Società Italiana di Biochimica

**e Biologia Molecolare**

# Università degli Studi di Pavia

**31a Riunione Nazionale**

***“A. Castellani”***

#### dei Dottorandi

**di Ricerca**

**in Discipline Biochimiche**

**(31st *“A. Castellani”* Meeting of PhD students in biochemical sciences)**

**BRALLO DI PREGOLA (Pavia)**

**3 - 7 June 2019**

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PROGRAM

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# SCIENTIFIC AND ORGANIZING COMMITTEE

Cesare Balduini

Vittorio Bellotti

Ilaria Canobbio

Gianni Francesco Guidetti

Giampaolo Minetti

Chiara Paganini

Maria Enrica Tira

Francesca Tonelli

Mauro Torti

Maurizia Valli

Mauro Magnani

Raffaele Porta

Annalisa Santucci

**SCIENTIFIC AND ORGANIZING SECRETARIAT**

Università degli Studi di Pavia

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 **MONDAY, JUNE 3rd, 2019**

**17.00-20.00** Registration & check-in

**20:00 DINNER**

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 **TUESDAY, JUNE 4th, 2019**

**8.50-9.00** Opening remarks

Chair: Vittorio Bellotti

**9.00-9.40** Prof. LUIGI PALMIERI (Bari)
Mitochondria and aging

**9.40-10.00** Francesco Capriglia (Bari)
Elucidating the molecular mechanisms underlying the biological activity of rescuing peptides in MELAS mitochondrial disease

**10.00-10.20** Laura Ioannilli (Roma)
FoxO1 in the mitochondria of adipose tissue: impact on cell response to nutrient availability

 **COFFEE BREAK**

Chair:

**10.50-11.10** Maria Tolomeo (Bari)
Alteration of flavin homeostasis in neuromuscular disorders and cancer

**11.10-11.30** Roberta Cavagna (Milano)
Capture next generation sequencing enhances the identification of clonal rearrangements as markers in acute lymphoblastic leukemia patients

**11.30-11.50** Maddalena Cagnone (Pavia)
A pilot study to investigate the balance between proteases and α1-antitrypsin in lung transplant patients

**11.50-12.10** Jessica Canino (Pavia)
Role of proline-rich tyrosine kinase Pyk2 in thromboinflammation

 **LUNCH**

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Chair:

**15.00-15.40** Prof. FEDERICO BUSSOLINO (Torino)
Transcription factor EB reprograms tumor microenvironment by a lysosomal/autophagy -independent pathway

**15.40-16.00** Chiara Maria Manega (Milano)
12(S)-hydroxyeicosatetraenoic acid downregulates monocyte-derived macrophage efferocytosis: new insights in atherosclerosis

**16.00-16.20** Alice Franchi (Genova)
Bioactive molecules isolated from olive pomace extract protect murine cortex neurons from NMDA-mediated cell death

 **COFFEE BREAK**

**17.00-19.00 POSTER PRESENTATION FOLLOWED BY POSTER VIEWING - SESSION A**Authors should place their posters on the provided boards and present them in front of the audience with 2-3 slides for a total of 5 min including discussion.

**20:00 DINNER**

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 **WEDNESDAY, JUNE 5th, 2019**

Chair:

**9.00-9.40** Prof. FABRIZIO TAGLIAVINI (Milano)
Molecular subtypes of Alzheimer's disease

**9.40-10.00** Giulia Faravelli (Pavia)
Using *Caenorhabditis elegans* and INVAPP/Paragon automated system for amyloid drug screening

**10.00-10.20** Rebecca Piccarducci (Pisa)
α-synuclein heterocomplexes in red blood cells as potential diagnostic biomarkers in Alzheimer’s disease

 **COFFEE BREAK**

Chair:

**11.00-11.20** Erika Di Biase (Milano)
The oligosaccharide of GM1 ganglioside acts as a neurotrophic agent for neuronal development

**11.20-11.40** Giovanna Menduti (Roma)
Response to oxidative stress of neuronal cells overexpressing ALDH5A1 gene variants

**11.40-12.00** Giulia Lunghi (Milano)
GM1 oligosaccharide modulation of calcium signaling in neuronal functions

 **LUNCH**

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Chair:

**15.00-15.40** Prof. FRANCESCO BONOMI (Milano)
Nanoparticles and solid systems: their effects on protein structure and function

**15.40-16.00** Valentina Bordoni (Sassari)
Artemisia silver nanoparticles: new opportunities to fight cancer

**16.00-16.20** Michela Lapi (Milano)
Biochemical and structural characterization of Nuclear Factor I X (NFIX)

 **COFFEE BREAK**

**17.30-18.30** **Dottorandi di Pavia
Il lato oscuro della ricerca biomedica**

**20:00 DINNER**

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**21.00-23.00** Serata caminetto:
Luca Vanzago e Raffaele Porta:
**Un colloquio tra Biochimica e Filosofia**

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 **THURSDAY, JUNE 6th, 2019**

Chair:

**9.00-9.40** Prof. MARCO MORACCI (Napoli)
Discovery of carbohydrate active enzymes from (hyper)thermophiles: how to exploit natural diversity in biotechnology

**9.40-10.00** Maria Elena Laugieri (Genova)
Study and characterization of glycosyltransferases from *Paramecium bursaria Chlorella virus – 1*

**10.00-10.20** Maria Elena Canali (Milano)
The role of sialidase NEU3 in the cardiac response to ischemia and reperfusion injury

 **COFFEE BREAK**

Chair:

**11.00-11.40** Prof. LARS KAESTNER (Saarbrücken)
Something (new) about proteins and cells

**11.40-12.00** Francesca Grassi Scalvini (Milano)
Proteomic and behavioural analysis of thermal stress effects on Zebrafish brain

 **LUNCH**

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Chair:

**15.00-15.40** Prof. RAFFAELE PORTA (Napoli)
Plastics revolution, pollution and substitution

 Prof. MOHAMMED SABBAH (Napoli)
Polysaccharide and protein-based bioplastics

**15.40-16.00** Ferdinando Sansone (Napoli)
Characterization of a new beta-galactosidase from thermophilic Bacillus coagulans strain MA-13 for biotechnological applications

**16.00-16.20** Vittoria Cicaloni (Siena)
Interactive Alkaptonuria Database: investigating clinical data to improve patient care

 **COFFEE BREAK**

**16.30-18.30 POSTER PRESENTATION FOLLOWED BY POSTER VIEWING - SESSION B**Authors should place their posters on the provided boards and present them in front of the audience with 2-3 slides for a total of 5 min including discussion.

**20:00 DINNER**

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 **FRIDAY, JUNE 7th, 2019**

Chair:

**9.30-10.10** Prof. ANNALISA SANTUCCI (Siena)
Alkaptonuria: the history, the story and the research on the first human genetic disease

**10.15** **CLOSING REMARKS**

 **COFFEE BREAK AND DEPARTURE**

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**POSTER SESSION A, TUESDAY, JUNE 4th 2019, 17:00-19:00**

1. **Mariangela Jessica Alfeo (Pavia):** Iron-regulated surface determinant B (IsdB) mediates Staphylococcus aureus adherence to vascular endothelium through von Willebrand factor (vWF)
2. **Ilaria Artusi (Padova):** The extracellular EpiP serine protease from *Staphylococcus aureus* proteolytically activates prothrombin and triggers blood coagulation: implications in septic thrombosis
3. **Stefano Barbera (Siena):** Rab5C regulates the CD93/Multimerin-2/β1 integrin complex trafficking during endothelial cell adhesion and migration
4. **Serena Castelli (Roma):** Pseudo-hypoxia induction by Adipose Triglyceride Lipase (ATGL) in Hela cells
5. **Francesca Maria Castiglia (Siena):** Synthesis, efficacy and cytotoxicity of the antimicrobial peptide SET-M33: analysis of the best counter ion
6. **Carmela Piazzolla (Bari):** Role of mitochondrial uncoupling protein-2 in pancreatic ductal adenocarcinoma tumorigenesis and maintenance
7. **Deborah Pietrobono (Pisa):** Adenosine promotes glioblastoma aggressiveness modulating the epithelial-mesenchymal transition
8. **Simona Saporiti (Milano):** IgG1 effector functions: elucidation of glycans role by in silico structural analysis
9. **Paolo Maria Soprano (Pavia):** Exploiting natural silk protein for bioengineering bone marrow niche for ex vivo platelet generation
10. **Mauro Vismara (Pavia):** Analysis of the effects of platelet-derived microparticles on a breast cancer cell line
11. **Carolina Zara (Urbino):** Increase of intracellular glutathione (GSH) by I-152, a conjugate of N acetyl-cysteine (NAC) and β-mercaptoethylamine (MEA)

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**POSTER SESSION B, THURSDAY, JUNE 6th, h 17:00-19:00**

1. **Clementina Barone (Napoli)** Characterization of p57kip2/*CDNK1C* mutations identified in Beckwith-Wiedemann syndrome
2. **Luca Bombardi (Verona):** Molecular and structural properties of centrin 2 from *Toxoplasma gondii*
3. **Tatiana Carrozzini (Milano):** Protective effects of coffee metabolites against oxidative stress
4. **Silvia Cotti (Pavia-Ghent):** The effects of phosphorous deficiency and oversupply: vertebral column malformations and bone mineralization in wild-type and osteogenesis imperfecta zebrafish mutants
5. **Federico D’Alessio (Roma):** Characterization of YggS, a protein involved in pyridoxal 5’-phosphate transport and homeostasis
6. **Nadia Garibaldi (Pavia):** Cellular homeostasis in murine osteoblasts from two osteogenesis imperfecta models is rescued by phenylbutyric acid
7. **Laura Leoni (Pavia):** Characterization of OI type XIV zebrafish models
8. **Sonia Spinelli (Genova):** ABA stimulates insulin-independent glucose uptake in L6 rat myoblasts and in mouse skeletal muscle via AMPK activation
9. **Giovanni Stelitano (Pavia):** Targeting iron uptake pathway for the development of novel antitubercular drugs
10. **Filippo Tasini (Urbino):** Characterization of the ubiquitin system in primary and metastatic gastric cancer cell lines
11. **Elisa Vignali (Varese):** A new bacterial lignin peroxidase: recombinant overexpression and biotechnological applications
12. **Daniela Cristina Vuoso (Napoli):** Anticancer activity of Annurca apple polyphenol extract in triple negative breast cancer cells is mediated by ROS/JNK signaling axis

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