



1st Workshop
of the SIB group “Tumor Biochemistry”
From genes to metabolites through proteins: dealing with human health and disease

February 25th 2022, University of Milano Bicocca
Piazza della Scienza 4, Room U4-08 Luisella Sironi Milano

Scientific Committee
Ferdinando Chiaradonna
Annamaria Antona
Michela Grosso
Chiara Riganti
Federica Rizzi
Domenica Scumaci

Organizing Committee
Ferdinando Chiaradonna
Barbara Zerbato
Giorgia Capodanno
Larissa Ndayisenga
Maximilian Gobbi



Scientific Program

09.50-10.00 Opening Remarks

10.00-11.00 Session 1-Metabolic rewiring in cancer cells. Basic mechanisms and new therapeutic targets (Part I)

Chairs: Iris Chiara Salaroglio and Michela Corsini

10.00-10.15 *Unveiling Metabolic Plasticity of Human Osteosarcoma Cells to Improve Cancer Therapy.* **Francesca Agriesti.** University di Foggia

10.15-10.30 *Cladosporols Negatively Regulate 3T3-L1 Cell Differentiation and, through Adipocytokine Synthesis and Secretion, Influence HT-29 Colon Carcinoma Cell Proliferation.* **Roberta Rapuano.** Sannio University, Benevento

10.30-10.45 *Dysregulated Expression of the Transcriptional Factor Gata-1 Rewires Metabolic Activity in Myeloid Leukemia Cells.* **Silvia Trombetti.** University of Naples Federico II

10.45-11.00 *MCJ/DNAJC15 Mitochondrial Chaperone as a Metabolic “Balance Needle” in Ovarian Cancer Chemoresistance.* **Stefano Miglietta.** University of Bologna

11.00-11.30 Coffee Break

Chair: Ferdinando Chiaradonna

11.30-12.00 *Invited lecture Sex and Gender Dimension in Science and Research.* **Susanna Chiocca.** European Institute of Oncology, Milano

12.00-13.00 Session 2-Metabolism and epigenetic interplay in cancer

Chairs: Elisabetta Aldieri and Anna Privitera

12.00-12.15 *Lactate Rewires Lipid Metabolism and Sustains a Metabolic-Epigenetic Axis in Prostate Cancer.* **Luigi Ippolito.** University of Florence

12.15-12.30 *Integrative Analysis of Aberrant Epigenetic Features in Triple Negative Breast Cancer Clinical Samples.* **Giulia Robusti.** European Institute of Oncology, Milano

12.30-12.45 *A Key Silencing Histone Mark on Chromatin is Lost when Colorectal Adenocarcinoma Cells Are Depleted in Methionine by Methionine γ -Lyase.* **Samanta Raboni.** University of Parma

12.45-13.00 *Novel Insights into DJ-1: a Key Player in Epigenetic Misregulation in Breast Cancer.* **Marina La Chimia.** University of Catanzaro

13.00-14.00 Lunch

14.00-15.00 Poster Session

Chair: Sergio Giannattasio

15.00-15.30 *Invited lecture Tackling Tumor Cell Metabolism through a Novel Signaling Pathway Converging on PP2A.* **Saverio Minucci.** University of Milano

15.30-17.00 Session 3-Metabolic rewiring in cancer cells. Basic mechanisms and new therapeutic targets (Part II)

Chairs: Marina Bacci and Luigi D'Angelo

15.30-15.45 *A New Immunocompetent Organ on Chip for Modeling the 3D Tumor Microenvironment with Capillary Flow-Driven Immune Cells.* **Silvia Scaglione.** National Research Council, Genoa

15.45-16.00 *Riboregulation of Human Serine Hydroxymethyltransferase Activity in Cellular Metabolism.* **Francesca Romana Liberati.** University of Sapienza, Rome

16.00-16.15 *Cytotoxic Effect of the Antipsychotic Drug Spiperone in Colorectal Cancer Cells via Endoplasmic Reticulum Stress Induction, Intracellular Lipids Dysregulation, and Golgi Apparatus Damage.* **Annamaria Antona.** University of Piemonte Orientale, Novara

16.15-16.30 *SKP2 Drives the Sensitivity to Neddylation Inhibitors and Cisplatin in Malignant Pleural Mesothelioma.* **Joanna Kopecka.** University of Torino

16.30-16.45 *From glutamine addiction to altered ROS levels: VEGFR2-dependent metabolic changes in melanoma cells suggest novel therapeutic opportunities.* **Elisabetta Grillo.** University of Brescia

16.45-17.00 *Inhibition of Hexosamine Biosynthetic Pathway increases the Gemcitabine effect in pancreatic cancer treatment.* **Barbara Zerbato.** University of Milano Bicocca

17.00-17.10 Awards and Closing remarks

Short talk commission awards: Jlenia Brunetti (Siena), Ilaria Dando (Verona), Alessio Paone (Roma), Annapina Russo (Napoli)

Poster commission awards: Daniela Capello (Piemonte Orientale), Virginia Di Bella (Catania), Chiara Giacomelli (Pisa), Laura Patrussi (Siena),