# PhD Program in Genetics, Molecular, and Cellular Biology

# Advanced Course Mechanisms and Pathways controlling Nuclear and Genome Integrity

From March 31<sup>st</sup> to April 11<sup>th</sup>, 2025. Aula A: Falaschi, IGM-CNR

**Organizers:** Bione Silvia, Buscemi Giacomo, Foiani Marco, Francia Sofia, Ghigna Claudia, Liberi Giordano, Montecucco Alessandra, Sabbioneda Simone, Zannini Laura

#### March 31st

9:30-11:00 Fabrizio D'Adda di Fagagna: (IGM-CNR and IFOM)

"Telomere Biology in Cancer and Aging"

11:15-13:00 Magda Bienko (Human Technopole Milano)

"Cell type-specific intronic RNAs shape genome architecture during neuronal lineage specification"

# April 1st

10:00-12:00 Andres Aguilera (University of Seville, Spain)

"RNA-mediated replication stress and genome instability"

14:00-16:00 Piero Carninci (Human Technopole Milano)

"Multiple roles of long non-coding RNAs in genome regulation"

#### April 2nd

11:00-13:00 Vincenzo Costanzo (University of Milano and IFOM)

"Understanding causes and consequences of DNA replication stress in cancer and stem cells" 14:00-16:00 Dana Branzei (IGM-CNR and IFOM)

"DNA damage tolerance regulation"

### April 4<sup>rt</sup>

11:00-13:00 **Stefano Piccolo** (University of Padova and IFOM)

"Mechanobiology of cancer, regeneration and ageing"

# April 7th

11:00-13:00 **Diego Dibitetto** (Istituto Mario Negri, Milano)

"An Example of Synthetic Lethality in Cancer: a focus on the BRCA-PARP connection" 14:00-16:00 G.V. Shivashankar (Dep. of Health Science and Technology, ETH Zurich)

"Mechano-genomic control and biomarker for cell-state transitions in health and disease"

#### April 10th

11:00-13:00 Evi Southoglu University of Sussex, UK

"The role of Genome Organisation in DNA repair Fidelity and Mutagenesis"

# April 11<sup>th</sup>

11:00 -13:00 Davide Gabellini San Raffaele Hospital, Milano "

"Understanding and treating inflammation in FSHD muscular dystrophy"