



2024 Oklahoma Geroscience Symposium

Mitochondria in aging and age-associated disease

April 11, 2024
7:55 AM - 5:30 PM

7:30AM Light breakfast and Registration

7:55AM **Veronica Galvan, Ph.D.**, Director, Oklahoma Nathan Shock Center on Aging
Introduction / Welcome

SESSION 1

Mitochondria in skeletal muscle aging and in age-associated disease

Chairs: Dr. Sabira Mohammed Jazir and Dr. Jordan Fuqua

8:00AM – 8:30AM **Darrell Neufer, Ph.D.**, East Carolina University
Health Span from a Mitochondrial Bioenergetics Perspective

8:30AM – 9:00AM **Anna E. Thalaker-Mercer, Ph.D.**, University of Alabama at Birmingham
Nutrient and metabolic determinants of skeletal muscle composition in advanced age

9:00AM – 9:30AM **Russ Hepple, Ph.D.**, University of Florida
Mitochondrial Biology in Aging Skeletal Muscle

9:30AM – 9:50AM **Colleen O'Reilly, Ph.D.**, Oklahoma Medical Research Foundation
Skeletal muscle mitochondrial dynamics of old mice are slower than young mice in vivo

9:50AM – 10:10AM **COFFEE BREAK**

SESSION 2

Mitochondria in the aging nervous and immune systems

Chairs: Dr. Colleen O'Reilly and Dr. Sreemathi Logan

10:10 AM – 10:40AM **Gerald Shadel, Ph.D.**, Salk Institute for Biological Studies
Nucleic Acid-Mediated Mitochondrial-Nuclear Signaling

10:40AM – 11:10AM **Tommy Lewis, Ph.D.**, Oklahoma Medical Research Foundation
AMPK dependent mitochondrial fission in neuronal health and disease

11:10AM – 11:30PM **K Awardee: Charles Najt, Ph.D.**, Virginia Tech University
Lipid Droplet Signaling in Metabolic Health and Aging

11:30PM – 11:50PM **Carlos Diaz Garcia, Ph.D.**, University of Oklahoma Health Sciences Center
Mitochondrial Ca²⁺ uniporter deficiency impairs neuronal metabolism and cognition

11:50AM – 12:20AM **Julia Busik, Ph.D.**, University of Oklahoma Health Sciences Center
Dyslipidemia and diabetic retinopathy – a lipocentric approach to a glucocentric problem

LUNCH AND POSTER SESSION (Conference Rooms A & B)

12:20PM – 2:00PM

KEYNOTE PRESENTATION

2:00PM – 3:00PM **Keynote Speaker: Doug Wallace, Ph.D.**, University of Pennsylvania
Mitochondrial Medicine in the Pandemic Era

SESSION 3

Mitochondria in cardiac aging

Chairs: Dr. Archana Unnikrishnan and Dr. Sarah Ocanas

3:00 – 3:30PM **Rong Tian, MD, Ph.D.**, University of Washington
Mitochondrial mechanisms of human disease: bioenergetics and beyond

3:30PM – 3:50PM **Ann Chiao, Ph.D.**, Oklahoma Medical Research Foundation
Mitochondrial metabolism in cardiac aging

3:50PM – 4:10PM **K Awardee: Danielle Bruns, Ph.D.**, University of Wyoming
Distinct mechanisms of aging in the cardiac right and left ventricles

4:10PM – 4:30PM **OKC NSC Pilot Award Lecture: Sandra Lee, Ph.D.**, University of Utah
Inducible cardiac-specific NNUFA13 knockout mice results in dilated cardiomyopathy without inflammation

4:30PM– 5:15PM **Funder's Roundtable:** Dr. Christy Carter (NIA), Dr. Viviana Perez (Hevolution Foundation), Dr. Yih-Woei Fridell (NIA).
Chaired by Dr. Deepa Sathyaseelan and Dr. Benjamin Miller

5:15 – 5:30PM **Poster Awards Presentation and Closing Remarks**

5:30PM – 7:30PM **Trainee/Faculty Reception Mixer on the Terrace**