



# GIBB2026

ANNUAL MEETING OF THE ITALIAN  
GROUP OF BIOMEMBRANES &  
BIOENERGETICS

**UDINE, 11-13 JUNE 2026**

Palazzo Garzolini - Di Toppo Wassermann

SCIENTIFIC PROGRAM

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

# GRUPPO ITALIANO DI BIOMEMBRANE E BIOENERGETICA

## ITALIAN GROUP OF BIOMEMBRANES AND BIOENERGETICS



Created in 1973 by a group of Italian Scientists coming from a variety of disciplines (biology, chemistry, biophysics, pathology, pharmacology and physiology), GIBB was born with the idea of promoting Bioenergetics in the Country and to establish an interface with the growing International Bioenergetics Community.

### SCIENTIFIC COMMITTEE

**Luca Scorrano**, University of Padova

**Alessandro Giuffrè**, IBPM-CNR, Roma

**Giovanna Lippe**, University of Udine

**Michele Galluccio**, University of Calabria

**Valentina Giorgio**, University of Bologna

**Angela Messina**, University of Catania

**Consiglia Pacelli**, University of Foggia

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# INVITED SPEAKERS



**ERICH GNAIGER**

Oroboros Instruments  
Innsbruck, Austria



**CHRISTIAN LOEW**

EMBL Hamburg, Germany



**PAOLO BERNARDI**

University of Padova, Italy



**TOMAS MOROSINOTTO**

University of Padova, Italy



**LAURA FORMENTINI**

University of Madrid, Spain

# PROGRAM

## THURSDAY, 11 JUNE

13:00-14:00 Welcome and registration

**14:00-14:15 Opening remarks**

### MITOCHONDRIA IN CANCER, AGING AND DISEASE

CHAIRS: Consiglia Pacelli (University of Foggia), Alessandro Giuffrè (IBPM-CNR, Roma)

14:15-14:30	Giada Zanini, Post-Doc, University of Modena and Reggio Emilia	<i>Lonp1 overexpression affects mitochondrial functions, mtDNA localization, and cytokines production in colorectal cancer</i>
14:30-14:45	Eleonora Martinis, Post-Doc, University of Udine	<i>Immunophenotypic skewing of B cells toward IgD<sup>+</sup>CD27<sup>+</sup>IgG<sup>+</sup> subtype and metabolic attenuation in colorectal cancer</i>
14:45-15:00	Ilenia Paoletti, PhD Student, University of Foggia	<i>ClpP hyperactivation by ONC212 disrupts mitochondrial function and targets cancer stem cells in osteosarcoma and breast cancer</i>
15:00-15:15	Ali Safarzadeh, PhD Student, University of Padova	<i>The mitochondrial protein Fis1 but not its interactor Drp1 are essential to sustain Acute Myeloid Leukemia Stem Cells</i>
15:15-15:30	Elisa Zamprogno, PhD Student, University of Udine	<i>Investigating mitochondrial dysfunction and autophagic flux in ATP5MC3-associated dystonia</i>
15:30-15:45	Clara Abobocioae, PhD Student, University of Vienna	<i><math>\beta</math>-hydroxybutyrate restores mitochondrial dysfunctions caused by LETM1 deficiency</i>
15:45-16:00	Giada Carpi, PhD Student, University of Udine	<i>Assessing the impact of mitochondrial transplantation on cardiac pericyte viability in vitro</i>
<b>16:00-16:30</b>	<b>Coffee break</b>	

### MITOCHONDRIAL STRESS RESPONSES AND PROTEIN QUALITY CONTROL

CHAIRS: Anna Signorile (University of Bari), Michele Galluccio (University of Calabria)

16:30-16:45	Giulia Micheloni, PhD Student, University of Modena and Reggio Emilia	<i>Mitochondrial effects of a CODAS-associated LONP1 mutation and their modulation by Lonp1 activators</i>
16:45-17:00	Federica Antonacci, PhD Student, University of Foggia	<i>A novel ATAD3A variant associated with altered mitochondrial homeostasis</i>
17:00-17:15	Camila Dib, PhD Student, University of Padova and UCA, Buenos Aires	<i>Mitochondrial fragmentation induced by the CFTR modulators Lumacaftor and Ivacaftor in immortalized Cystic Fibrosis Cell Lines</i>
17:15-17:30	Piero Leone, Researcher, University of Bari	<i>Two novel FLAD1 variants causing UPR in fibroblasts from a paediatric patient</i>
17:30-17:45	Alessandro Cecconi, PhD Student, University of Padova	<i>Effects of compartment-specific unfolded mitochondrial protein aggregates on mitochondrial function</i>

17:45-18:00	Eve Harding, PhD Student, IMOL, Warsaw, Poland	<i>mtDNA stability alters the mito-nuclear crosstalk through calcium homeostasis</i>
18:00-18:15	Alice Borsetto, Research Fellow, University of Padova	<i>Effect of USP14 inhibition, and molecular mechanism of mitophagy induction</i>
18:15-19:00	<b>Invited Lecture – Erich Gnaiger, Oroboros</b> <b><i>Lower mitochondrial calcium uptake capacity than calcium retention capacity in the presence and absence of cyclosporin A</i></b>	
<b>19:00</b>	<b>Welcome cocktail</b>	

## FRIDAY, 12 JUNE

<b>09:00-10:00</b>	<b>Invited Lecture – Christian Loew, EMBL Hamburg</b> <b><i>Nutrient and drug uptake across the membrane</i></b> CHAIRS: Giovanna Lippe (University of Udine), Andrea Rasola (University of Padova)	
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### STRUCTURAL AND FUNCTIONAL CHARACTERIZATION OF CHANNELS AND TRANSPORTERS

CHAIRS: Angela Messina (University of Catania), Luca Scorrano (University of Padova)

10:00-10:15	Luana S. Brunetti, Post-Doc, University of Calabria	<i>Mechanism of organic cation transport mediated by the OCTN1 human transporter</i>
10:15-10:30	Raffaella Scanga, Post-Doc, University of Calabria	<i>Inhibition of the Amino Acid Transporter LAT1 by 1-methyltryptophan reveals a novel therapeutic strategy in cancer</i>
10:30-10:45	Elena Frigo, Post-Doc, University of Padova	<i>ATP synthase subunits e and g are essential for Ca<sup>2+</sup> homeostasis and development in Drosophila melanogaster independent of oxidative phosphorylation</i>
<b>10:45-11:15</b>	<b>Coffee break</b>	
11:15-11:30	Federica Boscolo Nata, PhD Student, University of Padova	<i>The C-terminus of subunit e is essential to switch the ATP synthase into the mitochondrial permeability transition pore</i>
11:30-11:45	Stefania Bonusi, PhD Student, University of Brescia	<i>Targeting mPTP improves mitochondrial bioenergetics and muscle regeneration in Duchenne Muscular Dystrophy</i>
11:45-12:00	Gabriele Coluccino, Post-Doc, University of Udine	<i>N-terminal cleavage reshapes Cyclophilin D dynamics and is associated with enhanced F-ATP Synthase binding</i>
12:00-13:00	<b><i>Lectio Magistralis "Medaglia G.F. Azzone" - Paolo Bernardi, University of Padova</i></b> <b><i>More doubts than certainties: how I survived in science (still having some fun)</i></b>	

13:00-14:00	Light lunch
<b>14:00-15:00</b>	<b>Invited Lecture – Tomas Morosinotto, University of Padova</b> <b><i>The impact of mitochondrial respiration on plants metabolism</i></b> CHAIRS: Elena Forte (Sapienza University of Rome), Marco Zancani (University of Udine)

#### TRANSLATIONAL APPROACHES, DIAGNOSTICS AND BIOTECHNOLOGY

CHAIRS: Valentina Giorgio (University of Bologna), Marcello Pinti (University of Modena)

15:00-15:15	Iolanda R. Infantino, Post-Doc, University of Catania	<i>NHK1 peptide targeting VDAC1 mitigates mitochondrial impairment in ALS Primary Fibroblasts</i>
15:15-15:30	Tomas Knedlik, Researcher, University of Padova	<i>Discovering Small-Molecule Modulators of Mitochondria-ER Contact Sites and their protein targets</i>
15:30-15:45	Davide Fontana, PhD Student, University of Padova	<i>A redox cyler-based therapy against mitochondrial diseases</i>
15:45-16:00	Denis Komarov, PhD Student, University of Padova	<i>Identification of the mitochaperome as a new tumor-restricted assembly</i>
16:00-16:15	Antonello Caponio, PhD Student, University of Bari	<i>CRISPR-based restoration of AGC1 reveals mutation-dependent phenotypic rescue in AGC1-deficient neuronal progenitors</i>
16:15-16:30	Elettra Leo, Post-Doc, Oroboros	<i>Challenges in PBMC bioenergetic diagnostics: from cohort-derived reference values to patient interpretation</i>
16:30-16:45	Dora Scarpin, Post-Doc, University of Udine	<i>Biotechnological production of extracellular vesicles from Coffea arabica L. cell suspension cultures: isolation and proteomic profiling</i>
16:45-17:00	Aurelia Miscia, PhD Student, University of Padova	<i>Generation and initial characterization of STACCATO, a family of Split-FAST Mitochondria-ER Contacts probes to measure contact sites of different widths</i>
17:00-17:15	Beatrice Capita, PhD Student, University of Padova	<i>FLYMP: a new FRET based sensor to study contact sites between mitochondria and lysosomes</i>
<b>17:15-17:45</b>	<b>Coffee break</b>	

#### MITOCHONDRIAL BIOGENESIS AND METABOLISM

CHAIRS: Maria Barile (University of Bari), Nazzareno Capitanio (University of Foggia) (University of Udine)

17:45-18:00	Lucrezia Zuccarelli, Researcher, University of Udine	<i>Exercise prehabilitation combined with nutritional and cognitive interventions during Bed Rest preserves skeletal muscle mitochondrial function in older adults</i>
18:00-18:15	Giuseppe Giarrusso, PhD Student, University of Catania	<i>Hexokinase overexpression and its consequences for respiratory parameters</i>

18:15-18:30	Leila Secchiaroli, PhD Student, University of Bologna	<i>TMEM65 couples mitochondrial calcium homeostasis to respiratory chain biogenesis</i>
18:30-18:45	Noemi D’Incau, Research Technician, UCL, UK	<i>Biallelic variants in PGS1 disrupt cardiolipin biosynthesis and mitochondrial bioenergetics</i>
<b>19:00-19:30</b>	<b>Assemblea dei soci</b>	
<b>20:30</b>	<b>Social dinner - Ristorante Concordia, Piazza I Maggio, Udine</b>	

## SATURDAY, 13 JUNE

09:30-10:30	<b>Invited Lecture – Laura Formentini, University of Madrid</b> <b><i>Nutrient-dependent control of OXPHOS: the role of fatty acid oxidation in ageing</i></b> CHAIRS: Anna Maria Porcelli (University of Bologna), Cesare Indiveri (University of Calabria)	
<b>10:30-11:00</b>	<b>Coffee break</b>	

## MITOCHONDRIAL DYNAMICS: FROM BASIC MECHANISMS TO THERAPEUTIC STRATEGIES

CHAIRS: Alessandra Corazza (University of Udine), Vito De Pinto (University of Catania)

11:00-11:15	Cien Zhen, PhD student, University of Padova	<i>Mitochondrial calcium uptake regulates mitochondrial fission modes</i>
11:15-11:30	Aytekun Hajighaderi, PhD Student, University of Padova	<i>Gdap111 is a mitochondrial fission factor vicariating Gdap1 in neuronal cells</i>
11:30-11:45	Federico Magrin, PhD Student, University of Padova	<i>A chemotypically focused virtual screening identifies novel specific OPA1 inhibitors that enhance cytochrome c release and induce cell death</i>
11:45-12:00	Kimia Goharian, Research Fellow, University of Padova	<i>The role of the FIS1-Interactome in Acute Myeloid Leukemia Mitophagy</i>
12:00-12:15	Promila Lakra, Research Fellow, University of Padova	<i>Investigating the role of Mitochondria-ER Contact Sites in UV-Induced Melanogenesis</i>
12:15-12:30	Teresa Valentini, Research Fellow, University of Padova	<i>Opantimir treatment antagonizing microRNAs that upregulate Opa1: development of a new delivery system</i>

## CLOSURE OF THE GIBB MEETING

<b>12:30-12:40</b>	Final discussion	
<b>12:40-12:50</b>	<b>Award Ceremony – Best Oral Presentation Awards, PhD Students and Post-Docs</b>	
<b>12:50-13:00</b>	Closing remarks and end of meeting	

PATRONAGE



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