



GIBB

Gruppo Italiano di Biomembrane e Bioenergetica

International Meeting of the Italian Group of Biomembranes and Bioenergetics (GIBB)



***Congress Centre
Riva del Garda (Trento)***

<http://www.gibb-be.org>



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Gruppo Italiano di Biomembrane e Bioenergetica

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Program

Thursday, June 8

TIME	SESSIONS AND PRESENTERS
12:00-13:50 On-site registration	
13:50-14:00 Welcome address	
14:00-14:30	Plenary Lecture 1 – Leonid Sazanov (ISTA, Klosteneuburg, Austria) The beginning and the end: complexes I and V of respiratory chain <i>Chairperson, Paolo Bernardi</i>
Session 1 – Redox reactions and dynamics of energy-transducing membranes (I) <i>Chairpersons: Alessandro Giuffrè and Paolo Bernardi</i>	
14:30-14:45	P1. Sebastian Pintscher, Assistant Professor (Jagiellonian University) Putative respiratory supercomplexes in <i>Sulfolobus acidocaldarius</i>
14:45-15:00	P2. Katarzyna Lorencik, PhD student (Jagiellonian University) The routes of electron transfer in respiratory alternative complex III of <i>Flavobacterium johnsoniae</i>
15:00-15:15	P3. Daniel Ken Inaoka, Associate Professor (Nagasaki University) Sulfide:quinone oxidoreductase from <i>Schistosoma mansoni</i> forms a long-lived charge transfer complex
15:15-15:30	P4. Gaia Tioli, Postdoc (University of Bologna) Biochemical and computational approaches to dissect the effect of MT-CYB pathogenic mutations on respiratory chain activity and assembly
15:30-15:45	P5. Jakub Pagacz, PhD student (Jagiellonian University) Cytochrome <i>bc₁</i> propensity towards ROS generation: involvement of redox potentials of heme cofactors
15:45-16:00	P6. Silke Morris, Postdoc (University of Muenster) Mitochondrial Inner Membrane Protein Dynamics in the Senescent Heart
16:00-16:15	P7. Alba Timón-Gómez, Postdoc (Oroboros Instruments) A reference substrate-uncoupler-inhibitor titration protocol to create a mitochondrial pathway and coupling control database
16:15-16:30	P8. Mizuki Hayashishita, Postdoc (Nagasaki University) The importance of ATP and quinol oxidase in cell death induced by oligomycin A and antimycin A
16:30-17:00 Coffee break	
Session 2 - Redox reactions and dynamics of energy-transducing membranes (II) <i>Chairperson: Karin Nowikovsky and Michela Carraro</i>	

17:00-17:15	P9. Francesca Giordano, PhD student (University "La Sapienza" Roma) Persulfide dioxygenase from <i>Pseudomonas aeruginosa</i> at the crossroad between the bioenergetically-relevant gaseous signaling molecules nitric oxide and hydrogen sulfide
17:15-17:30	P10. Martina R. Nastasi, PhD student (University "La Sapienza" Roma) The cyanide insensitive oxidase sustains sulfide-resistant respiration and confers nitric oxide resistance to <i>Pseudomonas aeruginosa</i>
17:30-17:45	P11. Mauricio Cárdenas-Rodríguez, Postdoc (University of Padova) OPA1 processing regulates mitochondrial outer-inner membranes contacts and the TIM23 protein import complex
17:45-18:00	P12. Tiago Branco, Postdoc (University of Padova) Deletion of Mitochondrial Fission Protein 1 in vivo leads to mitochondrial dysfunction and premature death
18:00-18:15	P13. Federica Vinelli, PhD student (University of Padova) RAP1 inhibition restores mitochondria elongation and lysosomal distribution downstream of Opa1 deletion
18:15-18:30	P14. Margherita Zamberlan, Postdoc (University of Padova) The small GTPase Rap1 links the mitochondria-shaping protein Opa1 to angiogenesis inhibition
18:30-18:45	P15. Giada Zanini, PhD student (University of Modena and Reggio Emilia) Novel functions of extramitochondrial forms of LonP1
18:45-19:00	P16. Tancredi Bin, PhD student (University of Bologna) Use of bioenergetically active particles for studying the interactions of green chemicals with native membranes

Friday, June 9

TIME	SESSIONS AND PRESENTERS
09:00-09:30	Plenary Lecture 2 - Ambre Bertholet (UCLA, Los Angeles, USA) The mitochondrial patch-clamp to redefine the mechanism of action of chemical uncouplers <i>Chairperson, Cesare Indiveri</i>
	Session 3 - Mitochondrial channels and transporters (I) <i>Chairpersons: Cesare Indiveri and Vito De Pinto</i>
9:30-9:45	P17. Chiara Brunocilla, PhD student (University of Calabria) In silico study of LAT1 interaction with substrates and inhibitors
9:45-10:00	P18. Veronica Carpanese, PhD student (University of Padova) BioID-based proteomic analysis of the human volume regulated chloride channel (VRAC) interactome
10:00-10:15	P19. Deborah Giudice, PhD student (University of Calabria) Overproduction, Purification, and Stability of the Functionally Active Human Carnitine Acetyl Transferase (hCAT)
10:15-10:30	P20. Giuseppe Battiato, PhD student (University of Catania) VDAC1 knock-out in mammalian cells affects mitochondrial respiration forcing the Complex I activity

10:30-10:45	P21. Sami E. M. Mohammed , <i>PhD student (University of Veterinary Medicine Vienna)</i> Exploring the pH-sensing mechanism of the mammalian mitochondrial $\text{Ca}^{2+}/\text{H}^{+}$ exchanger TMBIM5/MICS1
10:45-11:00	P22. Aurora Maracani , <i>PhD student (University of Padova)</i> The aspartate-glutamate carrier is a mitochondrial metabolic sensor orchestrating mitochondrial morphology and ultrastructure
11:00-11:30 Coffee break	
Session 4 - Mitochondrial channels and transporters (II) <i>Chairperson: Valentina Giorgio and Nazzareno Capitanio</i>	
11:30-11:45	P23. Ludovica Tommasin , <i>PhD student (University of Padova)</i> Assessing the relative contribution of ATP synthase and Adenine Nucleotide Translocator in the mitochondrial permeability transition
11:45-12:00	P24. Clarissa Gissi , <i>Postdoc (University of Udine)</i> A novel pathogenic mutation in the ATP5MC3 gene of ATP synthase is associated with lysosomal alterations
12:00-12:15	P25. Elena Frigo , <i>PhD student (University of Padova)</i> Effects of downregulation of subunits e and g of <i>Drosophila melanogaster</i> ATP synthase <i>in vivo</i>
12:15-12:30	P26. Martina Grandi , <i>Research fellow (University of Bologna)</i> The IF1 protein binds to the OSCP subunit of ATP synthase and protects cancer cells from apoptosis
12:30-12:45	P27. Gabriele Coluccino , <i>PhD student (University of Udine)</i> Characterisation of a N-terminal cleaved form of Cyclophilin D: a new player in an old game?
12:45-13:00	P28. Valentina Pia Muraca , <i>PhD student (University of Udine)</i> Identification of a N-terminal-cleaved form of Cyclophilin D in animal and human tissues
13:00-13:15	P29. Alessia Nisco , <i>PhD student (University of Bari)</i> Adaptive Flavin Adenine Dinucleotide production to metabolic changes in Pancreatic Ductal Adenocarcinoma
13:15-13:30	P30. Serena Barile , <i>PhD student (University of Bari)</i> Preliminary characterization of a novel peroxisomal transporter in <i>Arabidopsis thaliana</i>
13:30-14:30 Lunch	
14:30-15:00	Plenary Lecture 3 – Erich Gnaiger (University of Innsbruck, Austria) Nonlinearity of the proton leak and mitochondrial membrane potential - protonmotive pressure as a unifying concept <i>Chairperson, Luigi Palmieri</i>
Session 5 - Mitochondria and metabolism <i>Chairperson: Luca Scorrano and Luigi Palmieri</i>	
15:00-15:15	P31. Adrianna Budzinska , <i>PhD student (Adam Mickiewicz University, Poznan)</i> Zoledronate and alendronate induce aerobic metabolism adaptations in endothelial cells
15:15-15:30	P32. Maria A. Desbats , <i>Postdoc (University of Padova)</i> Redundant and divergent roles of COQ8A and COQ8B in cell metabolism

15:30-15:45	P33. Antigoni Diokmetzidou, Postdoc (University of Padova) Unraveling the role of mitochondria-endoplasmic reticulum contacts in breast cancer progression: targeting metabolic plasticity
15:45-16:00	P34. Denis Komarov, Research fellow (University of Padova) Investigating amino acid metabolism in neurofibromatosis type 1-related tumours
16:00-16:15	P35. Francesca Scantamburlo, PhD student (University of Padova) Taming the metabolism of tumor associated macrophages to fight NF1-related tumors
16:15-16:30	P36. Aristide Ferrante, PhD student (University of Foggia) Characterization of the Metabolic Phenotype and Reliance of Human Osteosarcoma-Derived Stem and Differentiated Cancer cells: is combination of metabolic and chemotherapeutic drugs the best choice?
16:30-17:00 Coffee break	
Session 6 - Mitochondria in health and disease (I) <i>Chairpersons: Elena Forte and Giancarlo Solaini</i>	
17:00-17:15	P37. Silvia Castagnaro, Postdoc (University of Padova) A mitochondrial therapy for muscular dystrophies
17:15-17:30	P38. Cristina Calderan, Postdoc (University of Padova and Istituto di Ricerca Pediatrica Città della Speranza) Development of a yeast model to characterize OPA1 mutations associated with different neuromuscular disorders
17:30-17:45	P39. Andre Djalalvandi, Postdoc (University of Padova) Antagonizing microRNAs that target the mitochondria shaping protein Opa1 ameliorates denervation-induced muscle atrophy
17:45-18:00	P40. Ana Paula Mendonça, Postdoc (University of Padova) Microparticle sustained delivery of the calcineurin inhibitor FK506 to curtail autophagy and restore vision in an ADOA mouse model
18:00-18:15	P41. Alice Lacombe, Postdoc (University of Padova) Establishment of a new cell model to identify drugs for Autosomal Dominant Optic Atrophy (ADOA)
18:15-18:30	P42. Mirko Tamma, PhD student (University of Foggia) iNPC-derived dopaminergic neurons attained from PARK2 mutated patient fibroblasts unveil an impaired interplay between mitochondrial functions and circadian clockwork
18:30-18:45	P43. Krzysztof Wojcicki, PhD student (Adam Mickiewicz University, Poznan) The effects of statins on the bioenergetic activity of mitochondria isolated from the rat's brain
18:45-19:00	P44. Maria Laura Matrella, PhD student (University of Bari) Biochemical characterization of functional differentiated SHSY5Y cells as an "in vitro" cellular model in neuroscience research
19:00-19:30 Assemblea soci GIBB	
20:30 Social dinner	

Saturday, June 10

TIME	SESSIONS AND PRESENTERS
09:00-09:30	Plenary Lecture 4 – Diego De Stefani (<i>University of Padova, Italy</i>) Molecular control of mitochondrial calcium fluxes <i>Chairperson, Annamaria Tonazzi</i>
	Session 7 - Mitochondria in health and disease (II) <i>Chairperson: Annamaria Tonazzi and Marcello Pinti</i>
9:30-9:45	P45. Martina Semenzato, Postdoc (<i>University of Padova</i>) OPA1 ablation in the heart causes mitochondrial dysfunction and cardiac hypertrophy through inactivation of autophagic process
9:45-10:00	P46. Hualin Fan, PhD student (<i>University of Padova</i>) The landscape of tether-spacers in mitochondria-endoplasmic reticulum contacts in isoproterenol-induced heart failure
10:00-10:15	P47. Jonathan Lambert, Postdoc (<i>University of Padova</i>) Performing discovery-based proteomics using a novel Opa1-TurboID stable cell line to determine the metabolically dependent Opa1 protein interactome
10:15-10:30	P48. Anna Pellattiero, Postdoc (<i>University of Padova</i>) Specific OPA1 inhibitors that enhance apoptotic release of cytochrome c and cell death
10:30-10:45	P49. Francesca Landini, PhD student (<i>University of Foggia</i>) Bioenergetic Profile and Redox Control during in vitro Osteogenesis of Dental Pulp Stem Cells
10:45-11:00	P50. Silvia Grillini, PhD student (<i>University of Bologna</i>) The pro-oncogenic protein IF1 does not inhibit ATP synthase physiological activity and confers a proliferative advantage on tumor cells exposed to stress conditions
11:00-11:30 Coffee break	
	Session 8 - Mitochondria in health and disease (III) <i>Chairperson: Angela Messina and Francesco Francia</i>
11:30-11:45	P51. Carlotta Paoli, PhD student (<i>University of Padova</i>) NME4 elevation promotes OPA1 activity to accelerate pancreatic carcinogenesis
11:45-12:00	P52. Erwan Rivière, PhD student (<i>University of Padova</i>) A genome-wide screening identifies conserved regulators of mitochondrial fission
12:00-12:15	P53. Stefano Miglietta, Postdoc (<i>University of Bologna</i>) MCJ/DNAJC15 mitochondrial chaperonine increases vulnerability to ferroptosis of chemoresistant ovarian cancer cells
12:15-12:30	P54. Ludovica B. Zambello, PhD student (<i>University of Padova</i>) A genome wide screening to identify mediators of cellular senescence induced by loss of the mitochondrial fission protein
12:30-12:45	P55. Keisuke Takeda, Postdoc (<i>University of Padova</i>) Defining a process of mitochondrial quality maintenance based on lateral separation of aggregated proteins
12:45-13:00	P56. Michela Rosiello, PhD student (<i>University of Foggia</i>) Mitochondria: a time to sleep, a time to wake up
13:00-13:30 Awards, closing and remarks (Lunchbox)	