Società Italiana di Biochimica

**e Biologia Molecolare**

# Università degli Studi di Pavia

**34a Riunione Nazionale**

***“A. Castellani”***

#### dei Dottorandi

**di Ricerca**

**in Discipline Biochimiche**

**(34th *“A. Castellani”* Meeting of PhD students in biochemical sciences)**

**BRALLO DI PREGOLA (Pavia)**

**5 - 9 giugno 2023**

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PROGRAMMA

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# COMITATO SCIENTIFICO-ORGANIZZATIVO

Paola Chiarugi Claudia Martini

Raffaele Porta Cesare Balduini

Vittorio Bellotti Antonella Forlino

Sofia Giorgetti Giampaolo Minetti

Chiara Paganini Giampiero Pietrocola

Francesca Tonelli Maria Enrica Tira

Mauro Torti Livia Visai

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Università degli Studi di Pavia

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**MONDAY, JUNE 5th, 2023**

17.00-20.00 Registration & check-in

20.00 **DINNER**

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**TUESDAY, JUNE 6th, 2023**

8.50-9.00 Opening remarks

Chair: t.b.d.

9.00-9.40 **Prof. ALBERTO PASSI (Università dell'Insubria)**  
**Hyaluronan journey from biological glue to biological cue**

9.40-10.00 **Barbara Maria Contento** (Università di Pavia)  
Altered CaMKII-SMAD signalling and cell junctions in a mouse model of osteogenesis imperfecta type XIV

10.00-10.20 **Ruhi Anjum** (Università di Urbino)  
CRISPR/CAS9-mediated UBC gene knockout in gastric cancer cell lines as a potential therapeutic strategy

**COFFEE BREAK**

Chair:

10.50-11.10 **Matteo Prisinzano** (Università di Firenze)  
Sphingosine 1-phosphate signaling axis mediates neuropeptide S-induced invasion of endometriotic cells

11.10-11.30 **Silvia Breviario** (Università di Milano)  
Acid sphingomyelinase inhibition in GBA-dependent Parkin-son’s disease in vitro models: protective or damaging effect?

11.30-11.50 **Maura D’Amato** (Università di Pavia)  
Development of a strategy to inhibit human neutrophil elastase in COVID-19 patients

11.50-12.10 **Michela Capraro** (Università di Genova)Identification of a potential biomarker predicting the efficacy of therapies in cystic fibrosis: downregulation of plasmatic matrix metalloproteinase 9

13.00 **LUNCH**

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Chair:

15.00-15.40 **Prof. MARIANNA CATERINO (Università di Napoli Federico II)**  
**Metabolomics and lipidomics: new tools for dissecting Inherited Metabolic Disorders**

15.40-16.00 **Dorina Dobi** (Università di Milano)  
Effect of the lipid environment on the F508del-CFTR rescue and stability at the plasma membrane

16.00-16.20 **Marta Tesi** (Università di Pisa)  
Recovery of human type 2 diabetes beta cell function associates with transcriptomic signatures that point to novel therapeutic targets

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**COFFEE BREAK**

17.00-18.00 **BLITZ PRESENTATIONS (A) (5 min)**

1 **Ornella Xynomilakis** (Università di Milano)  
Endocannabinoids, eicosanoids and essential lipids: composition of human milk compared to infant formula, a chance to improve infant formula nutritional benefits

2 **Giusi Sabatini** (Università di Teramo)  
The endocannabinoid system and Lactiplantibacillus (Lpb.) plantarum: a connection involved in the autism spectrum disorder

3 **Costanza Cicchi** (Università di Firenze)  
Effect of sustainable feeding strategy with olive oil pomace in Holstein lactating cows on bioactive peptides derived from milk proteins

4 **Lorenzo Casbarra** (Università di Firenze)  
Pathlay: a novel graphical server for -omics integration and interpretation



20.00 **DINNER**

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**WEDNESDAY, JUNE 7th, 2023**

Chair:

9.00-9.40 **Prof. Nazzareno Capitanio (Università di Foggia)  
Mitochondria and Clock-genes interplay: a Time to Sleep, a Time to Wake up**

9.40-10.00 **Matteo Amadei** (Sapienza Università di Roma)  
Genetic incorporation of dansylalanine in human ferroportin to probe the alternating access mechanism of iron transport

10.00-10.20 **Rachele Agostini** (Università di Urbino)  
Caveolin-1-overexpression stimulates extracellular vesicle secretion and modulates tumor microenvironment in a model of rhabdomyosarcoma

**COFFEE BREAK**

Chair:

10.50-11.10 **Federica Biancucci** (Università di Urbino)  
Multiomics approaches for therapeutic developments in ataxia telangiectasia

11.10-11.30 **Laura Bottoni** (Università di Siena)  
NRF2 activation by cysteine uptake as a mechanism of survival for Triple-Negative Breast Cancer cells

11.30-11.50 **Emma Nicol Serritelli** (Università Politecnica delle Marche)  
Involvment of the enzyme nicotinamide N-methyltransferase in proliferation, invasive capacity and chemosensitivity of human osteosarcoma

11.50-12.10 **Cecilia Astigiano** (Università di Genova)  
Sirtuin 6 regulates the activation of the ATP/purinergic axis in endothelial cells

**** **LUNCH**

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Chair:

15.00-15.40 **Prof. Lucio Luzzatto (Università di Firenze)  
From biological chemistry to molecular medicine**

15.40-16.00 **Martina De Felice** (Università di Pisa)  
Intermittent hypoxia and mild cognitive impairment: from a new in vitro model to promising peripheral plasma biomarkers of cognitive decline

16.00-16.20 **Francesca Monittola** (Università di Urbino)  
Dynamic changes in immunoproteasome complex assembly and capping with regulatory particles in an in vitro model of senescing macrophages

**COFFEE BREAK**



20.00 **DINNER**

**21.00-23.00 Serata caminetto**

**Il merito scientifico, come riconoscerlo, come valutarlo, come premiarlo**

**Interverranno nella discussione:**

**Prof. Giovanni Apolone Direttore Scientifico dell’Istituto Nazionale dei Tumori**

**Prof. Lucio Luzzatto Università degli Studi di Firenze**

**THURSDAY, JUNE 8th, 2023**

Chair:

9.00-9.40 **Prof. Santina Bruzzone (Università di Genova)  
Therapeutic potential of targeting the NAD world**

9.40-10.00 **Ilaria Nesi** (Università di Firenze)  
Monocytes - derived microvesicles as cargo to transfer antigens to target cells

10.00-10.20 **Silvia Maria Grazia Trivigno** (IUSS Pavia)  
The C-type lectin CD93 regulates platelet activation induced by Par4 stimulation

**COFFEE BREAK**

Chair:

10.50-11.10 **Azza Anan Dabous** (Università della Campania)  
Novel probiotic formulation containing hydroxyectoine for the treatment of IBD on enterocyte based in vitro model

11.10-11.30  **Joseph Silverberg Jr** (Università di Ferrara)  
Expanding the toolbox of ubiquitous promoters for gene therapy

11.30-11.50 **Sofia Masini** (Università di Urbino)  
Redox perturbation in the SARS-CoV-2 spike protein induced by thiol molecules

**** **LUNCH**

Chair:

15.00-15.20 **Ambra Selene Parmagnani** (Università di Torino)  
Iron-sulfur cluster assembly proteins: potential plant magnetoreceptors

15.20-15.40 **Annalisa Givonetti** (Università del Piemonte Orientale) Proteomic analysis and in vitro testing of hempseed flour and its hydrolysate

**COFFEE BREAK**

16.10-17.00 **BLITZ PRESENTATIONS (B) (5 min)**

1 **Faiza Abbas** (Università di Urbino)  
RBC-derived extracellular vesicles as a drug delivery system: flow cytometric analyses and challenges

2 **Maria Sofia Bertilacchi** (Università di Pisa)  
ACE2 signaling drives lung injury in lung bronchial epithelial cells: a focus on a possible ACE2 nuclear fraction activity

3 **Alessia Giglio** (IUSS Pavia)  
Engineered PLGS nanoparticles targeting the MET receptor for intracellular delivery of verteporfin

4 **Cecilia Masiero** (Università di Pavia)  
A new combined treatment for the dominant osteogenesis imperfecta zebrafish model Chihuahua



20.00 **DINNER**

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**FRIDAY, JUNE 9th, 2023**

Chair:

9.30-10.10 **Prof. Elisa Margherita Maffioli (Università di Milano)  
Proteomics: one approach to answer many biological questions**

10.15 **CLOSING REMARKS**

11.00 **DEPARTURE**