Targeting Mitochondria

13TH CONGRESS

Oct. 26 › 28 2022
Berlin © Germany
Welcome to the World Mitochondria Society Annual Meeting

On behalf of the Scientific Committee of the World Mitochondria Society (WMS), we are pleased to announce the organization of the 13th Annual Meeting of WMS on Targeting Mitochondria, which will be held on October 26-28, 2022 at the Steigenberger Hotel Am Kanzleramt, Berlin, Germany. The congress will also be live-streamed providing an online participation option.

After the great success of the 12th WMS Meeting in 2021 that was held virtually with interactive sessions for discussion, we are hoping that personal interactions among colleagues from around the world will be a major feature of our 13th World Annual Meeting.

While we have just started working on the outline of our next conference edition, we will potentially discuss the following topics:

- Mitochondrial Dysfunctions and Dynamics in Chronic Diseases
- Mitochondria transplantation and transfer
- Extracellular Vesicles & Mitochondria: The Target
- Nuclear-Mitochondrial Interactions and their Effect on Longevity and Health
- Translational Therapies - Focus on Infrared Therapies
- WMS Challenges in the Acceleration of Mitochondrial Medicine

Basic scientists working at the bench in the laboratory, physicians treating patients suffering from mitochondrial disorders as well as representatives of companies working on the commercialization of mitochondria-targeted therapies are all welcome to our conference. I assure anyone who is going to join us in this year’s Congress in October 2022 that you won’t be disappointed!

We are looking forward to meeting you all!

All our warmest regards.

Prof. Volkmar Weissig
President of the World Mitochondria Society
Midwestern University, USA
Wednesday, October 26, 2022
Dedicated to Mitochondria Workshop

13h30 – Registration for Workshop and Targeting Mitochondria 2022 Congress

Mitochondria Workshop 2022: How to Evaluate Mitochondria Function?

Session 1: How to evaluate and analyze mitochondria function in 2022

Session 2: Methods for analyzing mitochondrial function: Bioenergetics

15h10 Coffee Break

Session 3: Methods for analyzing mitochondria: Biogenesis, dynamics, and mitophagy

Session 4: Biochemical strategies for the diagnosis of mitochondrial disorders

Presentation of Practical Cases, Workshop report & Interactive Discussion

18h00 End of the Workshop

18h00 Welcoming Cocktail

Naïg Gueguen
Mitovasc Institute, Mitolab team,
INSERM 1083, CNRS 6215,
Centre Hospitalier Universitaire d'Angers
Angers, France

For full agenda, registration, and information, please follow this link
13th World Congress on Targeting Mitochondria
October 26-28, 2022 – Berlin, Germany

Agenda

– Day One –
Thursday, October 27, 2022

9h00 - Welcome Note: World Mitochondria Society Now & Tomorrow

Volkmar Weissig, President of the World Mitochondria Society, Midwestern University, USA

Marvin Edeas, WMS Founder & Chairman of The Scientific Committee, Université de Paris, INSERM 1016, Institute Cochin, France

Keynote Speech on Mitochondrial Medicine: Present and Future
Douglas C. Wallace, Children's Hospital of Philadelphia, USA

9h30-10h30

Session 1: Mitochondrial Dysfunctions and Dynamics in Chronic Diseases

Regulation of Mitochondrial Signaling in Cardiomyopathy During Sepsis
Qun Sophia Zang, Loyola University Chicago Health Science Campus, USA

Exercise, Mitochondrial Adaptations, and Fatty Liver
Cora Weigert, University Hospital Tuebingen, Germany

The Multiple Facets of the Mitochondria Shaping Protein Opa1 in Adipocytes: From Epigenetic to Tissue Plasticity
Camilla Bean, University of Padova, Italy

10h30 - Coffee Break
Session 2: Mitochondria Transplantation and Transfer

11h00-12h40

Recent Advances in Mitochondrial Transplantation Therapy
James McCully, Harvard Medical School Department of Cardiac Surgery Boston Children’s Hospital, USA

Mitochondrial Transfer via MitoPunch
Michael Teitell, University of California, USA

Mitochondria Transplantation Between Living Cells
Julia A. Vorholt, ETH Zurich, Switzerland

Use of Mitochondrial Transplantation for Stroke
Melanie Walker, University of Washington Medical School, USA

12h40 - Lunch Break

14h10-15h50

Session 3: Extracellular Vesicles & Mitochondria: The Target

EV-Mitochondria as a Promising Therapeutic for Mitochondrial Dysfunction
Devika S Manickam, Duquesne University, USA

The Role of Extracellular Vesicles in Mitochondrial Quality Control Mechanisms
Marc Germain, Université du Québec à Trois-Rivières, Canada

Mitochondria in Extracellular Vesicles and Aging
Nicole Noren Hooten, NIH, USA
The Impact of Mesenchymal Stromal Cell Extracellular Vesicles on Mitochondrial Dysfunction in Acute Respiratory Distress Syndrome
Anna Krasnodembskaya, Queen's University Belfast, United Kingdom

Mitochondrial Exosomal miR137-COX6A2 in Schizophrenia
Ines Khadimallah, Lausanne University Hospital, Switzerland

15h50 - Coffee Break

16h20 – Short Oral Presentations of day 1

Remember you can submit your abstracts to any of those sessions and present your work.

Abstract Submission

18h00 End of Congress Day 1
8h00 – Day 2 opening session

8h10-9h00

Session 4 – Nuclear-Mitochondrial Interactions and their Effect on Longevity and Health

Mitochondrial responses to a massive trauma-determinant of survival
Marc G. Jeschke, University of Toronto, Canada

2-Deoxy-D-glucose couples mitochondrial DNA replication with mitochondrial fitness
Ian J. Holt, Biodonostia Health Research Institute, Spain

9h00-10h30

Session 5 – Translational Therapies - Focus on Infrared Therapies

Noninvasive Treatment of Brain Ischemia-Reperfusion Injury With Near Infrared Light: Working Toward Clinical Implementation
Maik Hüttemann, Wayne State University, USA

Mitochondrial and Photo-Medicine - Recent Clinical Applications
Michael Weber, President of European Laser Academy, Germany

Short Oral Presentations

10h30 - Coffee Break
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11h00-16h00

Session 6 – WMS Challenges in the Acceleration of Mitochondrial Medicine

The Randomized Controlled Phase 2b KHENERGYZE Trial of Sonlicromanol in Primary Mitochondrial Disease MELAS Spectrum Disorders: Topline Results
Jan Smeitink, Khondrion B.V., Netherlands

GM1 oligosaccharide as mitochondrial modulator: implications in neurological diseases
Maria Fazzari, University of Milano, Italy

A Novel PTD-mediated IVT-mRNA delivery platform developed for Protein Replacement Therapy for genetic/metabolic disorders
Lefkothea C. Papadopoulou, Aristotle University of Thessaloniki, Greece

12h30 – Lunch Break

Mitochondrial targeting in aging and injury
Raghavan Pillai Raju, Medical College of Georgia, USA

The Potential of Mitochondrial Genome Engineering
Pedro Silva-Pinheiro, University of Cambridge, United Kingdom

A Non-canonical Tricarboxylic Acid Cycle Underlies Cellular Identity
Paige Arnold, Memorial Sloan Kettering Cancer Center, USA

Unlocking the potential of the mammalian electron transport chain
Jessica Spinelli, Whitehead Institute for Biomedical Research, USA

Folic Acid Supplementation Improves Drosophila Parkin Loss-of-Function Phenotype and Decreases Mitochondrial Hydrogen Peroxide Levels in Vulnerable Dopaminergic Neurons
Lori Buhlman, from Midwestern University Glendale, USA
16h00 – Coffee Break

16h30 – Short Oral Presentations of Day 2

Remember you can submit your abstracts to any of those sessions and present your work.

17h30- Concluding Remark and Scientific & Innovations Awards

18h00 - End of Targeting Mitochondria 2022