**SFRBM 2008 • Oral Presentation Schedule • Indianapolis, IN**

## DAY 1: THURSDAY, NOVEMBER 20, 2008

**SESSION 1** **REDOX REACTION MECHANISMS AND NOVEL PRODUCTS**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Julio Massari | Universidade de Sao Paulo | Methylglyoxal Reacts at High Rates with Peroxynitrite Yielding Acetyl Radical |
| 2:50 pm - 3:10 pm | Michael Davies | The Heart Research Institute | The vinyl ether linkages of plasmalogens are favored targets for myeloperoxidase-derived oxidants: a kinetic study |
| 3:10 pm - 3:30 pm | Chiara Cipollina | University of Pittsburgh | Cyclooxygenase-dependent generation of novel electrophilic omega-3 fatty acid derivatives |
| 3:30 pm - 3:50 pm | Brian Cox | Vanderbilt University Medical Center | Formation of Novel D-ring and E-ring Isoprostanes-like Compounds in Vivo and in Vitro form the Oxidation of Eicosapentaenoic Acid |
| 3:50 pm - 4:10 pm | Rebecca Zee | Boston University School of Medicine | SIRTUIN-1 ZINC THIOLATE CENTER IS A DIRECT MOLECULAR TARGET OF OXIDANTS |
| 4:10 pm - 4:30 pm | J. Houghton | University of California at Davis | Myeloperoxidase-Dependent Nitration and Oxidation of p-Cresol: A Novel Pathway for Xenobiotic and Endobiotic Metabolism |

**SESSION 2** **SUPEROXIDE, SUPEROXIDE DISMUTASES AND OXIDATIVE STRESS**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Netanya Spencer | University of Iowa | Compartmentalization and Regulation of Nuclear NOX4-dependent Superoxide Production |
| 2:50 pm - 3:10 pm | Joshua Madsen | University of Iowa | FOXO3a binding to the *SOD2* promoter causes chromatin remodeling and transcriptional activation of MnSOD expression |
| 3:10 pm - 3:30 pm | Yani Zou | Stanford University | A New Mouse Model for Exploring Roles of Extracellular Superoxide Dismutase |
| 3:30 pm - 3:50 pm | Denise Fernandes | Sao Paulo University | Protein Disulfide Isomerase overexpression in vascular smooth muscle cells induces preemptive Nox1 NADPH oxidase activation via nitric oxide-inhibitable |
| 3:50 pm - 4:10 pm | David Cantu | University of Colorado Denver | Oxidative Inactivation of Mitochondrial Aconitase Results in Increased Hydrogen Peroxide, Free Iron and Cell Death in Primary Midbrain Cultures |
| 4:10 pm - 4:30 pm | Kelly Andringa | University of Alabama at Birmingham | Protective Effects of S-Adenosylmethionine in Alcohol Induced Fatty Liver Disease: Identification of Molecular Targets in the Mitochondrial Proteome |

**SESSION 3** **ADAPTATIVE AND REGULATORY RESPONSES**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Ana Matias | Faculdade de Ciências - Universidade de Lisboa | Adaptation to hydrogen peroxide induces the formation of lipid rafts via fatty acid synthase in Saccharomyces cerevisiae |
| 2:50 pm - 3:10 pm | Angelica Amanso | University of São Paulo, Heart Institute | Proteasome inhibition increases oxidative stress and disrupts NADPH oxidase response to stimuli in vascular smooth muscle cells |
| 3:10 pm - 3:30 pm | David Infanger | Cornell University | Targeted knockdown of Nox4 in the paraventricular nucleus (PVN) normalizes sympathoexcitation and improves cardiac function following myocardial infarc |
| 3:30 pm - 3:50 pm | Sita Subbaram | Albany Medical College | Redox Control of Co-activators and Repressors of MMP-1 transcription |
| 3:50 pm - 4:10 pm | Mikiei Tanaka | NHLBI | Oxidized messenger RNA induces endoplasmic reticulum stress in HEK293 cells |
| 4:10 pm - 4:30 pm | Nels Olson | University of Vermont | S-Nitrosoglutathione Modulates Airway Inflammatory Signaling by Regulating the Transcription Factors NF-kB and HIF-1. |

## DAY 2: FRIDAY, NOVEMBER 21, 2008

**SESSION 4** **LIPIDS IN REDOX BIOLOGY**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Huiyong Yin | Vanderbilt University | Novel Mass Spectrometric Methods for the Analysis of Intact Oxidation Products of Phospholipids |
| 2:50 pm - 3:10 pm | Jean-Claude Honore | Université de Montréal | Trans-Arachidonic Acids Generated After Nitrative Stress Induce Cerebral Microvascular Degeneration Through Activation of the GPR40 Receptor |
| 3:10 pm - 3:30 pm | Krisztian Stadler | NIEHS/NIH | Lipid peroxidation and 4-hydroxynonenal-based modification of the insulin receptor substrate-1 in an obese insulin resistant, type II-like diabetic animal mod |
| 3:30 pm - 3:50 pm | Joshua Brooks | Vanderbilt University | Highly Reactive Cyclopentenone Isoprostanes Derived from Eicosapentaenoic Acid Exert Potent Anti-Inflammatory Effects through Inhibition of NFKB Signa |
| 3:50 pm - 4:10 pm | Liuji Chen | UT Health Science Center - San Antonio | Increased lipid peroxidation facilitates amyloidogenesis through upregulation of BACE1 expression, a mechanism that may be important in pathogenesis of |
| 4:10 pm - 4:30 pm | Richard Browne | University at Buffalo, SUNY | Micronutrient/Mineral Supplementation with High-dose alpha-Tocopherol is Associated with Decreased gamma-Tocopherol and Increased Lipid Peroxidatio |

**SESSION 5** **REACTIVE SPECIES: BIOLOGICAL FORMATION AND ACTIONS**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Shipeng Wei | University of Alabama at Birmingham | Hypochlorous acid inhibits epithelial sodium channel activity both in vitro and in vivo |
| 2:50 pm - 3:10 pm | Sandra Vaz | Universidade de São Paulo - Instituto de Química | A COMPARATIVE STUDY OF RIBONUCLEASE AND LYSOZYME OXIDATION AND NITRATION BY PEROXYNITRITE AND MYELOPEROXIDASE |
| 3:10 pm - 3:30 pm | Charles Bosworth | University of Alabama at Birmingham | The Mechanisms of Cellular Nitrosothiol Formation from Nitric Oxide |
| 3:30 pm - 3:50 pm | Corrine Kliment | University of Pittsburgh | Oxidative Stress Alters Syndecan-1 Distribution in Lungs with Pulmonary Fibrosis. |
| 3:50 pm - 4:10 pm | Adam Salmon | UT Health Science Center - San Antonio | Lack of methionine sulfoxide reductase A in mice increases sensitivity to oxidative stress but does not diminish lifespan |
| 4:10 pm - 4:30 pm | Balz Frei | Oregon State University | The Age-Dependent Increases in Vascular Oxidative Stress and Inflammation are Ameliorated by Lipoic Acid Supplementation |

**SESSION 6** **SIGNAL TRANSDUCTION AND GENE EXPRESSION**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Christoph Ufer | University Medicine Charite (CCM) | Translational regulation of Glutathione peroxidase 4 Expression through Guanine-rich sequence binding factor 1 is essential for embryonic brain developme |
| 2:50 pm - 3:10 pm | Valeria Antico Arciuch | University of Buenos Aires | The redox modulation of Akt1 activation in mitochondria |
| 3:10 pm - 3:30 pm | Nicholas Khoo | University of Pittsburgh | Activation of Endothelial Nitric Oxide Synthase and Heme Oxygenase 1 Expression in Vasculature by Nitro-fatty Acids |
| 3:30 pm - 3:50 pm | Richard Siow | King's College London | Transforming Growth Factor beta-1 elicits Nrf2-mediated heme oxygenase-1 induction in aortic smooth muscle cells |
| 3:50 pm - 4:10 pm | Alexander MIchels | Oregon State University | HNF1alpha Regulation of Sodium-Dependent Vitamin C Transporter 1 (SVCT1) |
| 4:10 pm - 4:30 pm | Vanja Pekovic | Durham University | A novel role for nucleoskeletal protein lamin A in cellular redox homeostasis and ageing |

**DAY 3: SATURDAY, NOVEMBER 22, 2008**

**SESSION 7** **CARDIOVASCULAR REDOX BIOLOGY AND PATHOLOGY**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Andrey Kozlov | L Boltzmann Institute | Circulating nitrosyl complexes of hemoglobin originate from diverse NO sources and release biologically active NO under exposure to intense visible light |
| 2:50 pm - 3:10 pm | Sean Davies | Vanderbilt University | Role of Isoketals in Ischemic Cardiomyopathy |
| 3:10 pm - 3:30 pm | Sergey Dikalov | Emory University School of Medicine | Mitochondrial Oxidative Stress in Hypertension |
| 3:30 pm - 3:50 pm | Udit Agarwal | Cleveland Clinic | NADPH oxidase derived oxidants participate in ventricular rupture post MI through oxidation of PAI-1 |
| 3:50 pm - 4:10 pm | Andreia Chignalia | University of São Paulo | TESTOSTERONE-INDUCED CELL MIGRATION OCCURS VIA c-SRC MEDIATED ROS GENERATION IN SHR VSMC. |
| 4:10 pm - 4:30 pm | Karuppaiyah Selvendiran | The Ohio State Unversity | Inhibition of Smooth Muscle Cell Proliferation and Balloon Injury-Induced Neointimal Hyperplasia through Activation of PTEN Expression by HO-3867, a Syr |

**SESSION 8** **ANTIOXIDANT AND NOVEL THERAPEUTICS**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Nira Izigov | Tel Aviv University | S-allylmercapto-N-acetylcysteine (ASSNAC) up-regulates antioxidant mechanisms and protects cells from oxidative stress |
| 2:50 pm - 3:10 pm | Gregory Giles | University of Otago | Synthetic S-Nitrosothiols As Anti Cancer Agents |
| 3:10 pm - 3:30 pm | Ines Batinic-Haberle | Duke University Medical Center | MnTBAP selectively scavenges peroxynitrite over superoxide: Comparison of MnTBAP to MnTE-2-PyP in two different models of oxidative stress injuries, S |
| 3:30 pm - 3:50 pm | Eva Grayck | University of Colorado, Denver | Kinetics of SOD2/3 in rat tissue after different routes of administration |
| 3:50 pm - 4:10 pm | Mutay Aslan | Akdeniz University Medical School | Astaxanthin Attenuates Hepatocellular Injury Following Ischemia/Reperfusion |
| 4:10 pm - 4:30 pm | Joo-Yeun Oh | University of Alabama at Birmingham | A new model for redox cell signaling; the accumulation of the covalent modification of signaling proteins by lipid electrophiles. |

**SESSION 9** **MITOCHONDRIA AND CELL PROLIFERATION**

| TIME | PRESENTER | AFFILIATION | ABSTRACT TITLE |
|---|---|---|---|
| 2:30 pm - 2:50 pm | Bradford Hill | University of Alabama at Birmingham | MITOCHONDRIAL BIOENERGETICS REGULATES PROTEIN MODIFICATION BY LIPID ELECTROPHILES |
| 2:50 pm - 3:10 pm | Timothy Sweeney | Duke University Medical Center | TLR2 deficiency impairs mitochondrial biogenesis by failure to induce PGC-1alpha in S. aureus sepsis |
| 3:10 pm - 3:30 pm | Nukhet Aykin-Burns | University of Iowa | SIRT3 is a Mitochondrial Tumor Suppressor Gene |
| 3:30 pm - 3:50 pm | Lin Mantell | St. John's University Colleqe of Pharmacy/Feinstein Ir | The role of HMGB1 in the pathogenesis of cystic fibrosis |
| 3:50 pm - 4:10 pm | Anne Diers | University of Alabama at Birmingham | Redox modulation of breast cancer cell migration: implications for anti-metastatic therapy |
| 4:10 pm - 4:30 pm | William St. Clair | University of Kentucky | RelB plays an important role in the progression of prostate cancer and resistant to radiation therapy |