

Bioenergetics Mitochondria & Metabolism 2019 Symposium
Saturday March 2, 2019
Baltimore, Maryland
9:00 AM – 6:00 PM
Convention Center Rooms: 324, 325, 326
Subgroup Co-Chairs: Elizabeth Jonas, Yale University and George Porter,
University of Rochester Medical Center

Morning Session: “Structure-Function of Mitochondrial Super-Complexes”

Co-Chairs: William A. Cramer. and Karin Busch

9:00 AM to 9:10 AM

Prof. William A. Cramer, Purdue University, West Lafayette, IN USA

Introduction: A New View of Organelle Energy Transduction: Super-Complexes

9:10 AM to 9:40 AM

Werner Kühlbrandt, Max Planck Institute for Biophysics - Frankfurt am Main, Germany

Cryo EM of Mitochondrial Super-Complexes

9:40 AM to 10:10 AM

William Dowhan, University of Texas Health Science Center/Houston Texas USA

A requirement for cardiolipin in the organization and function of mitochondrial super-complexes

10:10 AM to 10:40 AM

Rosemary Stuart, Marquette University, Milwaukee, Wisconsin USA

'Rcf1 and Rcf2: central role in cytochrome c oxidase enzymology and support of the proton motive force'

10:55 AM to 11:25 AM

Robert Gennis, University of Illinois, Urbana, Illinois USA

Structure of the Alternative Complex III from “Flavobacterium Johnsoniae within a Supercomplex with Cytochrome aa3'

11:25 AM to 11:55 AM

Helmut Kirchhoff, Washington State University, Pullman, WA USA

Quinone Diffusion in Photosynthetic Membranes: Challenges Caused by Complex Membrane Architectures

Afternoon Session: “Metabolic Approaches for Longevity and Disease Treatment (with Focus on Ketone Bodies)”

Chair: Elena Dedkova

1:35 PM to 1:45 PM

Elena N. Dedkova, University of California, Davis, CA, USA

Introduction

1:45 PM to 2:15 PM

Carl E. Stafstrom, Johns Hopkins University, Baltimore, MD, USA

Ketogenic Diet: Evidence for Metabolic Control of Neuronal Excitability and Seizures

2:15 PM to 2:45 PM

Peter A. Crawford, University of Minnesota, Minneapolis, MN, USA

Multi-dimensional Roles of Ketone Bodies in Fuel Metabolism, Signaling, and Therapeutics

2:45 PM to 3:15 PM

Daniel P. Kelly, University of Pennsylvania, Philadelphia, PA, USA

Ketone bodies as a therapeutic strategy for heart failure

3:30 PM to 4:00 PM

Kieran Clarke, University of Oxford, Oxford, UK

Novel ketone monoester for human exercise and cognition: Why, how and when

4:00 PM to 4:30 PM

Eric Verdin, Buck Institute for Research on Aging, Novato, CA, USA

Ketogenic Diet Reduces Midlife Mortality and Improves Memory in Aging Mice

4:30 PM to 5:00 PM

Elena N. Dedkova, University of California, Davis, CA, USA

Ketone bodies and their polymers in heart failure and type 2 diabetes: lessons learned from the ketone ester diet

5:00 PM to 6:00 PM

Business Meeting & General Discussion

7:00 PM to 9:00 PM

Subgroup Dinner

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