

ORAL PRESENTATIONS
(by Presentation Day)

Abstract Title	Author / Affiliation	Session	Date / Time	Travel Award
Role of vascular cystathionine gamma lyase (CSE) / hydrogen sulfide (H ₂ S) in regulating brain perfusion and cognitive function	Gopi Kolluru <i>LSU Health Sciences Center</i>	S1: Redox Influences in Aging and Neurodegeneration	Thurs, Nov 17 2:30 pm - 2:50 pm	
Scavenging lipid hydroperoxides by glutathione peroxidase 4 overexpression attenuates contractile and mitochondrial dysfunction in a murine model of accelerated sarcopenia.	Hongyang Xu <i>Oklahoma Medical Research Foundation</i>	S1: Redox Influences in Aging and Neurodegeneration	Thurs, Nov 17 2:50 pm - 3:10 pm	
Dietary Supplementation with 23-Hydroxy Ursolic Acid Reduces the Severity and Incidence of Acute Experimental Autoimmune Encephalomyelitis (EAE) in a Murine Model of Multiple Sclerosis	Reto Asmis <i>Wake Forest School of Medicine</i>	S1: Redox Influences in Aging and Neurodegeneration	Thurs, Nov 17 3:10 pm - 3:30 pm	
Loss Of Biliverdin Reductase-A (BVR-A) Impairs Brain Energy Metabolism Favoring The Development Of Neurodegeneration: A Link Between AD And T2DM	Eugenio Barone <i>Sapienza University of Rome - Italy</i>	S1: Redox Influences in Aging and Neurodegeneration	Thurs, Nov 17 3:30 pm - 3:50 pm	
Restoring brain NAD ⁺ and blood-brain barrier integrity to optimize brain health and identify neuroprotective targets	Kalyani Chaubey <i>Case Western Reserve University</i>	S1: Redox Influences in Aging and Neurodegeneration	Thurs, Nov 17 3:50 pm - 4:10 pm	
Redox regulation of gene expression by subcellular mitochondrial trafficking	Nathaniel Shannon <i>University of Vermont</i>	S2: Mitochondria and Inflammation	Thurs, Nov 17 2:30 pm - 2:50 pm	
Impairment of Vascular Mitochondrial Metabolism Accelerates Vascular Aging, Promotes Endothelial Dysfunction, Vascular Hypertrophy and Hypertension	Sergey Dikalov <i>Vanderbilt University Medical Center</i>	S2: Mitochondria and Inflammation	Thurs, Nov 17 2:50 pm - 3:10 pm	
Mitochondrial Regulation of Inflammation after Psychological Trauma	Emily Reed <i>Texas A&M University</i>	S2: Mitochondria and Inflammation	Thurs, Nov 17 3:10 pm - 3:30 pm	
UNC-49 is a redox-sensitive GABAA receptor that cell non-autonomously regulates the mitochondrial unfolded protein response	Franziska Pohl <i>Washington University St. Louis</i>	S2: Mitochondria and Inflammation	Thurs, Nov 17 3:30 pm - 3:50 pm	
Role of Tetrahydrobiopterin Metabolism in Abdominal Pain in Inflammatory Bowel Diseases	Thomas Pasa <i>Universidade Federal de Santa Catarina - Brazil</i>	S2: Mitochondria and Inflammation	Thurs, Nov 17 3:50 pm - 4:10 pm	
Mitochondrial superoxide generates toxic HNE-adducted MnSOD aggregates	Sanjit Dhar <i>University of Kentucky</i>	S3: Mitochondria in Cancer and Atherosclerosis	Thurs, Nov 17 2:30 pm - 2:50 pm	
Expression of ovarian cancer specific Drp1 splice variants regulate mitochondrial heterogeneity and cell plasticity	Zaineb Javed <i>UPMC Hillman Cancer Center</i>	S3: Mitochondria in Cancer and Atherosclerosis	Thurs, Nov 17 2:50 pm - 3:10 pm	

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Hydrogen Peroxide Promotes Cancer Reprogramming via Production of RT-Derived EVs containing Mitochondria	Caitlin Miller <i>University of Kentucky</i>	S3: Mitochondria in Cancer and Atherosclerosis	Thurs, Nov 17 3:10 pm - 3:30 pm	
Genetic And Pharmacological Induction Of Endothelial Sirt3 After Onset Of Hypertension Rescue Endothelial Function And Reduce Blood Pressure	Anna Dikalova <i>Vanderbilt University Medical Center</i>	S3: Mitochondria in Cancer and Atherosclerosis	Thurs, Nov 17 3:30 pm - 3:50 pm	
Nicotinamide Nucleotide Transhydrogenase (NNT) regulates macrophage mitochondrial function and the redox dependent impairment of efferocytosis.	David Krzywanski <i>Augusta University</i>	S3: Mitochondria in Cancer and Atherosclerosis	Thurs, Nov 17 3:50 pm - 4:10 pm	
Specificity Protein 1-Mediated Promotion of CXCL12 Advances Endothelial Cell Metabolism and Proliferation in Pulmonary Arterial Hypertension	Christopher Dustin <i>University of Pittsburgh</i>	S4: Redox Regulation of Cardiovascular and Pulmonary Physiology	Fri, Nov 18 2:30 pm - 2:50 pm	
Endothelial NOX1-Mediated AMPK α 1 Mediates Hypoxia-Induced Pulmonary Hypertension via p21cip	Christian Goossen <i>University of Pittsburgh</i>	S4: Redox Regulation of Cardiovascular and Pulmonary Physiology	Fri, Nov 18 2:50 pm - 3:10 pm	
Nuclear Cytoglobin Inhibits Oxidative DNA Damage and Regulates Gene Programs in the Vasculature through Cysteine-based Interactions with the Non-Histone Protein HMGB2	Clinton-Matthew Mathai <i>Albany Medical College</i>	S4: Redox Regulation of Cardiovascular and Pulmonary Physiology	Fri, Nov 18 3:10 pm - 3:30 pm	
NADPH Oxidase 4-mediated Fibrosis Contributes to Heart Failure with Preserved Ejection Fraction	Brandon Schickling <i>The University of Iowa</i>	S4: Redox Regulation of Cardiovascular and Pulmonary Physiology	Fri, Nov 18 3:30 pm - 3:50 pm	
Endothelial cells derived from elephant seals respond to extended hypoxia by suppressing inflammation and conserving glutathione	Jose Pablo Vazquez-Medina <i>University of California, Berkeley</i>	S4: Redox Regulation of Cardiovascular and Pulmonary Physiology	Fri, Nov 18 3:50 pm - 4:10 pm	
Spatiotemporal mapping of ROS dynamics across mitochondrial nanodomains in situ	Nada Ahmed Selim <i>University of Rochester Medical Center</i>	S5: Mitochondrial Bioenergetics in Metabolism	Fri, Nov 18 2:30 pm - 2:50 pm	
Co-association and functional link of cytoglobin with glycolytic complexes to regulate vascular bioenergetics	David Jourd'heuil <i>Albany Medical College</i>	S5: Mitochondrial Bioenergetics in Metabolism	Fri, Nov 18 2:50 pm - 3:10 pm	
NOX4 Drives Exercise-Induced Mitophagy	Rebecca Mammel <i>Virginia Polytechnic and State University</i>	S5: Mitochondrial Bioenergetics in Metabolism	Fri, Nov 18 3:10 pm - 3:30 pm	
Mechanisms of Mitochondrial Complex I-ROS Mediated Behavioral Response	Chidozie Okoye <i>University of Rochester</i>	S5: Mitochondrial Bioenergetics in Metabolism	Fri, Nov 18 3:30 pm - 3:50 pm	

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Mitochondrial Glutathione Catabolism Sustains Respiratory Function in Cysteine-Deprived NSCLC	Nathan Ward <i>Moffitt Cancer Center</i>	S5: Mitochondrial Bioenergetics in Metabolism	Fri, Nov 18 3:50 pm - 4:10 pm	
Regulation of PTP1B by Cholesterol in Insulin Resistance	Avinash Londhe <i>State University of New York</i>	S6: Redox Control of Metabolism and Disease	Fri, Nov 18 2:30 pm - 2:50 pm	
Macrophage-restricted Overexpression of Glutaredoxin 1 Protects Mice Against Atherosclerosis and Obesity by Suppressing Nutrient Stress-triggered Induction of NADPH Oxidases and NO Synthases	Yong Joo Ahn <i>Wake Forest School of Medicine</i>	S6: Redox Control of Metabolism and Disease	Fri, Nov 18 2:50 pm - 3:10 pm	
Redox Regulation and Metabolic Dependency of Zika Virus Replication: Inhibition by NAD Anti-Metabolites and Nrf2-dependent antioxidant response	Rodrigo Franco <i>University of Nebraska-Lincoln</i>	S6: Redox Control of Metabolism and Disease	Fri, Nov 18 3:10 pm - 3:30 pm	
Alcohol metabolism induces a reduced hepatic cysteine proteome	Peter Harris <i>University of Colorado</i>	S6: Redox Control of Metabolism and Disease	Fri, Nov 18 3:30 pm - 3:50 pm	
AAV8-mediated expression of scFv-E06 to target oxidized phosphatidylcholines protects against hepatic fibrosis	Clint Upchurch <i>University of Virginia</i>	S6: Redox Control of Metabolism and Disease	Fri, Nov 18 3:50 pm - 4:10 pm	
Oxidative damage in tumor microenvironment enhances prostate tumor growth in a diabetic irradiated condition.	Arpita Chatterjee <i>University of Nebraska Medical Center</i>	S7: Redox Regulation of Cancer	Sat, Nov 19 2:30 pm - 2:50 pm	
Elucidating the role of the extracellular antioxidant enzyme, Glutathione Peroxidase 3 (GPx3), in pro-tumorigenic inflammatory signaling in ovarian cancer	Shriya Kamlapurkar <i>University of Pittsburgh School of Medicine</i>	S7: Redox Regulation of Cancer	Sat, Nov 19 2:30 pm - 2:50 pm	
Site-Specific Nitration of Hsp90 Alters Cell Metabolism and Supports Schwannoma Cell Proliferation	Isabelle Logan <i>Oregon State University</i>	S7: Redox Regulation of Cancer	Sat, Nov 19 3:10 pm - 3:30 pm	
BMX-001 prevents chemoradiotherapy-induced toxicity of healthy tissue in rectal cancer	Molly Myers <i>University of Nebraska Medical Center</i>	S7: Redox Regulation of Cancer	Sat, Nov 19 3:30 pm - 3:50 pm	
Superparamagnetic iron oxide nanoparticles (SPIONs) provide a stable iron reserve to overcome pharmacological ascorbate resistance in glioblastoma	Michael Petronek <i>The University of Iowa</i>	S7: Redox Regulation of Cancer	Sat, Nov 19 3:50 pm - 4:10 pm	
Cytoglobin specifically promotes peroxiredoxin 2-mediated scavenging of hydrogen peroxide through inhibition of hyperoxidation	Kurrim Gilliard <i>Albany Medical College</i>	S8: Molecular Regulation of Redox I	Sat, Nov 19 2:30 pm - 2:50 pm	



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Peroxiredoxins Orchestrate the Timing of Transcription Factor Activation in Response to Oxidative Stress	Elizabeth Jose <i>The University of Arizona</i>	S8: Molecular Regulation of Redox I	Sat, Nov 19 2:50 pm - 3:10 pm	
Identification of thioredoxin 1-dependent signaling pathways and cellular functions in mammalian cells	Peter Vitiello <i>University of Oklahoma Health Sciences Center</i>	S8: Molecular Regulation of Redox I	Sat, Nov 19 3:10 pm - 3:30 pm	
Thioredoxin reductase 1 is required for maintenance of pancreatic beta-cell function and identity	Jennifer Stancill <i>Medical College of Wisconsin</i>	S8: Molecular Regulation of Redox I	Sat, Nov 19 3:30 pm - 3:50 pm	
Activation of Nrf2 at critical windows of developmental impacts protein S-glutathionylation in the developing Zebrafish (Danio rerio) embryo	Emily Marques <i>University of Massachusetts-Amherst</i>	S8: Molecular Regulation of Redox I	Sat, Nov 19 3:50 pm - 4:10 pm	
Trypanosoma cruzi hybrid heme peroxidase catalytically detoxifies peroxynitrite and promotes infection in macrophages	Rafael Radi <i>Universidad de la Republica - Uruguay</i>	S9: Molecular Regulation of Redox II	Sat, Nov 19 2:30 pm - 2:50 pm	
Particulate Matter Exposure Exacerbates Endothelial Barrier Disruption via Upregulated Cx43	Ying Liang <i>Florida International University</i>	S9: Molecular Regulation of Redox II	Sat, Nov 19 2:50 pm - 3:10 pm	
Redox-Regulation of mammalian TRC40 as a stress-sensing chaperone	Bianca Dempsey <i>University of Michigan</i>	S9: Molecular Regulation of Redox II	Sat, Nov 19 3:10 pm - 3:30 pm	
Alcohol-induced lysine N-acetylation and cysteine redox are drivers of hepatic proteome dysregulation	Courtney McGinnis <i>University of Colorado - Anschutz Medical Campus</i>	S9: Molecular Regulation of Redox II	Sat, Nov 19 3:30 pm - 3:50 pm	
Redox Regulation of Oncogenic KRAS	Shachin Patra <i>UF Scripps Biomedical Research</i>	S9: Molecular Regulation of Redox II	Sat, Nov 19 3:50 pm - 4:10 pm	