

SFRBM 2009 • Oral Presentation Schedule • San Francisco, CA

DAY 1: THURSDAY, NOVEMBER 19, 2009

SESSION 1 Title: Novel Aspects of Nitric Oxide and Hydrogen Sulfide Biology

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:00 pm - 2:20 pm	Andrey Kozlov	L. Boltzmann Institute	Nitrite bioactivation in cardiomyocytes
2:20 pm - 2:40 pm	Andrey Samal	UAB	Sodium Nitrite Administration Mitigates Lung Injury After Chlorine Gas Exposure in Rats
2:40 pm - 3:00 pm	Katherine Wood	National Institutes of Health	Endothelial and Blood eNOS: Shared Roles in Nitrite Homeostasis and Blood Pressure Regulation
3:00 pm - 3:20 pm	Homero Rubbo	University of the Republic - Uruguay	Nitroarachidonic acid: The first Peroxidase Inhibitor of Prostaglandin Endoperoxide H Synthase 1 and 2
3:20 pm - 3:40 pm	Ruslan Rafikov	Medical College of Georgia	The structure of eNOS provides N-terminal rearrangements during redox stress that closes catalytic cavity
3:40 pm - 4:00 pm	Matthew Whiteman	Peninsula Medical School - UK	Cross Talk between NO and Hydrogen Sulfide in Inflammatory Cells: A Novel Anti-inflammatory Mechanisms of Action of Glucocorticoids?
4:00 pm - 4:20 pm	Asaf Stein	UAB	Perthiols: A Novel Storage form for Hydrogen Sulfide in Mammalian Systems
4:20 pm - 4:40 pm	Sushil Jain	LSU Health Sciences Center	Lower Blood Hydrogen Sulfide Levels in Diabetes: Its Potential Role in Elevated Oxidative Stress and Vascular Inflammation Associated with Diabetes

SESSION 2 Title: Biological Regulation and effects of Reactive Oxygen Species

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:00 pm - 2:20 pm	Jose Pablo Vazquez-Medina	University of California Merced	NOX4 and P22phox Increase after Prolonged Fasting Without Oxidative Damage or Inflammation in a Naturally Adapted Mammal
2:20 pm - 2:40 pm	Katrin Schröder	Goethe-Universität - Germany	The NADPH oxidase Nox2 is required for hypoxia-induced mobilization of endothelial progenitor cells and vascular repair
2:40 pm - 3:00 pm	Netanya Spencer	University of Iowa	Localization of NOX4 in the Inner Nuclear Membrane
3:00 pm - 3:20 pm	Ina Takac	Goethe-Universität - Germany	The extracytosolic part of Nox4 mediates the hydrogen peroxide formation by this NADPH oxidase
3:20 pm - 3:40 pm	Karina Ckless	SUNY Plattsburgh	Reactive Oxygen Species are Necessary for Inflammation Induced by Serum Amyloid A (SAA) in Mouse Macrophages
3:40 pm - 4:00 pm	Stephen Wedgwood	Northwestern University	Catalase Restores Extracellular Superoxide Dismutase Activity in Persistent Pulmonary Hypertension of the Newborn (PPHN)
4:00 pm - 4:20 pm	Jennifer Streeter	University of Iowa	Potential role of Protein Kinase C-beta I as a novel regulator of Nox1 activation
4:20 pm - 4:40 pm	Haitao Li	The Ohio State University	Characterization of the Magnitude and Mechanism of Aldehyde Oxidase-mediated Nitric Oxide Production

SESSION 3 Title: Redox Imaging, Signaling and Chemotherapy

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:00 pm - 2:20 pm	Geroge Caia	The Ohio State University	EPR/NMR Coimaging of In Vivo Redox Status in Mice
2:20 pm - 2:40 pm	Clare Hawkins	Heart Research Institute	Hypothiocyanous acid is a potent inducer of apoptosis in macrophage and endothelial cells
2:40 pm - 3:00 pm	Guang Yang	Children's Hospital of Philadelphia	Hyperoxia-induced C/EBPalpha disrupts postnatal lung type II cell proliferation during air recovery
3:00 pm - 3:20 pm	Reshma Bhowmick	Medical College of Wisconsin	Cytoprotective Induction of Nitric Oxide Synthase in a Cellular Model of Photodynamic Therapy
3:20 pm - 3:40 pm	Rajendra Sharma	Univ. of North Texas HSC	Human leukemia (HL60) cells transfected with hGSTA1 acquire resistance to sulforaphane-induced cell death
3:40 pm - 4:00 pm	Georg Wondrak	University of Arizona	Genotype-specific Redox Chemotherapy Targeting NQO1/2 Breast Cancer
4:00 pm - 4:20 pm	Kheng Newick	University of Vermont	Redox regulation of FoxM1 in malignant mesothelioma cells.
4:20 pm - 4:40 pm	Melinda Asbury	Marshall University	The specific mechanism by which DA-induces MAPK p38 activation serves as a molecular switch between cellular protection and cellular destruction in a model of methamphetamine neurotoxicity: the role of dopamine D1 receptors and the redox-sensitive transcription factor AP-1

DAY 2: FRIDAY, NOVEMBER 20, 2009

SESSION 4 Title: Mitochondrial Antioxidants and Cellular Effects

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:00 pm - 2:20 pm	Liuj Chen	Univ. of Texas HSC - San Antonio	Reduction in mitochondria H2O2 protects against insulin resistance through a mechanism of Akt and AMPK activation
2:20 pm - 2:40 pm	Sergey Dikalov	Emory University	Therapeutic targeting of mitochondrial superoxide in hypertension
2:40 pm - 3:00 pm	Anumantha Kanthasamy	Iowa State University	Mitochondria-Targeted Antioxidants Protects Against Oxidative Damage to Mitochondrial Iron-Sulfur Clusters in a Preclinical Animal Model of Parkinson's Disease
3:00 pm - 3:20 pm	Jingjing Hu	University of South Carolina	Studying mitochondrial redox status and control mechanisms using in vivo fluorescent protein sensors
3:20 pm - 3:40 pm	Debbie Mustacich	Oregon State University	Beta-Oxidation of Alpha-Tocopherol Occurs in Mitochondria of Rats
3:40 pm - 4:00 pm	Vasudevan Bakhavatchalu	University of Kentucky	MnSOD links oxidative stress and mitochondrial DNA repair by interacting with p53 and DNA pol gamma
4:00 pm - 4:20 pm	Huiyun Liang	Univ. of Texas HSC - San Antonio	Protective effect of PGC-1alpha on the development of ALS
4:20 pm - 4:40 pm	Katarzyna Broniowska	Medical College of Wisconsin	Efficient S-Nitrosation of Cellular Proteins by Cytochrome c

SESSION 5 Title: Macromolecule Modification by Reactive Species

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:00 pm - 2:20 pm	Rebecca Zee	Boston University	Cellular thiol redox environment modulates SIRT1 activity
2:20 pm - 2:40 pm	Maria Franco	Burke/Cornell Medical Research Institute	Nitration of a single HSP90 tyrosine residue is sufficient to induce cell death
2:40 pm - 3:00 pm	Sally Nelson	SomaLogic, Inc.	High Throughput Protein Biomarker Discovery and Translation into Diagnostics in Disease Using the SomaLogic Aptamer-Based Assay
3:00 pm - 3:20 pm	Saurabh Chatterjee	NIEHS/NIH	Protein radicals induce follicular dendritic cell depletion and inhibit B cell differentiation in acute systemic inflammatory disease
3:20 pm - 3:40 pm	Saurabh Aggarwal	Medical College of Georgia	Identification of tyrosine 247 as the site of PKG, susceptible to peroxynitrite-mediated nitration during the development of pulmonary hypertension
3:40 pm - 4:00 pm	Sandra Gomez-Mejiba	Oklahoma Medical Research Foundation	Trapping of protein-centered radicals and anti-inflammatory effects of 4OH-PBN
4:00 pm - 4:20 pm	Amal Fernando	Children's Hospital of Philadelphia	Nuclear Localization of HO-1 Enhances DNA Repair After Oxidative Stress in Neonatal Mice.
4:20 pm - 4:40 pm	Chiara Cipollina	University of Pittsburgh	Cyclooxygenase-2 generates anti-inflammatory omega-3 fatty acid derivatives in activated macrophages

SESSION 6**Title: Antioxidants and Redox Signaling**

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:00 pm - 2:20 pm	Adam Case	University of Iowa	Heightened Susceptibility to Influenza Mortality in Immunodeficient Mice Caused by a T-cell Specific Defect in SOD2
2:20 pm - 2:40 pm	Bill Orr	Southern Methodist University	Peroxiredoxins and the Redox State Hypothesis of Aging
2:40 pm - 3:00 pm	Michelle Manni	University of Pittsburgh	The Role of Extracellular Superoxide Dismutase in Bacterial Pneumonia
3:00 pm - 3:20 pm	Raquel Silva	University of Sao Paulo	PAMM: a novel antioxidant enzyme induced by oxidative stress
3:20 pm - 3:40 pm	Lynette Rogers	Nationwide Children's Hospital	Maternal DHA Supplementation Decreases Inflammation and Improves Lung Growth in Hyperoxia-Exposed Newborn Mouse Pups
3:40 pm - 4:00 pm	Trent Tipple	Nationwide Children's Hospital	Overexpression of Thioredoxin Interacting Protein Decreases Hypoxia Response Element Promoter Activity in Murine Alveolar Epithelial Cells
4:00 pm - 4:20 pm	Saeid Ghavami	University of Manitoba	Simvastatin Induces Human Lung Mesenchymal Cell Apoptosis via p53-PUMA and Selective Release of Smac and Omi
4:20 pm - 4:40 pm	Aaron Holley	University of Kentucky	Mechanisms of p53-mediated Paclitaxel-induced Neurotoxicity