



CardioLung 2018: Updates in Cardiovascular and Pulmonary Pathophysiology - VI Edition

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

<http://summerschool.cardiovascular.med.unipi.it/>

Up to 8 ECTS credits

Course A: 18th – 25th June

- Plenary lectures: 6 ECTS

Course B: 26th – 29th June

✦ Internship: 2 ECTS

Official Language: **ENGLISH**

Course format

Cardiolung 2018 includes a theoretical and a practical part. Plenary lectures will represent the core of the Course (**Course A**), which will be followed by a short intensive *internship* at the clinical units and diagnostic laboratories of the Cardiac and Pulmonary University Divisions (**Course B**, optional).

Key topics

- Cardiovascular and pulmonary disease burden
- Molecular mechanisms in cardiopulmonary disease
- Ischemic heart disease: established facts and new views
- Exercise physiology
- Heart failure
- Cardiopulmonary rehabilitation
- Sleep apnea syndrome
- Obstructive cardiomyopathy
- Sudden cardiac death in the young
- Vascular ageing and atherothrombosis
- Ventricular-arterial coupling
- Diet, metabolism and cardiovascular disease
- Chronic obstructive and interstitial pulmonary disease
- Asthma
- Lung cancer
- Cardiopulmonary system in extreme conditions
- Space medicine
- Brain – Heart axis
- Ethics and methodology in medicine and science
- Bioengineering

Venue

- Historical Medical School, University of Pisa (Course A)
- Cardiovascular and Thoracic Department, Cisanello University Hospital, Building # 10, Via Paradisa 2, Pisa (Course B)

Target group

The summer school is targeted at national and international undergraduate, PhD and post-doc students in Medicine and Life Sciences, with a specific interest in the cardiovascular and pulmonary field.

Faculty

AGOSTONI Piergiuseppe, Università di Milano e Centro Cardiologico Monzino
AHLUWALIA, Arti, Università di Pisa e Centro Piaggio
BEGHE' Bianca, Università di Modena e Reggio Emilia,
BODEI Chiara, Università di Pisa, e Sistema Museale di Ateneo
BONGIORNI Maria Grazia, Azienda Ospedaliero Universitaria Pisana
BRUNO Rossella, Università di Pisa
CAPPELLINI Paola, Università di Pisa
CARROZZI Laura, Università di Pisa
CELI Alessandro, Università di Pisa
CRUICKSHANK Kennedy J, King's College University, London, UK
DE CARLO Marco, Azienda Ospedaliero Universitaria Pisana
DENTE Federico, Azienda Ospedaliero Universitaria Pisana
DE ROSSI Danilo E, Università di Pisa, e Centro Piaggio
FABBRI Leonardo M, Università di Modena e Reggio Emilia
FRASER Alan G, Wales College of Medicine, Cardiff, UK
GEMIGNANI Angelo, Università di Pisa
GUARINI Giacinta, Azienda Ospedaliero Universitaria Pisana
IACOBELLIS Marco, Azienda Ospedaliero Universitaria Pisana
KOZAKOVA Michaela, Esaote SpA, Firenze
LATORRE Manuela, Nuovo Ospedale Apuano, Massa
LATTANZI Fabio, Azienda Ospedaliero Universitaria Pisana
LEFTHERIOTIS Georges, Université de Nice, FR
LOSSO Lorenzo, Università di Pisa
LOUIS Renaud, Université de Liège, BE
LUZZATI Tommaso, Università di Pisa
MANZONI Diego, Università di Pisa
MARCELLONI Francesco, Università di Pisa
MARCUCCI Rossella, Università di Firenze
MARZILLI Mario, Università di Pisa
MORRONE Doralisa, Università di Pisa

NATALE Andrea, Università di Pisa
NERI Tommaso, Università di Pisa
NIERI Dario, Ospedale Santa Maria Annunziata, Firenze
NILSSON Peter M, CRC Malmoe, e Lund University , SE
OLEYNIK Dmitriy, University National Medical School, Odessa, UA
OLIVOTTO Iacopo, Azienda Ospedaliero-Universitaria Careggi, Firenze
ORSINI Enrico, Azienda Ospedaliero Universitaria Pisana
PAGGIARO Pierluigi, Università di Pisa
PALOMBO Carlo, Università di Pisa
PARATI Gianfranco, Università Milano Bicocca, e Centro Auxologico, Milano
PASSINO Claudio, Scuola Superiore S Anna, Pisa
PEDRINELLI Roberto, Università di Pisa
PETRINI Jacopo, Università di Pisa
PETRONIO Anna Sonia, Università di Pisa
POLVERINO Eva, Hospital Clinic de Barcelona, ES
QUINONES GALVAN Alfredo, Fondazione Toscana Gabriele Monasterio, Pisa
SANTARCANGELO Enrica, Università di Pisa
SEBASTIANI Laura, Università di Pisa
SOFI Francesco, Università di Firenze
SPONTONI Paolo, Azienda Ospedaliero Universitaria Pisana
SUVOVOROV Alexander, IMBP, Institute of Biomedical Problems, Moscow, RU
TREMOLI Elena, Università di Milano e Centro Cardiologico Monzino,
VAGAGGINI Barbara, Azienda Ospedaliero Universitaria Pisana
VALENZA Gaetano, Università di Pisa
VIEGI Giovanni, Istituto di Biomedicina e di Immunologia Molecolare, CNR, Palermo
ZORZI Alessandro, Università di Padova
ZUCCELLI Giulio, Azienda Ospedaliero Universitaria Pisana
ZUCCHI Riccardo, Università di Pisa

Acknowledgements

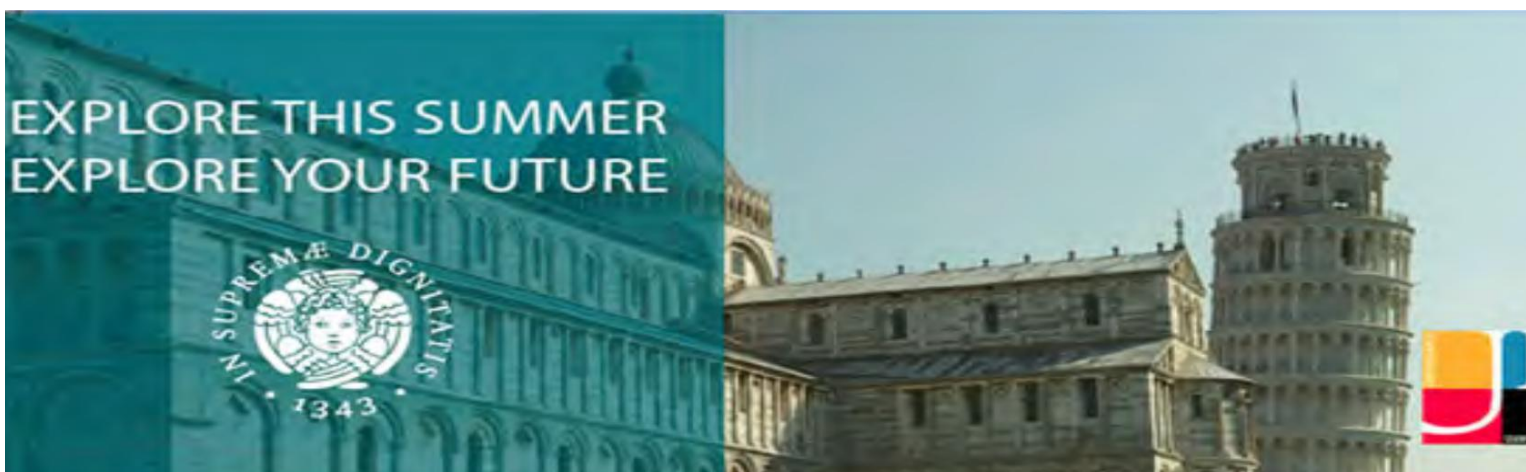
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- Microtest s.r.l., Lucca

Contacts @:

[HTTPS://WWW.UNIPI.IT](https://www.unipi.it)

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CardioLung: Updates in Cardiovascular and Pulmonary Pathophysiology - VI Edition

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

Program

Course A, June 18th – June 25th: Historical Medical School, Aula Massart, Via Roma 55, Pisa

June 18th

- 8.30 - 9.30 Registration of participants. *Valentina BESSI, Pisa, Carmela MORIZZO, Pisa, Carlo PALOMBO, Pisa*
- 9.30 - 10.00 International promotion, *Francesco MARCELLONI, Pisa*
Summer School in the Department activity, *Riccardo ZUCCHI, Pisa*
Introduction to the course, *Pierluigi PAGGIARO, Pisa*
- 10.00 - 11.00 Managing complexity in medicine: evidence, bias, and clinical decision-making.
Alan FRASER, Cardiff, UK
- 11.00 - 12.00 Vascular physiology and atherosclerosis. *Georges LEFTHERIOTIS, Nice, FR*
- 12.00 - 13.00 Systolic and diastolic heart failure. *Alan FRASER, Cardiff, UK*
- 14.30 - 15.00 The Pisa University Museum System. *Chiara BODEI, Pisa*
- 15.00 - 16.00 New data on world-wide epidemiology of asthma & COPD. *Giovanni VIEGI, Palermo*
- 16.00 - 17.00 From clinical to biological approach to asthma and COPD. *Pierluigi PAGGIARO, Pisa*
- 17.00 - 18.00 Asthma and comorbidities. *Manuela LATORRE, Pisa-Massa*

June 19th

- 9.00 - 10.00 Principles of exercise physiology. *Claudio PASSINO, Pisa*
- 10.00 - 11.00 The coronary circulation and chronic ischemic heart disease. *Doralisa MORRONE, Pisa*
- 11.00 - 12.00 Acute coronary syndromes: pathologic substrates and culprits. *Doralisa MORRONE, Pisa*
- 12.00 - 13.00 Personalized medicine in asthma. *Pierluigi PAGGIARO, Pisa*
- 13.00 - 13.30 The University of Pisa for international students. *Paola CAPPELLINI, Pisa*
- 14.30 - 15.30 From PADGEM protein to inclacumab: the importance of curiosity-driven research.

Alessandro CELI, Pisa

- 15.30 - 16.30 ITALUNG: Epidemiology and screening of lung cancer. *Laura CARROZZI, Pisa*
- 16.30 - 17.30 The link between cancer incidence and economic development, with a special focus on lung cancer. *Tommaso LUZZATI, Pisa*
- 17.30 - 18.30 Mitochondrial dysfunction in cardiac disease. *Giacinta GUARINI, Pisa*

June 20th

- 9.00 - 10.00 Large arteries structure and function. *Carlo PALOMBO, Pisa*
- 10.00 - 11.00 Ventricular – arterial coupling. *Carlo PALOMBO, Pisa*
- 11.00 - 12.00 Hypertrophic cardiomyopathy. *Iacopo OLIVOTTO, Firenze*
- 12.00 - 13.00 Sudden cardiac death in the young. *Alessandro ZORZI, Padova*
- 15.00 - 16.00 Myocardial metabolism and preconditioning. *Riccardo ZUCCHI, Pisa*
- 16.00 - 17.00 Microparticles: more than platelet dust. *Tommaso NERI, Pisa*
- 17.00 - 18.00 Nanostring technology: bringing genetics to the clinical field. *Rossella BRUNO, Pisa*

June 21th

- 9.00 - 10.00 Functional evaluation and risk stratification in heart failure patients.
Piergiuseppe AGOSTONI, Milano
- 10.00 - 11.00 OSAS as a systemic disease. *Gianfranco PARATI, Milano*
- 11.00 - 12.30 Early vascular ageing: risk factors, molecular mechanisms, and implications for cardiovascular disease. *Peter NILSSON, Lund-Malmoe, SE*
- 12.30 - 13.30 Principle of nutrition for cardiovascular health. *Alfredo QUINONES GALVAN, Pisa*
- 14.30 - 15.30 Respiratory system in men during diving to the maximal depth in the chamber. *Alexander SUVOROV, Moscow, RU*
- 15.30 - 16.30 Cardiorespiratory system adaptation to medium-term isolation conditions: Insights from the SIRIUS 18/19 program. *Alexander SUVOROV, Moscow, RU*
- 16.30 - 17.30 Diet and cardiovascular disease: low-calories, vegetarian vs Mediterranean. *Rossella MARCUCCI and Francesco SOFI, Firenze*
- 17.30 - 18.30 Influence of risk factors and their interactions on the likelihood of cardiovascular disease in patients with metabolic syndrome. *Dmitriy OLEYNIK, Odessa, UA*

June 22th

- 9.00 - 10.00 Integration of cardiovascular and pulmonary functions by central nervous system
Diego MANZONI, Pisa
- 10.00 - 11.00 Assessing sympathovagal balance in the clinical setting
Carlo PALOMBO and Gaetano VALENZA, Pisa
- 11.00 - 12.00 Heart - brain axis: interoception and interoception awareness.
Enrica SANTARCANGELO and Laura SEBASTIANI, Pisa
- 12.00 - 13.00 Sleep and cardiovascular disorders. *Angelo GEMIGNANI, Pisa*
- 14.30 - 15.30 Global cardiovascular disease burden: ethnicity, environment and genes.
Kennedy J CRUICKSHANK, London, UK
- 15.30 - 16.30 Tracking cardiovascular risk from early life, through adolescence to adults
Kennedy J CRUICKSHANK, London, UK
- 16.30 - 17.30 In vitro models of cardiovascular and pulmonary tissue. *Arti AHLUWALIA, Pisa*
- 17.30-18.30 Wearable systems for monitoring cardiopulmonary system in daily life. *Danilo DE ROSSI, Pisa*

June 23th

- 9.00 - 10.30 Perspectives in cardiovascular medicine: translating basic research into the clinical field: the Monzino model. *Elena TREMOLI, Milano*
- 10.30 - 11.30 Personalized medicine in COPD. *Dario NIERI, Pisa-Firenze*
- 11.30 - 12.30 New perspectives in lung cancer therapy. *Jacopo PETRINI, Pisa*

June 25th

- 8.30 - 9.30 Bronchiectasis: clinical and functional assessment. *Federico DENTE, Pisa*
- 9.30 - 10.30 Genetics of severe asthma. *Bianca BEGHE', Modena*
- 10.30 - 11.30 Multimorbidities in COPD: are they relevant for COPD management? *Leonardo FABBRI, Modena*
- 11.30 - 12.30 The illusion of treatment in coronary artery disease. *Mario MARZILLI, Pisa*
- 12.30 - 13.30 Critical approach to scientific papers. *Mario MARZILLI, Pisa*
- 15.00 - 16.00 Bronchiectasis: a new field of investigation. *Eva POLVERINO, Barcelona*
- 16.00 - 17.00 Asthma endotyping: potential consequences on asthma management. *Renaud LOUIS, Liège*
- 17.00 - 18.00 Final test and closing remarks. *Carlo PALOMBO & Alessandro CELI, Pisa*

Course B:

The Course B will be held at the Cardiac and Thoracic Department, University Hospital, Pisa-Cisanello, Building # 10, (meeting point at the 2nd Floor, seminar room), from June 26th to June 29th. Applicants will be distributed in the wards and diagnostic laboratories of University Cardiology and Pneumology, from 9.00 am to 1.00 pm, under tutorship of staff physicians. A detailed program will be given during the Course A

Free entrance to the University Museums

- a) During the course students will have free entrance to the Botanic Garden of University, located in Via Roma in front of the Medical School, and to the other Museums of the University
- b) Further information about University Museums at <http://www.sma.unipi.it>

