



Mitochondrial Disease Conference

January 23rd -24th 2026

PISA

Satellite Symposia

Friday 23rd – Concorde Room

9:00 am– 12:30 pm

Artificial Intelligence in Mitochondrial Medicine: emerging tools for diagnosis and monitoring

Chair: Michelangelo Mancuso

Friday 23rd – Mustang Room

10:30 am – 12:00 pm

Advances in Mitochondrial Optic Neuropathies

Chair: Valerio Carelli

Mito Conference 2026 - Scientific Program

Friday 23rd – Concorde Room

12:00 – 1:15 pm

Arrivals, Registration & Light lunch

1:15 **Welcome to the Mitochondrial Disease Conference 2026**

- **Marco Marmotta**, President, Mitocon – Insieme per lo Studio e la Cura delle Malattie Mitocondriali ODV
- **University of Pisa and AOUP Delegates**
- **Paula Morandi**, Chair - International Mito Patients
- **Olimpia Musumeci**, Scientific Committee Delegate

The Voice of patients

- **What Does Mitochondrial Disease Mean to Me** – Stories from Mito Patients and Families

2:00 pm

Introduction:

Chair: **Massimo Zeviani**, Institute for Maternal and Child Health IRCCS Burlo Garofolo, Trieste

Keynote Lecture Mechanisms for mtDNA maintenance and relevance for human pathology - **Nils-Göran Larsson**, Karolinska Institute Stockholm

2:45 – 4:15 pm

Session 1 - Basic Science

Chair: **Valeria Tiranti**, Fondazione IRCCS Istituto Neurologico Carlo Besta Milano

Chair: **Piero Santantonio**, Mitocon

Speakers

2:45 **New therapeutic approaches for mitochondrial myopathies** - **Carlo Viscomi**, University of Padova

Q&A

3:15 **The SURF1 KO pig: A translational model to implement new therapeutic treatments for Leigh Syndrome** - **Dario Brunetti**, Fondazione IRCCS Istituto Neurologico Carlo Besta Milano

Q&A

3:45 **Restoring mitochondrial DNA metabolism and function** - **Antonella Spinazzola**, University College London

Q&A

4:15 pm **Scientific Coffee with Poster**

The Poster Session is open to abstract submissions. The call for abstracts is open until October 1st, 2025

5:00 – 6:30 pm

Session 2 - Clinical Updates

Chair: **Enrico Bertini**, Bambino Gesù Children's Research Hospital IRCCS

Chair: **Paola Desideri**, Mitocon

Speakers

5:00 **Mitochondrial Leukoencephalopathies: data from a multicentric observational study - Anna Ardisson**, Fondazione IRCCS Istituto Neurologico Carlo Besta Milano

Q&A

5:30 **Sildenafil in Leigh syndrome: translational path from stem cells-based drug discovery to clinical trials, Alessandro Prigione**, University of Dusseldorf

Q&A

6:00 **MELAS Management, Costanza Lamperti** - Fondazione IRCCS Istituto Neurologico Carlo Besta Milano

Q&A

6:30 pm Closing day 1

8:30 pm Networking Dinner

Day 2 Saturday January 24th – Concorde Room

8:15 am Arrivals and Registrations

8:30 -10:00 Session 3 -Advances in Therapies

Chair: **Massimiliano Filosto**, University of Brescia

Chair: **Paula Morandi**, Mitocon

Speakers

8:30 **Advances in MNGIE** - **Ramon Marti**, Vall d'Hebron Research Institute and CIBERER, Universitat Autònoma de Barcelona, Barcelona.

Q&A

9:00 **Advances in Thymidine Kinase 2 Deficiency** - **Cristina Dominguez**, CIBERER, Instituto de Investigación imas12, Hospital Universitario 12 de Octubre Madrid

Q&A

9:30 **Mitochondrial Donation in Clinical Practice: Insights from the UK Reproductive Care Pathway** – **Robert McFarland**, Newcastle University

Q&A

10:00 -11:00 am **Young Investigator Session**

This session is open to abstract submissions. The call for abstracts is open until October 1st, 2025

Chair: **Carlo Viscomi**, University of Padova

Chair: **Francesca Latella**, Mitocon

- 10:00 Flash Talk: **Brain physiological transcriptomic architecture underpinnings of regional vulnerability to stroke-like lesions in MELAS** - **Matteo Azzimonti**, IRCCS Fondazione Ca' Granda Ospedale Maggiore Policlinico di Milano

Q&A

- 10:15 Flash Talk: **Investigating LHON-Linked Mitochondrial and Synaptic Impairments in Human iPSC-Derived RGCs** - **Andrea Cavaliere**, Fondazione IRCCS Istituto Neurologico Carlo Besta Milano

Q&A

- 10:30 Flash Talk: **Development of a novel approach to mitochondrial gene therapy: nanoparticle mediated delivery of intact, functional mtDNA** - **Kyrie Wilson**, Medical University of South Carolina (MUSC), Charleston USA

Q&A

- 10:45 Flash Talk: **hiPSC-derived microglia-like cells: establishing a model to study POLG-related mitochondrial disease**, **Piervito Lopriore**, University of Pisa, Sant'Anna School of Advanced Studies

Q&A

11:00 am Coffee Break

11:15 -12:00 am

Introduction: Valeria Tiranti, Fondazione IRCCS Istituto Neurologico Carlo Besta Milano

Keynote lecture: Gene therapies in PMDs - Carlos T. Moraes, University of Miami Miller School of Medicine

12:00 – 1:30 pm

Session 4: Collaboration models to accelerate therapies

Chairs: Michelangelo Mancuso, Valerio Carelli

Chair: Piero Santantonio, Mitocon

Participants: Representatives from academia, industry, regulatory bodies, patient organization/representatives

1:15 Discussion

1:30 – 2:30 pm Lunch break

2:30-4:00 pm

Session 5: Clinical Registries as a tool for Improving Patient Care and Research

Chair: Costanza Lamperti, Thomas Klopstock

Chair: Piero Santantonio, Mitocon

Speakers

2:30 **The Power of collaboration: how the GENOMIT Registry enables Natural History Studies and advanced Genetics of Mitochondrial Diseases-** Holger Prokisch, Helmholtz Zentrum Munich

Q&A

3:00 **Insights from the Spanish Clinical Registry and Biobank -** Marcello Bellusci, University Hospital "12 de Octubre" Madrid

Q&A

3:30 **The Italian Clinical Registry for Mitochondrial Diseases: Insights from a National Experience -** Michelangelo Mancuso, University of Pisa

Q&A

4:00 - 4:45 pm **Late Breaking News**

This session will include selected presentations from late breaking abstract submissions. The call for abstracts will open in October 2025.

Chair: Serenella Servidei, Catholic University of the Sacred Heart Roma

Chair: Paola Desideri, Mitocon

4:00 Talk 1

4:20 Talk 2

4:40 Talk 3

5:00 pm Coffee break

5:15-5:45 pm

Closing Lecture

Management of Optic Mitochondrial Myopathies: an overview

Valerio Carelli, University of Bologna

Introduction Thomas Klopstock, Ludwig-Maximilians-University of Munich

5:45 pm **Mito Awards**

Chair: **Carlo Viscomi**, University of Padova

Chair: **Marco Marmotta**, Mitocon

6:00 pm **Closing Remarks** - **Michelangelo Mancuso**, University of Pisa

6:10 pm **Closing Mito Conference 2026**

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