How to Evaluate Mitochondrion Function?

Workshop on October 28, 2020

From Initiation to Improvement...

One day before Targeting Mitochondria 2020

www.targeting-mitochondria.com
How to Evaluate Mitochondria Function

From Initiation to Improvement…

Wednesday, October 28, 2020

Online Workshop

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 one day before Targeting Mitochondria 2020, October 28, 2020.

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

Among the themes which will be addressed:

**Session 1 : Mitochondria 2020 - Latest Advances and Innovations**

- Influence of mitochondria on aging
- Dynamics & dysfunctions of mitochondria and their consequences on the organism
- Latest therapeutic innovations

**Session 2 : How to study, assess and analyze Mitochondria in 2020**

- 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

We will prepare a full annex with protocols related to mitochondria evaluations, methods, and technics you need in your future mitochondria study:

- 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
- Oxynigraphic analysis on permeabilized fibers or cells

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,

Dr. Naig Gueguen, PhD
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INSERM 1083, CNRS 6215, CHU d’Angers

Email: formation@targeting-mitochondria.com
How to evaluate Mitochondria Function

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Wednesday, October 28, 2020
Paris, France

Program

9h00 Welcome introduction

9h30 Session 1: Mitochondria 2020 - Recent advances and innovations
- General introduction mitochondria, oxidative stress and pathologies
- Dynamics & dysfunctions of mitochondria and their consequences on the organism
- Influence of mitochondria on aging
- Latest therapeutic innovations

10h15 Questions and answers

10h30 Coffee break

11h00 Session 2: How to evaluate and analyze mitochondria function in 2020
- 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 ?

12h30 Lunch break

14h00 Methods for analyzing mitochondrial function: Bioenergetics

15h00 Methods for analyzing mitochondria: Biogenesis, dynamics and mitophagy

16h00 Biochemical strategies for the diagnosis of mitochondrial disorders

16h30 Presentation of Practical Cases

17h00 Interactive Discussion

17h30 Conclusion and end of the day
Registration fee:

- **Only Workshop**: 400 €

If you wish to combine your registration with conference registration:

- **Workshop & Conference for Academic and Student**: 645 €
- **Workshop & Conference for Industrial**: 945 €
- **Report and Recorded Workshop**: 350 €

To register, please use the online form available at [https://www.xing-events.com/targeting-mitochondria-2020.html](https://www.xing-events.com/targeting-mitochondria-2020.html)

### 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

Each participant 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 follow this link to order the Report and Recorded video.

### Full annex with 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
Mitochondria 2019 - Berlin

On October 28 and 29, the 10th international conference on Mitochondria, organized by the World Mitochondra Society, took place in Berlin, Germany. This conference brought together 285 participants and more than 130 oral presentations and posters, the summaries of which are available in a report.

For more info and order

Mitochondria 2020 – Virtual Congress

October 29-30, 2020

For more info and order

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For more information

www.targeting-mitochondria.com/mitochondria-workshop