



# SCIENTIFIC PROGRAM – July 6<sup>th</sup> Aula Magna, Scuola Superiore Sant'Anna

**09:00 OPENING LECTURE** 

Prof. UGO BOGGI UNIVERSITY OF PISA "Robotic surgery"

# MOLECULAR RESEARCH

- **10:00 OLGA PYANKOVA:** "Study of the effect of gravitational loading variations on human capillary endothelial cells"
- 10:15 NITYANAND BHARAT BOLSHETTE: "Oncogenic-remodeling of circadian clock machinery"
- 10:30 ALESSIO FERRARI: "Chronoquine: a novel anticancer agent"
- 10:45 SARA PERUZZI: "Structural insight into PNKD function"
- 11:00 FEDERICA VANNINI: "Identification of Circulating Low Molecular Weight Endothelium-Protective Factors"
- 11:15 GABRIELE BERTI: "Additional effects of PCSK9 on molecular processes underlying atherosclerosis beyond the effects on circulating LDL-cholesterol"

### PRE-CLINICAL RESEARCH

#### I - FROM MOLECULES TO TOOLS

- 11:30 MARIANNA COLASUONNO: "Synthesis and characterization of tPA-Nanoparticles for treating thrombosis"
- 11:45 CECILIA PUCCI: "Developing zebrafish models of human SETD5 loss of function-dependent intellectual disability and autism"
- 12:00 CHIARA DE CESARI: "Retinitis pigmentosa: an innovative approach to improve photoreceptor transplant efficiency"
- 12:15 NICOLE DI LASCIO: "Characterization of carotid plaque vulnerability in mice by means of high-frequency ultrasound imaging"
- 12:30 ALESSANDRO BOCCADIFUOCO: "Hemodynamic simulation of a patient specific ascending thoracic aortic aneurysm and validation against Magnetic Resonance Imaging measurements"
- 12:45 DANYAR Sh. GILMANOV: "Role of exosomes derived from human mesenchymal stem cells in preventing the activation of monocytes/macrophages by biological valve tissue"
- 13:00 BREAK

#### II – FROM CARDIAC INJURY TO REPAIR

- 14:00 CHRYSANTOS GRYGORATOS: "Cardiac remodeling in models of anthracycline-induced cardiomyopathy"
- 14:15 LUIGI PASTORMERLO: "Renal sympathetic denervation for cardioprotection after myocardial infarction: a preclinical study"
- 14:30 NIKOLOZ GORGODZE: "Pro-regenerative microRNAs Carried by Liposomal Vectors in Experimental Myocardial Infarction"

14:45 FAUSTO PIZZINO: "Role of microRNA and of cardiac magnetic resonance in the evaluation of left ventricular remodeling secondary to primary mitral regurgitation: the EMIGRATE study"

# CLINICAL RESEARCH

- I TREATMENTS AND OUTCOME
- 15:00 ROSETTA RAGUSA: "VAD and recovery of natural heart: the role of inflammation and new markers"
- 15:15 GIANLUCA MIRIZZI: "Modulation of Central Chemoreceptors in Systolic Heart Failure"
- 15:30 FRANCESCA MENICHETTI: "Correlation between ventricular arrhythmias substrate and cardiac Perfusion/Innervation mismatch detected by nuclear imaging: clinical impact on ablation"
- 15:45 DANIELA GUARINO: "Effects of pre-surgery diet on glucose metabolism in severely obese individuals undergoing bariatric surgery: high-protein vs Mediterranean diet"
- 16:00 HAKIM KARIM CHABANE: "Beneficial effects of a complementary diet with cereal β-glucans on anterior myocardial infarction patients treated by primary PCI- "Cuore Sano" Protocol"

#### **II – INNOVATIONS IN PATIENT MANAGEMENT**

- 16:15 SARA SAMONI: "Ultrasound and Color-Doppler in the assessment of Renal Functional Reserve"
- 16:30 PIETRO BAJONA: "Ischemic Mitral Regurgitation: the Quest for Mitral Valve Repair Prognostic Factors"
- 16:45 GIOVANNI BENEDETTI: "Smart home for the elderly : Design of a well-being evaluator and of a simplified warning scoring system"

- 17:00 ALESSANDRO VALLEGGI: "Reappraisal and remodeling of inhospital care of end-of-life in heart failure: towards a patientcentered approach"
- 17:15 FRANCESCA GUARNERI: "Patients with complex needs: new perspective of evaluation"
- 17:30 BREAK

# JOINT SESSION WITH SCUOLA NORMALE SUPERIORE

#### FROM CARDIOSCIENCE TO NEUROSCIENCE

- 17:45 JACOPO AGRIMI: "Nutraceutical Approach to Prevent Work Stressinduced Brain-Heart Axis Dysfunctions linked to Cardiovascular Disease Risk: A Translational Study"
- 18:00 ZEESHAN HAMID SHAH: "A Deep, Combined Omics Exploration of The FAAH Knockout Brain Lipidome"
- 18:15 FRANCESCO GOBBO *(SNS)*: "Mapping of activated synapses in the hippocampus after context exploration with a new optogenetic reporter for spine potentiation"
- 18:30 ALICE ACCORRONI: "3-iodothyronamine effect on long-term potentiation: rescuing β-amyloid-induced synaptic dysfunction"
- 18:45 GRAZIA RUTIGLIANO: "The role of thyroid hormone and associated metabolite pathways in neuropsychiatry and metabolism"
- 19:00 MARIA TERESA MAZZETTO *(SNS)*: "Multi-omics analysis of brain aging"
- 19:15 VIVIANA MARCHI:"Kinematic and electrophysiological characterization of spontaneous motor activity in young infants: new frontiers on early biomarkers of neurodevelopmental disorders"

# 19:30 DEBORA NAPOLI *(SNS)*: "Epigenetic mechanisms in brain plasticity"

#### **19:45 CONCLUDING REMARKS**

Faculty of the PhD in Translational Medicine

Prof. Fabio A Recchia - Coordinator (ISV-SSSUP) Prof. Michele Emdin – Deputy Coordinator (ISV-SSSUP) Prof. Vincenzo Lionetti – (ISV-SSSUP) Prof. Claudio Passino – (ISV-SSSUP) Prof. Mario Enrico Pè – (Chairman of Experimental Class, ISV-SSSUP) Prof. Aldo Clerico – (ISV-SSSUP/ Fondazione CNR Toscana G. Monasterio) Prof. Flavio Coceani – (ISV-SSSUP) Prof. Alfred Cuschieri – (ISV-SSSUP/University of Dundee, UK) Prof. Sabina Nuti – (Laboratory MeS, IM-SSSUP) Prof. Angelo Reggiani – (Italian Institute of Technology, Genoa) Dr. Debora Angeloni – (ISV-SSSUP) Dr. Mario Meola – (ISV-SSSUP) Dr. Andrea Zuccolo – (ISV-SSSUP) Dr. Benedetto Grimaldi - (Italian Institute of Technology, Genoa) Dr. Giorgio Iervasi – (Director, Institute of Clinical Physiology - CNR) Dr. Danilo Neglia – (Fondazione Toscana "G. Monasterio") All. Francesca Guarneri - Delegate *Allievi Perfezionandi* (ISV-SSSUP) Dr. Laura Bevacqua – Administrative Office

Organizing Committee: Prof. Vincenzo Lionetti, All. Francesca Guarneri, Dr. Laura Bevacqua.