



February 15th-18th, 2016

Frontiers in cellular biology

“Cellular networks in normal, pathological and experimental conditions”

Organizers: Professors Maria Grazia Bottone, Isabel Freitas, Valeria Merico, Rosanna Nano, Department of Biology and Biotechnology “L. Spallanzani”, University of Pavia

In cell biology, networks are systems of interacting molecules that regulate cellular functions. They are based on interconnections between cell components and the microenvironment. The comprehension of the molecular basis of these cellular networks has improved the knowledge on how cells behave in normal and pathological conditions.

The aim of this course is to provide an overview of the new trends in cell biology to understand cellular functions focusing on undifferentiated and differentiated cells in normal, pathological and experimental systems.

Programme:

February 15th

(Aula 2, Botta 2)

9.30-12.00

Prof. Roberto Furlan (Head of Clinical Neuroimmunology Unit, Institute of Experimental Neurology – INSpe, Division of Neuroscience, San Raffaele Scientific Institute)

“Microglia microvesicles: messengers from the diseased brain”

14.30-17.00

Prof. Giovanni Camussi (Department of Internal Medicine, Molecular Biotechnology Center, University of Torino)

“Stem cell-derived extracellular vesicles in cell reprogramming and tissue repair”

February 16th

(Aula 2, Botta 2)

10.00 - 11.30

Prof. Luca Bonfanti (Department of Veterinary Sciences, University of Torino)

“Neurogenic niches: theme and variations”

11.45-13.15

Dr. Angela Gritti (TIGET Unit, San Raffaele Scientific Institute)
"From niche to dish (and coming back?)"

February 17th

(Aula 2, Botta 2)

9.30 – 11.00

Prof. Alessandra Balduini (Department of Molecular Medicine, University of Pavia)

"Bone marrow 3D models for blood cell production"

11.00-12.30

Dr. Rita Maccario (Laboratory of Transplant Immunology/Cell Factory, IRCCS Policlinico San Matteo Foundation)

"Mesenchymal stem/stromal cell (MSC)-based Cell Therapy: an obstacle course from experimental research to clinical application"

14.30-16.00

Dr. Paola Rebuzzini (Developmental Biology Laboratory, Department of Biology and Biotechnology "L. Spallanzani", University of Pavia)

"Achilles' heel of pluripotent stem cells: genetic, genomic and epigenetic variations during prolonged culture"

February 18th

(Aula Jucci, Palazzo Botta 2)

9.30 – 11.00

Dr. Daniela Montagna (Laboratorio Immunologia e Trapianti, Dipartimento di Scienze Clinico-Chirurgiche, Diagnostiche e Pediatriche, Università degli Studi di Pavia, Fondazione IRCCS Policlinico San Matteo)

"New approaches of anti-tumor immunotherapy with ex vivo activated Cytotoxic T lymphocytes or NK cells as a tool to overcome tumor immune escape"

11.00-12.30

Prof. Paolo Bernasconi (S.C. Ematologia, IRCCS Fondazione Policlinico San Matteo, Università di Pavia)

"Mesenchymal stromal cells: biological characterization and clinical use"

14.30-16.00

Prof. Rosangela Invernizzi (Dipartimento di Medicina Interna, Università di Pavia, Fondazione IRCCS Policlinico San Matteo, Pavia)

"Angiogenesis and hematopoiesis in myelodysplastic syndromes"