How to Evaluate Mitochondria Function?

Workshop on October 26, 2022

From Initiation to Improvement...

www.targeting-mitochondria.com
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Hybrid Workshop – In Berlin & Online

In collaboration with the World Mitochondria Society (WMS), we are pleased to announce the organization of the workshop dedicated to the Evaluation of Mitochondria Function, Dysfunction and Activities which will be held on October 26, 2022 (One day before the Targeting Mitochondria 2022 Congress).

The workshop will be interactive and will be recorded to allow a large international access to the whole presentations. You can access the workshop via our online platform if you missed it.

The aim of this workshop is to discuss the last advances on mitochondria assessment and evaluation.

Among the themes which will be addressed:

**How to study, assess and analyze Mitochondria in 2022?**

- *In vitro studies / In vivo studies / Ex vivo studies*
- *What are the technological tools to study and analyze the mitochondria*
- *What are the mitochondrial markers to be evaluated in the context of medical studies*
- *Meaning & functionality of the citrate synthase enzyme*
- *How to analyze the mitochondrial respiratory chains*
- *How to study mitophagy*

We will also highlight the practical aspect of Mitochondria Evaluation:

- Methods for analyzing mitochondrial function: Bioenergetics
- Methods for analyzing mitochondria: Biogenesis, Dynamics and Mitophagy
- Biochemical strategies for the diagnosis of mitochondrial disorders

This workshop is intended for anyone who wish to improve their skills and knowledge in the field of mitochondria, metabolism and bioenergetics, their key roles within the body, analysis tools and the latest therapeutic innovations.

Looking forward to meeting you very soon, please don’t hesitate to contact us for any further information.

Best regards,

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Program

13h20 Welcome introduction

13h30 Session 1: How to evaluate and analyze mitochondria function in 2022
- In vitro studies
- In vivo studies
- Ex vivo studies
- What are the technological tools to study and analyze the mitochondria?
- What are the mitochondrial markers to be evaluated in the context of medical studies?
- Meaning & functionality of the citrate synthase enzyme
- How to analyze the mitochondrial respiratory chains?
- How to study mitophagy?

14h30 Session 2: Methods for analyzing mitochondrial function: Bioenergetics

15h30 Break

15h45 Session 3: Methods for analyzing mitochondria: Biogenesis, dynamics and mitophagy

16h45 Session 4: Biochemical strategies for the diagnosis of mitochondrial disorders

17h45 Presentation of Practical Cases

18h15 Presentation of the Workshop report & Interactive Discussion
- Analysis of respiratory chain complex activities, tissues and cells: detailed protocols, from buffers and reagents preparation to enzymatic measurement
- Analysis of complexes assembly by Blue Native-PAGE
- Oxygraphic analysis on permeabilized fibers or cells

18h30 Conclusion and end of the day
2 options are available:

1. Register to the workshop alone

2. Combine the workshop’s registration with the 13th World Congress of the World Mitochondria Society on Targeting Mitochondria

Find out more about the fees and options:

Who Should Attend?

Are you a general practitioner, biologist, geneticist, researcher in oncology, neuroscience and pediatrics, or metabolic diseases? Research director, R&D director, engineer, research assistant, or business leader? You want to learn more about mitochondria, their key roles in the cellular metabolism, last analytical tools and methods.

Teaching resources

- Presentation support given to participants
- Presentation proposed by the speaker via Power Points
- Q&A session with all participants

Report

All attendees will receive a report detailing each session and will obtain summaries and / or Power Point presentations of the various interventions.

If you cannot attend the workshop, you can order:
- The report in PDF format
- The recorded Workshop

Please contact us to order the Report and Recorded video.

Annex and Protocols:

- Analysis of respiratory chain complex activities, tissues and cells: detailed protocols, from buffers and reagents preparation to enzymatic measurement
- Analysis of complexes assembly by Blue Native-PAGE
- Oxygraphic analysis on permeabilized fibers or cells

For more information