

Scientific Program

Thursday, October 5th 2023 Aula Circolare, University of Calabria, Rende (CS)

16:00 - 18:00 Registration

11:00 – 11:30 *Coffee Break*

Friday, October 6th 2023
Aula Circolare, University of Calabria, Rende (CS)

08:00 - 09:00	Registration
09:00 - 09:30	Opening Conference Institutional Greetings
Session 1	"Nucleic Acids: Structure, Modelling and Biochemistry" Chair: Anna Maria Musti (University of Würzburg)
09:30 - 10:00	Opening Lecture Session 1 Paolo Vincenzo Pedone (University of Campania Luigi Vanvitelli) Structure and functions of Zinc finger DNA binding proteins in prokaryotes and eukaryotes
10:00 – 10:20	<u>Daniela Valeria Miniero</u> (<i>University of Bari Aldo Moro</i>) Intron evolution: analysis in conserved genes
10:20 – 10:40	Federica Di Fonzo (Sapienza University of Rome) Metabolism and DNA repair: clues from the role of human serine hydroxymethyltransferase
10:40 - 11:00	Michele Galluccio (University of Calabria) The human SLC38A2 (SNAT2) transporter: two different protein isoforms derived from two highly similar mRNA transcripts

"Deciphering and Reshaping Nucleic Acids" 1st Workshop of the SIB group "Nucleic Acids"

Session 2 "Nucleic Acids: New tools and Translational Approach" Chair: Michele Galluccio (University of Calabria) 11:30 – 12:00 Opening Lecture Session 2 George Nagel (University of Würzburg) Microbial opsins in transgene animals and plants: chances and challenges **12:00 – 12:20** Giorgia Natalia Iaconisi (*University of Salento*) Optimizing Recombinant Protein Production in E. Coli Cells through Co-Transformation Approach **12:20 – 12:40** Amer Ahmed (*University of Bari Aldo Moro*) Generation of a Yeast Cell Model Potentially Useful to Identify the Mammalian Mitochondrial N-Acetylglutamate Transporter **12:40 – 13:00** Francesca Rizzo (University of Bari Aldo Moro) Understanding the mechanism of human mtDNA replication through the identification of novel regulatory factors by BioID2-based proximity labelling **13:00 – 14:00** *Lunch* Session 3 "Nucleic Acids: Application in Biomedical Science" Chair: Davide Sartini (Polytechnic University of Marche) 14:00 – 14:30 Opening Lecture Session 3 Sander Kersten (Wageningen University) PPARalpha, the master transcriptional regulator of lipid metabolism in the liver **14:30 – 14:50** Simona Nicole Barile (University of Bari Aldo Moro)

14:50 – 15:10 Roberto Campagna (Polytechnic University of Marche)

AGC1 deficiency

Nicotinamide N-methyltransferase: a key enzyme of pyridine metabolism and a target for human osteosarcoma treatment

Impaired bioenergetic profile in neuron progenitor cells form iPSCs of patients affected by

15:10 – 15:30 Davida Mirra (*University Campania Luigi Vanvitelli*)

Modulation of microRNA in human alveolar macrophages by cigarette smoke

15:30 – 16:00 *Coffee Break*

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Session 4	"Nucleic Acids in Biology: Epigenetic regulation and misregulation" Chair: Paola Loguercio Polosa (University of Bari Aldo Moro)
16:00 - 16:30	Opening Lecture Session 4 Modesto Orozco (IRB Barcellona) A multiscale view to nucleic acids biology
16:30 – 16:50	<u>Camilla Morresi</u> (<i>Polytechnic University of Marche</i>) Effect of high glucose diet and intestinal cells: possible molecular and epigenetic mechanisms
16:50 – 17:10	Marina La Chimia (Magna Græcia University of Catanzaro) Epigenetic meets metabolism: Phospo-DJ1 as a novel player in epigenetic misregulation
17:10 – 17:30	<u>Diana Marisol Abrego Guandique (Magna Græcia University of Catanzaro)</u> Perinatal Nutrition: MicroRNAs profiling in liver tissue under Western diet
17:30 – 18:00	Closing Remarks