VENUE

■ **Location:** Max Planck Institute for Biology of Ageing
Joseph-Stelzmann-Straße 9 b | 50931 Köln
Campus of the University of Cologne

How to get to the meeting by public transport:
Tram line 9/direction Sülz runs between Station „Lindenburg/Universitätskliniken" Ⓗ (Zülpicher Straße) and „Neumarkt" (central hub for the tram lines on the way to the train main station „Dom/Hbf").

SUPPORT

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Deutsche Forschungsgemeinschaft

MAX PLANCK INSTITUTE FOR BIOLOGY OF AGEING

Max Planck Institute for Metabolism Research

LAYOUT

Ulrike Kersting, University of Cologne

CONTACT

CRC 1218 | Mitochondrial regulation of cellular function
funded by Deutsche Forschungsgemeinschaft (DFG)
Website: sfb1218.uni-koeln.de

ORGANIZING COMMITTEE

Martin Graef, MPI for Biology of Ageing
Thomas Langer, MPI for Biology of Ageing
Jan Riemer, University of Cologne
Elena Rugarli, University of Cologne
Aleksandra Trifunovic, University Hospital of Cologne
Rudolf Wiesner, University Hospital of Cologne

MEETING OFFICE

Claudia Ballweg | email: mito-crc1218@uni-koeln.de
The conference desk is located in the foyer of the MPI for Biology of Ageing.

GENERAL INFORMATION

INTERNET ACCESS

WLAN is available within the MPI.
Please ask for access details at the conference desk.

CERTIFICATE OF ATTENDANCE

Certificates of attendance are issued at the conference desk in the foyer of the MPI.

LUNCH AND DINNER

Minerva's Lounge at the MPI AGE is a good place for lunch.
Bistro Olivieri at the CECAD Research Center directly across the street offers snacks, beverages and coffee.
A number of restaurants, bistros and pubs are located on Zülpicher Straße within 8-10 minutes walking distance.

INTERNATIONAL SYMPOSIUM OF THE CRC 1218

MITOCHONDRIAL PLASTICITY IN METABOLISM AND SIGNALLING

10-12 Oct 2018
at the Max Planck Institute for Biology of Ageing,
Joseph-Stelzmann-Straße 9 b,
Campus of the University of Cologne

mito CRC | SFB 1218

Universität zu Köln

Dear Colleagues,

It is our great pleasure to welcome you at the international meeting on 'Mitochondrial Plasticity in Metabolism and Signalling'.

With this meeting, we strive to bring together leading scientists and PhD students/postdocs to discuss new roles of mitochondria in energy metabolism, on the dynamic nature of mitochondria, on the integration of mitochondria into cellular signaling networks and on their role in pathophysiology and differentiation.

We hope that you will have an inspiring time with us in Cologne with excellent talks and fruitful discussions!

The Organizing Committee

WEDNESDAY, 10th OCTOBER

12:00 - 14:00 Registration

SESSION 1: MITOCHONDRIA IN ENERGY METABOLISM

CHAIR: Ulrich Brandt, Radboud University Medical Center, Nijmegen, The Netherlands

14:00 - 14:15 Welcome

14:15 - 14:45 **Matthew HIRSCHEY**, Duke University, USA
Regulation of energy metabolism by post-translational protein modifications

14:45 - 15:15 **Aleksandra FILIPOVSKA**, University of Western Australia, Australia
Fidelity of mitochondrial translation: the good, the bad and the cardiomyopathy

15:15 - 15:45 **Jean-Claude MARTINOU**, University of Geneva, Switzerland
Identification of mitochondrial RNA granules assembly factors and regulators using an image-based siRNA screen

15:45 - 16:15 Discussions with coffee

16:15 - 16:45 **Peter REHLING**, University of Göttingen, Germany
Biogenesis of mitochondrial membrane protein complexes

16:45 - 17:15 **Eileen WHITE**, State University of New Jersey, USA
Dual role of mitochondria in tumor initiation and progression

17:15 - 17:45 **Judy HIRST**, MRC Mitochondrial Biology Unit, UK
The structure of mammalian respiratory complex I and what it can teach us about mitochondrial diseases

17:45 - 18:15 **Aleksandra TRIFUNOVIC**, University of Cologne, Germany
Keeping complex I in shape

THURSDAY, 11th OCTOBER

SESSION 2: THE DYNAMIC MITOCHONDRION: COMPONENTS, ARCHITECTURE AND CONTACTS

CHAIR: Mafalda Escobar, CECAD Research Center/Institute for Genetics, University of Cologne

09:15 - 10:00 **mito-RTG Lecture**
Heidi McBRIDE, McGill University, Canada
Iron delivery to mitochondria

10:00 - 10:30 **William PRINZ**, National Institute of Diabetes and Digestive and Kidney Disease, USA
Link between lipid synthesis and transport to mitochondria

10:30 - 11:00 **David PAGLIARINI**, University of Wisconsin-Madison, USA
Defining mitochondrial protein function through systems biochemistry

11:00 - 11:30 Discussions with coffee

11:30 - 12:00 **Werner KÜHLBRANDT**, Max Planck Institute of Biophysics, Germany
CryoEM of ATP synthase

12:00 - 12:30 **Oliver DAUMKE**, Max-Delbrück-Center for Molecular *Medicine, Germany*
Structural and functional studies on mitochondrial membrane remodeling machineries

12:30 - 14:00 Lunch

SESSION 3: SIGNALLING TO AND FROM MITOCHONDRIA

CHAIR: Thomas Langer, Max Planck Institute for Biology of Ageing, Cologne

14:00 - 14:30 **Martin GRAEF**, Max Planck Institute for Biology of Ageing, *Germany*
Beyond mitophagy: multilayered interactions of autophagy machinery and mitochondria

14:30 - 15:00 **Mike MURPHY**, MRC Mitochondrial Biology Unit, UK
Mitochondrial metabolism and redox signalling

15:00 - 15:30 **Agnieszka CHACINSKA**, Centre of New Technologies, Poland
Guided tour of proteins into mitochondria

15:30 - 16:00 Discussions with coffee

16:00 - 16:30 **Fabiana PEROCCHI**, Ludwig-Maximilians-University Munich, Germany
Systematic reconstruction of mitochondrial calcium signalling networks

16:30 - 17:00 **Erika PEARCE**, Max Planck Institute for Immunobiology and Epigenetics, Germany
Polyamines modulate mitochondrial respiration through eIF5A hypusination

FRIDAY 12th OCTOBER

SESSION 4: MITOCHONDRIA IN PATHOPHYSIOLOGY AND DIFFERENTIATION

CHAIR: Elena Rugarli, CECAD Research Center/Institute for Genetics, University of Cologne

09:00 - 09:30 **Richard YOULE**, National Institutes of Health, USA
How PINK1- and Parkin-mediated mitophagy prevents neurodegeneration

09:30 - 10:00 **Hamid KASHKAR**, University of Cologne, Germany
Mitochondrial control of endothelial function during development and disease

10:00 - 10:30 **Michael DUCHEN**, University College London, UK
Linking mitochondrial dysfunction to neurodegeneration: Impaired mitochondrial bioenergetic capacity sensitises neurons to calcium overload

10:30 - 11:00 Discussions with coffee

11:00 - 11:30 **Thomas SCHWARZ,** Harvard Medical School, USA
On the distribution of power: moving and removing mitochondria in neurons

11:30 - 12:00 **Mary HERBERT**, Newcastle University, UK
Transmission of mtDNA disease: How to get from risk reduction to prevention?

12:00 Closing address