

16th PhD meeting

TECSBI

**20
24**

16-18 UNIVERSITY OF
SETTEMBRE MILANO-BICOCCA



SCUOLA DI DOTTORATO
BICOCCA



PROGRAM

Lunedì 16 - Aula Sironi

9.00-9.10 Opening Day 1

9.10-9.30 **s1. Laura Beretta**

Illuminating Protein-DNA interactions: using FID Assays to unmask true Protein-DNA Inhibitors in a Drug Discovery Campaign

9.30-9.50 **s2. Giuseppe Silvestri**

Exploring thermodynamic properties of biologically relevant macromolecular systems through free energy calculations: two case studies on the bench

9.50-10.10 **s3. Mirko Zago**

Biocatalytic preparation of esters

10.10-10.30 **s4. Pietro Butti**

Microbial bioprocesses and synthetic biology for fostering circularity in the textile industry

10.30-11.30 Coffee Break + Poster Session 1

11.30-11.50 **s5. Alessia Metallo**

Modulation of Intracellular Ca²⁺ Dynamics and Proliferation by ISTAROXIME in Pulmonary Artery Smooth Muscle Cells

11.50-12.10 **s6. Barbara Zerbato**

Targeting Hexosamine Biosynthetic Pathway to Overcome Resistance in Pancreatic Cancer Treatment

12.10-12.30 **s7. Giorgia Ruotolo**

From Fibroblasts to Neurons. A journey to discover Joubert Syndrome.

12.30-12.50 **s8. Chiara Florindi**

Unveiling the biophysical mechanism of cardiomyocyte excitation-contraction coupling modulation by a membrane-targeted photoswitch

12.50-14.10 Lunch Break

14.10-15.00 **is1. Prof. Francesco Iorio**
Human Technopole

15.00-15.20 **s9. Chiara Frigerio**

Exploring the interconnections between Fe-S cluster biogenesis and the DNA damage response

15.20-15.40 **s10. Francesco Abbiati**

GSL extract supplementation at the onset of yeast chronological aging imposes a metabolic remodelling that favours longevity

15.40-16.00 **s11. Roberta Pensotti**

*A journey through *Caenorhabditis elegans* aging: insights in the implication of Ferroptosis*

16.00-16.30 Coffee Break

16.30-16.50 **s12. Beatrice Negrini**

A multidisciplinary approach for the safe and sustainable design of novel nano-enabled antimicrobial products

16.50-17.10 **s13. Sara Fumagalli**

From Bioinformatics Tool Development to Microbial Transmission Analysis: Key Findings from Human and Environmental Microbiomes

17.10-17.30 **s14. Giulia Ghisleni**

The Heritage of the Deep Host-Microbiota Evolutionary Alliance: the Role of Micro-Biodiversity in Urban Contexts

17.30-17.50 **s15. Rosa Ranalli**

Urban pollinators in Italy: linking green areas with functional biodiversity for urban planning and management

Martedì 17 - Aula Sironi

9.00-9.10 Opening Day 2

9.10-9.30 **s16. Marco Barreca**

Tumour ecosystem dynamics in clinical triple-negative breast cancer depend on the chemotherapy regimen

9.30-9.50 **s17. Filippo Testa**

A new approach for direct visualization of unlabeled lipid nanoparticles for intracellular pathway analysis

9.50-10.10 **s18. Chiara Baioni**

Characterization of a CAFs model based on TGF β treatment of NIH3T3 cells: which phenotypes are acquired and how long are they maintained?

10.10-10.30 **s19. Maddalena Bracchi**

Design of a 3D bioprinted meniscal scaffold based on ECM meniscal features

10.30-11.30 Coffee Break + Poster Session 2

11.30-11.50 **s20. Miriam Kuku Afanga**

Identification of miRNA-based biomarkers predictive of lung cancer treatment response and mechanisms involved in lung cancer progression

11.50-12.10 **s21. Giulia De Simone**

Unveiling nutrimental trajectories in elderly: hippuric acid and food-derived markers in frailty

12.10-12.30 **s22. Elisa Dama**
A machine learning approach to discover new biomarkers for lung cancer early detection and risk assessment

12.30-12.50 **s23. Serena Petrella**
New therapeutic targets in Mucinous Ovarian Cancer

12.50-14.10 Lunch Break

14.10-15.00 **is2. Stefano Diciotti**
UNIBO

15.00-15.20 **s24. Tommaso Sassi**
Development of an Escherichia coli cell-factory for the industrial production of 5-methylpyrazine-2-carboxylic acid

15.20-15.40 **s25. Alessandro Marchetti**
Salt-tolerant xylanases from a halotolerant bacterium isolated from Greek coastal environments

15.40-16.00 **s26. Vittorio Senatore**
Yeast fermentation for the upcycling of PET monomers

16.00-16.30 Coffee Break

16.30-16.50 **s27. Marina Meroni**
Induction of adipocytic differentiation in myxoid liposarcoma: new approaches to improve the effectiveness of the available therapies

16.50-17.10 **s28. Maria Chiara Barbera**
Targeting miR-29 to modulate the epigenetic clock: a novel strategy to counteract prostate cancer progression.

17.10-17.30 **s29. Serena Seminara**
Effect of the inhibition of the Wiskott-Aldrich syndrome protein in the functions of microglia during neurodevelopment

18.00-20.00 Social event @BIM
Viale dell'Innovazione 3, Milano
with Non è la Zebra



Mercoledì 18 - aula U3-05

9.00-9.10 Opening Day 3

9.10-9.30 **s30. Alice Italia**
Study on the impact of Toll-like Receptor 4 (TLR4) modulation in rare inflammatory-fibrotic diseases

9.30-9.50 **s31. Angela Maria Giada Giovenale**
A look at neurogenesis in Smith-Magenis syndrome: what goes wrong?

9.50-10.50 Coffee Break + Poster Session 3

10.50-11.10 **s32. Alessia Lambiase**
Exploring anti-aging and neuroprotective properties of plant extracts and their bioactive compounds in eukaryotic models of Parkinson's disease

11.10-11.30 **s33. Stefano Bianchini**
Anticancer properties of Gratiola officinalis extract

11.30-11.50 **s34. Elisa Toini**
Applying phylogenetic methods to identify plants with high drug discovery potential

11.50-13.10 **is3. Marco Nobile,**
Chiara Gallese
UniVe & UniTo

13.10 Closing Remarks and Prizes

COLOR CODE



Industrial Biotech



Health and Biodiversity



Biomedical and Health

POSTER SESSIONS

Lun 16, 10.30-11.30 **Poster Session 1**

p1. Alice Armanni

Mapping the microbiome of hospitals and patients for solutions in risk monitoring

p2. Beatrice Colombo

Wild bees adaptation to anthropogenic habitats: a multi-Omic approach to implement innovative conservation and ecological transition strategies

p3. Lidia Favaretto

Tools of industrial ecology for the sustainability assessment of Nature-based Solutions

p4. Susanna Perotti

Enhancement of microbial biodiversity to promote environmental and human health

Mar 17, 10.30-11.30 **Poster Session 2**

p5. Martina Dramis

Engineering microbial cell factories for biomanufacturing chemicals and modified natural polymers suited for the formulation of high performance elastomeric nano compounds

p6. Mirko Frigerio Verga

Biotechnological approaches to support sustainable agriculture

p7. Gergő Borka

Development of Organ-on-Chip Based Methodologies for in Vitro Novel Compound Testing

p8. Maria Rita Chelazzi

Investigating the role of the SOWAHC-DIAPH1 complex in physiology and cancer

p9. Edvige Vulcano

Preliminary data of ICV delivery of human Neural Stem Cells in a mouse model of ALS

Mer 18, 9.50-10.50 **Poster Session 3**

p10. Flavio Corallo

Exploring the function of the CST complex at DNA double-strand breaks

p11. Francesca Misitano

Interaction between myofilament and SERCA2a activators on heart muscle mechanics

p12. Francesco Lapi

Multi-omics data analysis to characterize sex-specific metabolic shifts during embryo development

p13. Lorenzo Taglietti

Synthesis, Conformational Analysis and Preliminary Biological Evaluation of Iminosugar-based Pharmacological Chaperones for Mucopolysaccharidosis Type I

p14. Luca Moretti

Identification and characterization of anti-amyloidogenic natural compounds for the prevention of age-related neurodegenerative diseases

MAIN SPONSORS:

eppendorf



ALSO SPONSORED BY:

CliniSciences

Euro@lone®



BiM

**20
24**

**16th PhD
meeting**

TECSBI

