

DISEASE MODELING IN MOLECULAR BIOMEDICINE: FOCUS ON EXCITABLE SYSTEMS

ORGANIZERS: *Prof.ssa Annalisa Bucchi*
Prof.ssa Graziella Cappelletti
Prof.ssa Graziella Messina

July 5-8 2024
ROOM B8



The course will highlight the importance of proper disease modeling to investigate the structural-functional relationship in the pathophysiology of excitable systems. Current advances in in-vitro/in-vivo approaches used to identify the pathological mechanisms underlying cardiac arrhythmias, muscular dystrophies, and neurodegenerative diseases will be presented.

JULY 5, 2024

Room B8

DISEASE MODELING IN MOLECULAR BIOMEDICINE: HEART

- **9:00-9:30: Electrical and structural properties of the myocardium**
Dr Patrizia Benzoni, Università degli Studi di Milano
- **9:30-10:15 Animal models and human tissues**
Prof.ssa Laura Sartiani, Università degli Studi di Firenze
- 10:15-10:30 Break**
- **10:30-11:15 In-silico modeling**
Prof. Stefano Severi, Università di Bologna
- **11:15-12.45 Stem cells**
Dr. Chiara Volani, Eurac Research, Institute for Biomedicine
- **12:45-13:00 Conclusions**



JULY 5, 2024

Room B8

DISEASE MODELING IN MOLECULAR BIOMEDICINE: SKELETAL MUSCLE

- **14:00-15:30 Skeletal muscle: development, regeneration and diseases**

Dr.ssa Giorgia Careccia, Dipartimento di Bioscienze
Università degli Studi di Milano

15:30-15.45 Break

- **15:45- 17.30 Muscle in Motion: Advanced 3D Modeling of Skeletal Muscle**

Dr.ssa Anna Urciuolo, Dipartimento di medicina Molecolare
Università degli Studi di Padova

JULY 8, 2024

Room B8

DISEASE MODELING IN MOLECULAR BIOMEDICINE: NERVOUS SYSTEM

- **14:00-14:45. Neurons: how to explore the structural complexity.**

Prof.ssa Maura Francolini, Università degli Studi di Milano

- **14:45-15:30. Neurons: how to explore the functional complexity.**

Dr. Federico Brandalise, Università degli Studi di Milano

15:30-15:45 Break

- **15:45-16:45 Cellular platforms for studying neuronal and non neuronal dysfunction in CNS disorders.**

Prof.ssa Mariagrazia Grilli, Università del Piemonte Orientale

- **16:45-17.45 In vitro and in vivo models to study neuromuscular diseases: some examples for Spinal Muscular Atrophy.**

Prof.ssa Marina Boido, Università di Torino

- **17:45-18:00 Conclusions**

