

# 2<sup>nd</sup> Joint Annual Symposium

## 20<sup>th</sup> JUNE

13:45 Welcome

### Fighting diseases: dissecting the molecular mechanisms (Chairperson prof. Albertini A.)

1. 14:00-14:15 Cancer cell metabolism: the glutamine-asparagine connection (Mondello C, IGM-C CNR)
2. 14:15-14:30 Sporadic and hereditary gastric cancer: CDH1 (E-cadherin) gene and beyond (Ranzani GN, DBB)
3. 14:30-14:45 Expanding the spectrum of clinical phenotypes: from gene to disease and back (Errichiello E, DMM)
4. 14:45-15:00 A tale of some of the “two brains” pathologies (Comincini S, DBB)
5. 15:00-15:15 Exploiting RNase H2 activity towards uncanonical substrates geometry (Crespan E, IGM-CNR)
6. 15:15-15:30 A damaged DNA binding protein 2 (DDB2) mutation disrupting interaction with PCNA affects DNA repair and confers proliferation advantage (Guardamagna I, DMM)
7. 15:30-15:45 The RNA processing factors DICER and DROSHA control chromatin conformation and gene transcription at DNA double-strand break sites (Capozzo I, IGM-CNR)
8. 15:45-16:00 Do you know what’s in your laboratory water? The impact of water quality on your experiments (Riché E., Merck)

**16:00-16:30** *Coffee break*

### THE SYMPOSIUM MOVES TO ROOM A4 (CAMPUS)

9. 16:30-17:30 Invited speaker: How placebo effects influence clinical outcomes (Colloca L, Univ. Maryland, USA)

## 21<sup>st</sup> JUNE

### Fighting diseases: dissecting the molecular mechanisms (Chairperson prof. Biamonti G.)

10. 9:00 - 9:15 Larval diet impacts male pheromone composition in the medfly *Ceratitis capitata* (Scolari F, DBB)
11. 9:15 - 9:30 Nonretroviral integrated RNA viruses in the genome of mosquito vectors: a new form of immunity? (Palatini U, DBB)
12. 9:30 - 9:45 TSPYL2 is a novel regulator of SIRT1 and p300 activity in response to DNA damage (Zannini, IGM-CNR)
13. 9:45-10:00 LSD2-NPAC: nucleosome recognition and heterochromatinization processes (Pilotto S, DBB)
14. 10:00-10:15 Nova2 drives the formation of specific blood vessels through the production of a novel alternative splicing isoform of the dependence receptor Unc5b (Pradella D, IGM-CNR)
15. 10:15-10:30 PTPRD: a candidate gene for intellectual disability and neurodevelopmental disorders (Tuveri S, DMM)
16. 10:30-10:45 Mechanisms that rescue replication forks arrested by transcription (Zardoni L, IGM-CNR)
17. 10:45-11:00 Behind enemy lines: the gastric mucosal barrier and war strategies inside human stomach (Ricci V, DMM)

**11:00-11:30** *Coffee break*

18. 11:30-11:45 Molecular architecture of the multifunctional enzyme LH3, a collagen lysyl hydroxylase and glycosyltransferase (Sciatti L, DBB)
19. 11:45-12:00 Screening of circulating miRNAs in Hereditary Hemorrhagic Telangiectasia: differences between HHT1 and HHT2 patients and involvement of angiomiRs (Plumitallo S, DMM)
20. 12:00-12:15 Signalling pathways distinctive of trichothiodystrophy or xeroderma pigmentosum (Lombardi A, IGM-CNR)
21. 12:15-12:30 Fighting the effects of damaging environmental cues on women fertility and embryonic development (Cavalera F, Civello C, DBB)
22. 12:30-12:45 Rescuing the corticostriatal synaptic impairments in two mouse models of Huntington’s Disease (HD) (Talpo F, DBB)

## 21<sup>st</sup> JUNE

### Fighting diseases: developing new therapies (Chairperson prof. Gherardi E.)

23. 14:00-14:15 A common molecular mechanism for biological clocks and degenerative diseases (Damiani G, IGM-CNR)
24. 14:15-14:30 New compounds and new approaches to fight infectious diseases (Buroni S, DBB)
25. 14:30-14:45 Visualization of intact neuroimmune gateways in a clarified brainstem-inner ear preparation for the study of auditory system neuroinflammatory responses (Perin P, DMM)
26. 14:45-15:00 Human pluripotent stem cells towards striatal medium spiny neurons in physiology and pathology: an electrophysiological point of view (Maniezzi C, DBB)
27. 15:00-15:15 4-PBA ameliorates cellular homeostasis in fibroblasts from osteogenesis imperfecta patient (Besio R, DMM)
28. 15:15-15:30 Genewiz
- 15:30-16:00 Coffee break**
29. 16:00-16:15 Characterization of novel neuroprotective functions of PINK1, mutated in autosomal recessive Parkinson Disease, in modulating mitophagy and aggrephagy (Valente EM, DMM)
30. 16:15-16:30 Prognostic evaluations tailored to specific gastric neuroendocrine neoplasms. Analysis of 200 cases with extended follow-up (Vanoli A, DMM)
31. 16:30-16:45 Lysosomal Ca<sup>2+</sup> signalling controls proliferation and migration in human primary cultures of colorectal cancer (Pawan F, DBB)
32. 16:45-17:00 Clinico-pathologic and molecular study on a novel subset of mantle cell lymphoma, characterized by a MALT-type presentation and indolent behavior (Fratlicelli S, DMM)
33. 17:00-17:15 Platelet amyloid precursor protein is a regulator of venous thromboembolism in mice (Visconte C, DBB)
34. 17:15-17:30 Effects of the new cisplatin-based Pt(IV)Ac-POA prodrug in B50 and C6 rat cells (Ferrari B, DBB)

## 22<sup>nd</sup> JUNE

### Genetic variability in basic and clinical sciences (Chairperson prof. Bottinelli R.)

35. 8:30 - 8:45 Ancient and modern genomes: new approaches and tools to reconstruct the genetic history of human populations (Raveane A, Capodiferro MR, DBB)
36. 8:45 - 9:00 Chromothripsis: evolution of de novo small supernumerary marker chromosomes from trisomies (Kurtas N, DMM)
37. 9:00 - 9:15 MicroRNA signatures: bridging pathways between plants and animals (Macovei A, DBB)
38. 9:15 - 9:30 1. Investigating the Function of Telomeric Repeat-containing RNA; 2. Satellite DNA is responsible for centromere clustering in mammals (Del Giudice S, Cappelletti E, DBB)
39. 9:30 - 9:45 The epigenetic landscape of mammalian centromeres (Corbo M, Roberti A, DBB)

### Bridging basic research and biotechnological applications (Chairperson prof. Bottinelli R.)

40. 9:45-10:00 Probing the function of proteins in the *Aedes albopictus* saliva (Gabrieli P DBB)
41. 10:00-10:15 Multi-channel silk sponge for bio-engineering the human bone marrow environment: a new tool for functional platelet production *ex vivo* (Di Buduo CA, DMM)
- 10:15-10:45 Coffee break**
42. 10:45-11:00 Microbial Biotechnology (Longanesi L, DBB)
43. 11:00-11:15 Nanotechnology applications for innovative therapeutic approaches (Bloise N, DMM)
44. 11:15-11:30 Comparative distribution of 5mC/5hmC on DNA and RNA at EM level (Siciliani S, DBB)
45. 11:30-11:45 In vitro and in vivo characterization of the steric gate residue of DNA polymerase h (Maffia A, CNR)
46. 11:45-12:00 Sustainable recycling of vegetable and fruit wastes to recover phytochemicals with nutraceutical and/or cosmeceutical properties (Doria E, DBB)

### Closing remarks

- 12:00-12:15 Prof. Fabio Rugge (Rector of the University of Pavia)
- 12:15-12:45 The new CGS2 'Molecular and Cell Microscopy Facility' (Freccero M, Delegato per le infrastrutture della ricerca)