

PhD Program in Genetics, Molecular, and Cellular Biology

Course of Human Genetics and Pathology

Novel strategies and innovative molecular approaches to tackle human diseases

Aula Falaschi, Building of IGM-CNR

April 3rd-21th, 2023

Organizers

Elena Botta, Giorgia Zadra - CNR Institute of Molecular Genetics - IGM Pavia

Natalia Simona Pellegata - Department of Biology and Biotechnology, University of Pavia

Ornella Cazzalini, Paola Perucca - Department of Molecular Medicine, University of Pavia

Program

The course is intended to provide examples of recent advances in the development of therapies in different areas of human pathology including oncology, hereditary and rare diseases. Lectures will be focused on basic research studies for the identification of new therapeutic targets and potential clinical applications.

Monday April 3rd

14.30-16.30 **Giovanna Lattanzi** (CNR Institute of Molecular Genetics - IGM, Unit of Bologna)

Targeting interleukin 6 to counteract premature ageing and cachexia

Tuesday April 4th

14.30-16.30 **Antonella Forlino** (Department of Molecular Medicine, University of Pavia)

Insight on bone biology: a lesson from rare bone diseases

Wednesday April 5th

14.30-16.30 **Riccardo Brambilla** (Department of Biology and Biotechnology, University of Pavia)

Understanding cell signalling to treat neurodevelopmental and neurodegenerative disorders

Friday April 14th

14.30-16.30 **Dario Longo** (CNR Institute of Biostructures and Bioimaging - IBB, Torino)

In Vivo imaging techniques for assessing novel anticancer therapies targeting tumor acidosis

Monday April 17th

11.00-13.00 **Lavinia Arseni** (German Cancer Research Center - DKFZ, Heidelberg)

Proteasome inhibition as potential salvage strategy for chronic lymphocytic leukemia

14.30-16.30 **Angelica Facoetti** (Centro Nazionale di Adroterapia Oncologica - CNAO, Pavia)

Radiobiological basis for the treatment of tumors with ionizing radiation beam

Tuesday April 18th

14.30-16.30 **Elena Levantini** (Istituto di Tecnologie Biomediche - CNR, Pisa)

High-resolution single cell transcriptomics for the identification of new pharmacological strategies in lung cancer

Wednesday April 19th

14.30-16.30 **Laura Locati** (Head and Neck Medical Oncology Unit, IRCCS, Maugeri Pavia)
RET as a marker for novel therapies in thyroid carcinoma

Thursday April 20th

11.00-13.00 **Erica Golemis** (Fox Chase Cancer Center, Philadelphia)
Title TBD

14.30-16.30 **Mario Nuvolone** (Amyloidosis Research and Treatment Center, Policlinico, Pavia)
Treating protein misfolding diseases: Current and emerging therapeutic strategies against systemic amyloidoses

Friday April 21th

14.30-16.30 **Serena Pellegatta** (Istituto Neurologico Carlo Besta, Milano)
Dendritic cell immunotherapy and adoptive cell therapy for glioblastoma: from bench to bedside