



New Approaches for Characterizing Mitochondrial Signaling in Response to Environmental Stress

November 7, 2018

NIEHS Building 101, Rodbell Auditorium • 111 TW Alexander Drive, Research Triangle Park, N.C.

AGENDA

7:30 a.m. Registration

8:30 a.m. Welcome and Introductions
Rick Woychik, Deputy Director, NIEHS

Grantee Updates – Session One

Moderator: Kimberly McAllister, NIEHS

8:45 a.m. ROS Driven Mitochondrial-Telomere Dysfunction During Environmental Stress
Ben Van Houten and Patricia Opresko, University of Pittsburgh

9:15 a.m. Inducible Mouse Models of Mitochondrial ROS Signaling and Environmental Stress
Gerald Shadel, Salk Institute for Biological Studies

9:45 a.m. New Oxidation-Sensing Probes to Evaluate Mitochondrial Dysfunction in Lung Injury
Cristina Furdui and Bruce King, Wake Forest University

10:15 a.m. Break

Grantee Updates – Session Two

Moderator: Fred Tyson, NIEHS

**10:30 a.m. Study of the Mitochondrial-Cellular Response to Environmental Stress
by Fluorescence Imaging**
Gyorgy Hajnoczky and Gyorgy Csordas, Thomas Jefferson University

11:00 a.m. Imaging Heme Based Mitochondrial-Cell Signaling Networks in Cell and Animal Model
Amit Reddi, Georgia Institute of Technology

**11:30 a.m. RT-SQuARED-M Method to Study the Precise Role of Mitochondria in the
Oxidative Damage Caused by Environmental Toxins**
Kasturi Mitra, University of Alabama at Birmingham



Noon

Lunch

1:15 p.m.

Histone Tails As an Energy Reservoir for Cellular Metabolism

Raul Mostoslavsky, Massachusetts General Hospital

Grantee Updates – Session Three

Moderator: Dan Shaughnessy, NIEHS

1:45 p.m.

Imaging Mitochondrial Signaling in B-Cells Ectopically Implanted in the Eye

Carlos Moraes, University of Miami

2:15 p.m.

Irgm1 Reveals New Connections Between Mitochondrial Quality Control and Autoimmunity

Michael Fessler, Acting Chief, Immunity, Inflammation, and Disease Laboratory, NIEHS

2:45 p.m.

Break

3:00 p.m.

Mitochondrial Dysfunction in Pathobiology

John Lemasters, Medical University of South Carolina

3:30 p.m.

Mitochondrial Dynamics in the Regulation of Energy Expenditure and Fuel Preference

Orian Shirihai, UCLA

4:00 p.m.

Panel Discussion

Moderator: Janine Santos, NIEHS

5:00 p.m.

Meeting Ends