



Dottorato in Genetica, Biologia Molecolare e Cellulare
Scuola di Dottorato in Scienze della Vita "Camillo Golgi" - Università degli Studi di Pavia

April 2th, April 8-12th and 25th June 2019
(Aula A. Falaschi, Building of IGM-CNR)

Frontiers in Molecular Biology

"DNA and RNA metabolisms in normal physiology and disease"

Organizers: Doctors Giuseppe Biamonti, Sofia Francia, Claudia Ghigna, Giordano Liberi, Alessandra Montecucco, Ennio Proserpi.
Institute of Molecular Genetics, National Research Council (IGM-CNR) of Pavia.

Synopsis. The objective of this course is to provide a comprehensive view of the complex network of interactions that contribute to the maintenance of genome stability in eukaryotes. Seminars will be focused on the emerging crosstalk between non-coding RNAs, chromatin and transcription/pre-mRNA splicing in the context of DNA damage. The role of epigenetic programs, acting via chromatin organization, in the definition of cell- and tissue-specific programs and their contribution to human diseases will be also discussed.

Programme:

April 2th

14,30-16,00

Prof. Vincenzo Costanzo (IFOM, Milan)

Understanding the essential role of Dna metabolism genes in vertebrates.

April 3th

14,30-16,00

Dr. Fabrizio D'Adda di Fagagna (IFOM, Milan and IGM-CNR, Pavia)

DNA damage-induced non coding RNA synthesis.

April 8th

14,30-16,00

Prof. Maria Pia Longhese (Milano-Bicocca University, Milan)

Cellular response to DNA double-strand breaks.

16,00-17,30

Dr. Massimo Lopes (University of Zurich)

Replication fork remodelling upon cancer-relevant replication stress.

April 10th

14,30-16,00

Dr. Emanuele Buratti (International Centre for Genetic Engineering and Biotechnology – ICGEB, Trieste)

Role of RNA modifications in the development of Amyotrophic Lateral Sclerosis and Frontotemporal Dementia.

16,00-17,30

Dr. Davide Gabellini (San Raffaele Scientific Institute, Milan)

Molecular characterization of DUX4 in muscular dystrophy and cancer.

April 11th

14,30-16,00

Prof. Giannino Del Sal (University of Trieste, Trieste and IFOM, Milan)

Interplay between oncogenic signaling, tumor environment and cancer cell metabolism.

April 12th

14,30-16,00

Dr. Paolo Maiuri (IFOM, Milan)

Mapping the polarity of the cell Nucleus.

June 25th

15,00-16,00

Dr. Valter Longo (USC Leonard Davis School of Gerontology, Los Angeles and IFOM, Milan)

Fasting mimicking diets, multi-system regeneration and healthspan