

# PhD Research Symposium

12 November 2025

Aula 1.11 - Campus della Salute



PhD School in Translational and Precision Medicine



UNIVERSITÀ DI PAVIA  
Dipartimento di Medicina Molecolare

## Program

### ORAL PRESENTATIONS

- 9.00** Welcome from the PhD School Director  
*Prof. Roberto Bottinelli*
- 9.10** Hi-C on hiPSC-derived astrocytes allow to further decipher pathomechanisms in Autosomal Dominant adult-onset demyelinating LeukoDystrophy (ADLD)  
*Anna Basile* – Supervisor: *E. Giorgio*
- 9.30** MitoStitch: a new tool to investigate the structural and functional components of mito-nuclear communication  
*Alessandra Tavoni* – Supervisor: *K. Lefkimiatis*
- 9.50** Idiopathic polyhydramnios: an understated indicator of genetic and neuropsychiatric conditions?  
*Anna Meroni* – Supervisor: *F. Sirchia*

- 10.10** Radiation therapy and asparaginase: building a new approach for a combined cancer therapy  
*Andrea Previtali* – Supervisor: *C. Scotti*
- 10.30** The application of nanotechnology for the reduction of bacterial infection  
*Emanuela Peluso* – Supervisor: *L. Visai*

**10.50 – 11.20 Coffee Break**

### ORAL PRESENTATIONS

- 14.00** Lung cancer cells respond to pro-differentiation treatment by downregulating cancer stem cell and pathogenic traits in vitro  
*Alice Grossi* – Supervisor: *V. Sottile*
- 14.20** Investigating the Mechanisms Underlying Muscle Decline Induced by Physical Inactivity  
*Cristiana Sazzi* – Supervisor: *M.A. Pellegrino*
- 14.40** Functional consequences of morphometric changes in capillary and mitochondrial networks in healthy aging  
*Chiara Felles* – Supervisor: *S. Porcelli*
- 15.00** Exploring new therapeutic targets to overcome immunotherapy resistance in advanced NSCLC  
*Maria Teresa Frascino* – Supervisor: *A. Palladini*
- 15.20** A multidimensional assessment for tackling malnutrition in inflammatory bowel disease: ibd-onfoods  
*Francesco Mordà* – Supervisor: *A. Di Sabatino*

**15.40 – 16.10 Coffee Break**

**16.40 – 17.00 Concluding Remarks**

### FLASH TALKS

- 11.20** Regulatory Role of Sigma1 Receptor on Peroxisporins in Plasma Membranes and Mitochondria  
*Giorgia Senise* – Supervisor: *U. Laforenza*
- 11.25** Renal PDGFR Alpha cells induce gender specific protection during nephrotoxicity  
*Raima Remesh* – Supervisor: *M.P. Santini*
- 11.30** Application of a 3D in vitro model of human liver organoids for the development of new personalized therapies  
*Martina Di Noia* – Supervisor: *C. Turato*
- 11.35** Electrospun wool keratin scaffolds combined with gold nanoparticles: a new strategy for bone regeneration  
*Marta Piccioni* – Supervisor: *L. Visai*
- 11.40** Preliminary investigation of multiple stilbene-cisplatin combinations in A549 cells and their stem cell populations, after acute treatment  
*Mattia De Vita* – Supervisor: *M. Savio*
- 11.45** NIRS assessment of microvascular function and muscle oxidative capacity in patients with friedreich's ataxia  
*Marianna Neri* – Supervisor: *S. Porcelli*
- 11.50** Targeting neuronal hyperexcitability: biophysical insights into the KCC2 protein network  
*Sofia Guzzeloni* – Supervisor: *M. Lolicato*
- 11.55** Patient-Derived Cellular Models to investigate pathogenic mechanisms associated to CPLANE1 gene dysfunction in Joubert Syndrome  
*Valentina Buonfiglio* – Supervisor: *E.M. Valente*

### FLASH TALKS

- 16.10** Versatile Alginate-Gelatin Hydrogel Systems for 3D Breast Tumor Modeling  
*Amirhossein Elahi* – Supervisor: *N. Bloise*
- 16.15** A clinical investigation into the co-occurrence of dental anomalies with ocular and cutaneous features  
*Maurizio Pascadopoli* – Supervisor: *E. Errichiello*
- 16.20** Dissecting of the role of DEAD Box – RNA Helicase DDX54 in myelodysplastic neoplasms  
*Claudia Fiducioso* – Supervisor: *L. Malcovati*
- 16.25** Ventriculo-arterial coupling in cardiac amyloidosis  
*Anna Valeria Di Simone* – Supervisor: *G. Palladini*
- 16.30** Modelling of bone marrow extracellular matrix structure  
*Gustavo Martinovich* – Supervisor: *A. Balduini*
- 16.35** The Novel PROSPER Score for Predicting Early Post-Operative Recurrence in Crohn's Disease  
*Giovanni Santacroce* – Supervisor: *A. Di Sabatino*