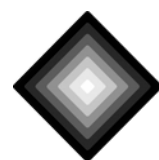


16th PhD meeting

TECSBI

2024

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. Rosa Ranalli

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

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. Giulia Ghisleni

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

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. Stefano Bianchini

Anticancer properties of Gratiola officinalis extract

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

CRISPR-based second-generation of genetic-vulnerability-maps in cancer cells

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. Laura Beretta *

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

17.30-17.50 s15. Mirko Zago *

Biocatalytic preparation of esters

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

09.30-09.50 s17. Serena Seminara

Effect of the inhibition of the Wiskott-Aldrich syndrome protein in the functions of microglia during neurodevelopment

9.50-10.10 s18. Chiara Baioni

Characterization of a CAFs model based on TGFβ 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. Alice Italia ***
Study on the impact of Toll-like Receptor 4 (TLR4) modulation in rare inflammatory-fibrotic diseases

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



COLOR CODE



* To attend these sessions, participants are required to sign a confidentiality agreement to ensure that all research presented remains protected and is not shared without authorization

Mercoledì 18 - aula U3-05

9.00-9.10 Opening Day 3

9.10-9.30 **s30. Filippo Testa**
A new approach for direct visualization of unlabeled lipid nanoparticles for intracellular pathway analysis

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. Barbara Zerbato**
Targeting Hexosamine Biosynthetic Pathway to Overcome Resistance in Pancreatic Cancer Treatment

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
Beyond the black-box: A practical guide to technical interpretability
&
The AI Act and the right to technical interpretability

13.10 Closing Remarks and Prizes

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:



ALSO SPONSORED BY:

