



FASEB

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Science Research Conferences

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FASEB Meeting

"Mitochondrial Biogenesis and Dynamics in Health, Disease and Aging"

May 21-26, 2017

(Sunday-Thursday; West Palm Beach)

Organizing Committee

Carlos Moraes (Miami)

Martin Ott (Stockholm)

Eric Schon (Columbia)

PROGRAM

Keynote Address: Jodi Nunnari (UC Davis) – *Mitochondrial Behavior*

Session 1: Mitochondrial gene expression

Chair: Toni Barrientos (Miami)

Maria Falkenberg (Gothenburg) - *Replication of mtDNA*

L. Stirling Churchman (Harvard) - *Coordination of nuclear and mitochondrial gene expression*

Dmitry Temiakov (Rowan) - *Replication-transcription switch in mitochondria*

Nenad Ban (ETH Zurich) - *Structural insights into mitochondrial protein synthesis*

Session 2: Respiratory chain complex assembly

Chair: Dennis Winge (Utah)

Jose Antonio Enriquez (CNIC, Madrid) - *Mechanism of superassembly between complexes III and IV*

Peter Rehling (Göttingen) - *Regulation of COX1 synthesis in mammalian cells*

Cristina Ugalde, (Madrid) - *Dynamics and regulation of respiratory supercomplex assembly*

Fabien Pierrel (Grenoble) – *Biosynthesis of coenzyme Q*

Session 3: Mitochondrial protein biogenesis and quality control

Chair: Peter Rehling (Göttingen)

Heidi McBride (McGill) - *Mechanisms and meaning of mitochondrial derived vesicles*

Leo Pallanck (U. Washington) - *Mechanisms of mitophagy*

Koji Okamoto (Osaka) - *Upstream events regulating mitophagy.*

Chris Meisinger (Freiburg) - *Posttranslational modifications modulate protein import*

Session 4: Mitochondrial stress in cell signaling and aging

Chair: Grazia Isaya (Mayo)

- Liza Pon (Columbia) - *Filtering good from bad mitochondria during cell division: Implications for aging*
Alicia Kowaltowski (São Paulo) – *Caloric restriction effects on mitochondrial function*
Siegfried Hekimi (McGill) - *The impact of mitochondrial function of survival and death: from worms to patients*
Agnieszka Chacinska (Warsaw) - *Stress-signaling of defective mitochondrial protein import*

Session 5: Mitochondrial dynamics in development and disease

Chair: Jodi Nunnari (UC Davis)

- Elena Rugarli (Cologne)- *Post-transcriptional regulation of mitochondrial biogenesis*
Orian Shirihai (Boston) - *The impact of nutrients on mitochondrial turnover and biogenesis*
Peter Walter (UCSF) – *ER-Mitochondrial dynamics*
David Chan (Caltech) - *Mitochondrial dynamics and quality control*

Session 6: Mitochondrial driven mechanisms of mitochondrial dysfunction

Chair: Vamsi Mootha (Harvard)

- Anu Suomalainen (Helsinki) - *Integrated stress response in mitochondrial disease*
Pere Puigserver (Harvard) - *Transcriptional Control of Mitochondrial Bioenergetics*
Nils-Göran Larsson (Max Plank, Cologne) - *Regulation of mtDNA transcription in vivo*
Tsutomu Suzuki (Tokyo) - *Molecular pathogenesis of mitochondrial disease caused by tRNA modification deficiency*

Session 7: New pathways, biomarkers and technologies to study mitochondrial function

Chair: Nils-Göran Larsson (Max Plank, Cologne)

- Michal Minczuk (Cambridge) - *Manipulating mtDNA heteroplasmy with designer zinc-finger nuclease technology*
Michael Murphy (Cambridge) - *Sources and consequences of mitochondrial superoxide production*
Shoukhrat Mitalipov (OHSU) - *Germline and Somatic mtDNA Correction for Mitochondrial Disorders*
Estela Area-Gomez (Columbia) - *ER-Mitochondrial interactions in aging and AD*

Session 8: Challenges and opportunities in mitochondrial biology and medicine

Chair: Eric Shoubridge (McGill)

- Patrick Chinnery (Cambridge) - *Mitochondrial DNA transmission*
Zofia Chrzanowska-Lightowlers (Newcastle) - *Mitochondrial translation*
David Sabatini (MIT/Whitehead) - *Large scale approaches for studying cell metabolism*
Vamsi Mootha (Harvard) - *Mitochondrial Systems Biology*