Pisa)

Alessandro Sticchi (Pisa)

Matteo Mazzola (Pisa)

Giovanni Federico Gronchi (Pisa)

Gianfranco Parati (Milano)

Fabio Anastasio Recchia (Pisa)

Gian Giacomo Galeotti (Pisa)

Enrico Agabiti Rosei (Brescia)

Claudio Passino (Pisa)

Mario Marzilli (Pisa)

Danilo Neglia (Pisa)

Giovanni Donato Aquaro (Pisa)

Andrea Colli (Pisa)

Marco De Carlo (Pisa)

Paolo Ameri (Genova)

Riccardo Liga (Pisa)

Stefano Taddei (Pisa)

Fabio Guarracino (Pisa)

Luigi Fontana (Sydney)

Carlo Patrono (Roma)

Ferruccio Santini (Pisa)

Andrea Ungar (Firenze)

Stefano Del Prato (Pisa)

Alessandro Sticchi (Pisa)

Lin Yee Chen (Minnesota)

Michele Emdin (Pisa)

Umberto Benedetto (Chieti)

Stefano Viani (Pisa)

Giulio Zucchelli (Pisa)

