

# **POSTER PRESENTATIONS**

Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
<b>Aiman Abzhanova</b> The University of North Carolina at Chapel Hill	Monitoring redox responses in human airway epithelial cells exposed to woodsmoke emissions generated in real time	Environmental Toxicology/Pharmacology	Thurs, Nov 17	062
Olawale Ajuwon Federal University Oye-Ekiti, Nigeria	Fermented Rooibos Tea Ameliorates Sodium Fluoride-Induced Cardio-renal Injury, Oxidative Stress and Inflammation via Suppression of NF- $\kappa\beta$ Signaling Pathway in Wistar rats	Environmental Toxicology/Pharmacology	Thurs, Nov 17	063
May Al-Maghrebi Kuwait University	NOX-activated NLRP3 Inflammasome Pathway Triggers Pyroptosis During Testicular Ischemia Reperfusion Injury	Inflammation and Immunity	Thurs, Nov 17	022
Rogério Aleixo Silva University of São Paulo - Brazil	LsfA, a 1-Cys Peroxiredoxin involved with Pseudomonas aeruginosa virulence: Structure, biochemical activity, and its influence in inflammation/resolution	Chemical Biology	Sat, Nov 19	207
Amanda Allender Villanova University	Building a Better Nrf2 Activator: Targeting Keap1 Cysteine 151 with Electrophiles	Chemical Biology	Sat, Nov 19	208
Ricardo Alva Brock University	Oxygen tension differentially affects gene expression in four cancer cell lines	Cancer	Sat, Nov 19	165
Diana Averill-Bates Université du Québec à Montréal	The role of ROS and Nrf2 in the induction of a hormetic, adaptive stress response during mild heat shock at 40°C	Cancer	Sat, Nov 19	166
Samrajni Banerjee University of Liverpool	Role of reactive oxygen species in declining mitochondrial structure and distribution in musculoskeletal tissues with ageing	Aging	Thurs, Nov 17	001
<b>Meltem Barlin</b> Washington University Medical School	Nox4 regulates cancer cell plasticity influencing autophagy state of cells.	Cancer	Sat, Nov 19	167
<b>Silvina Bartesaghi</b> Universidad de la Republica - Uruguay	Peroxynitrite-Mediated Oxidative Modifications of Nerve Growth Factor (NGF)	Chemical Biology	Sat, Nov 19	209
Khaliunaa Bayanbold The University of Iowa	Ferritin Overexpression Limits Intracellular Labile Iron and Induces Replication Stress in Lung Cancer Cells	Cancer	Sat, Nov 19	168
Margaret Bell University of Alabama at Birmingham	Revealing the relationships in gene expression and behavior in mice exposed to systemic modulation of the O-GlcNAcylation pathway	Metabolism/Bioenergetics	Fri, Nov 18	124
Gloria Benavides University of Alabama at Birmingham	Evaluation of mitochondrial function in human brain tissue in conjunction with oxidative stress markers	Metabolism/Bioenergetics	Fri, Nov 18	125



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Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
Louise Bennett Monash University	Anxiolytic Effects of Essential Oils May Involve Redox Biology in the Brain	Chemical Biology	Sat, Nov 19	210
Rachel Bentley Queen's University	The Role of Mitochondrial Subunits in the Opposing Oxygen Responses of the Ductus Arteriosus and Pulmonary Arteries	Cardiovascular and Pulmonary	Fri, Nov 18	077
<b>Brandon Berry</b> University of Washington	Lifespan Extension from Dietary Restriction is Mediated by Mitochondrial Membrane Potential in C. elegans	Aging	Thurs, Nov 17	002
Khushwant Singh Bhullar University of Alberta - Canada	GPR30 agonist peptide as ACE2 activator: A novel finding	Cardiovascular and Pulmonary	Fri, Nov 18	078
<b>Rebecca Bingham</b> Oregon State University	Site-Specific Tyrosine Nitration of Heat Shock Protein 90 Plays Distinct Roles in Glioblastoma Multiforme	Cancer	Sat, Nov 19	169
Andrew Bischer University of Rochester Medical Center	Internal ROS Generation Drives Foraging Decisions in C. elegans	Chemical Biology	Sat, Nov 19	211
Bethany Bogan Emory University	The Role of Fatty Acid Synthase in Atherosclerosis	Cardiovascular and Pulmonary	Fri, Nov 18	079
<b>Jacob Brown</b> Oklahoma Medical Research Foundation	The Role of Oxylipins in Muscle Atrophy	Aging	Thurs, Nov 17	003
Lun Cai Medical College of Georgia	Heme regulation in BACH1 knockout mice with sepsis	Metabolism/Bioenergetics	Fri, Nov 18	126
Nicolás Campolo Universidad de la República	Mechanisms of Oxidative Inactivation of Human Glutamine Synthetase	Chemical Biology	Sat, Nov 19	212
David Caraballo Florida International University	Systemic effect of NF-kB-mediated Signaling Pathway Induced by Mechanosensitive Ca2+-Channel TRPV4 in Pulmonary Endothelial Cells	Cardiovascular and Pulmonary	Fri, Nov 18	080
<b>Ana Clara Casella</b> Facultad de Medicina, Uruguay	Impact of Oxygen Concentration on the Oxidative Cytotoxic Response of Macrophages	Inflammation and Immunity	Thurs, Nov 17	023
<b>Giselle Cerchiaro</b> Federal University of ABC - UFABC	Effects of hydroxytyrosol in an induced Alzheimer's disease animal model: behavioral and metallomics profile	Neurodegenerative Disease	Thurs, Nov 17	042



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Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
Luksana Chaiswing University of Kentucky	Sensitization of Resistant Prostate Cancers to Radiation Through Mitochondrial Translation Targeting Coupled With Overloading Mitochondrial ROS	Cancer	Sat, Nov 19	170
<b>Rebecca Charles</b> Queen Mary University of London - UK	A novel inhibitor of soluble Epoxide Hydrolase that adducts C521 is cardioprotective	Cardiovascular and Pulmonary	Fri, Nov 18	081
Tilottama Chatterjee Oregon State University	Subpopulations of Nitrated Hsp90 Exhibit Distinct Patterns of Structure, Stability and Pathological Functions	Chemical Biology	Sat, Nov 19	213
Andreia Chignalia University of Arizona	Novel mechanisms underlying heart failure induced by pressure overload	Cardiovascular and Pulmonary	Fri, Nov 18	082
Marcie Cole University of Louisville	A Novel, Nitric Oxide-Releasing Elastomeric Chain for Antimicrobial Action	Chemical Biology	Sat, Nov 19	214
Daniel Colon Hidalgo University of Colorado	Loss of vascular EC-SOD leads to worse RV hypertrophy and metabolic alterations in PH	Cardiovascular and Pulmonary	Fri, Nov 18	083
<b>Robbie Cross</b> University of Alabama at Birmingham	Pilot Study on the Effect of Stress on Gut Microbial Metabolism in Black and White Undergraduate Students	Metabolism/Bioenergetics	Fri, Nov 18	127
Litiele Cruz University of São Paulo - Brazil	Laminin is the main brominated protein by hypobromous acid and Peroxidasin in the extracellular matrix	Chemical Biology	Sat, Nov 19	215
<b>Tiphany De Bessa</b> Heart Institute, University of Sao Paulo School of Medicine	Protein Disulfide Isomerase-A1 (PDIA1) Remodels Endoplasmic Reticulum -Plasma Membrane Contact Sites: Possible Role of Nogo-B Protein Regulation.	Cancer	Sat, Nov 19	172
Adely De la Pena San Sebastian University	Galectin-8 induces mitochondrial fission and redistribution to the perinuclear zone associated with epithelial–mesenchymal transition in MDCK cells	Chemical Biology	Sat, Nov 19	216
Kaio de Souza Gomes Federal University of ABC - UFABC	Synergistic Effects Between Neolignans Derivatives and Copper II Improves In Vitro Anti-Breast Cancer Activity	Chemical Biology	Sat, Nov 19	217
Veronica Demicheli Universidad de la Repúbica, Uruguay	Lysine acetylation in human MnSOD may protect from tyrosine-34 nitration and enzyme inactivation	Chemical Biology	Sat, Nov 19	218
<b>Evan DeVallance</b> West Virginia University	Maternal Nano-Titanium Dioxide Inhalation Increases Xanthine Oxidoreductase Activity in the Dam and Offspring via a PKC- and G9a-Mediated Process	Cardiovascular and Pulmonary	Fri, Nov 18	084



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Fabio Di Domenico Sapienza University of Rome	The harmful relationship between redox homeostasis and protein quality control systems in Alzheimer-like pathology	Neurodegenerative Disease	Thurs, Nov 17	044
Sergey Dikalov Vanderbilt University Medical Center	Imbalance Between GCN5L1 Acetyltransferase and Sirt3 Deacetylase Promotes CypD Hyperacetylation, Mitochondrial Oxidative Stress, Endothelial Dysfunction and Hypertension	Cardiovascular and Pulmonary	Fri, Nov 18	085
Eftekhar Eftekharpour University of Manitoba	Developmental Depletion of Neuronal Thioredoxin-1 is associated with expression of neurodegenerative markers and progressive Neurological deficits resulting in Sudden Epileptic Death.	Neurodegenerative Disease	Thurs, Nov 17	056
Hanan Elajaili University of Colorado	Use of Electron Paramagnetic Resonance (EPR) in vivo to evaluate redox status in a preclinical model of acute lung injury	Cardiovascular and Pulmonary	Fri, Nov 18	088
Amal Elhaw University of Pittsburgh	Orchestrated expression of the atypical Rho-GTPase, RHOV, in response to matrix detachment of ovarian cancer cells	Cancer	Sat, Nov 19	174
Nuran Ercal Missouri S&T	Investigation of novel nanoplatforms for delivery of an anticataract drug in whole lens cultures	Chemical Biology	Sat, Nov 19	220
Damián Estrada Universidad de la República	Innate immune modulation by phosphatidylserine exposure in T. cruzi during the acute phase of Chagas disease.	Inflammation and Immunity	Thurs, Nov 17	025
Jolyn Fernandes University of Oklahoma Health Sciences Center	Metabolomic Analysis of Hyperoxia induced Lung Injury and Attenuation by Aurothioglucose	Cardiovascular and Pulmonary	Fri, Nov 18	089
Francesca Ferrara University of the Studies of Ferrara	Ubiquitination as a key regulatory mechanism for O3-induced cutaneous redox Inflammasome activation	Inflammation and Immunity	Thurs, Nov 17	026
Chelsey Fontenot Louisiana State University	Nitric Oxide reversibly inhibits the redox transition of the [2Fe-2S] cluster in the mitochondrial outer membrane protein mitoNEET	Metabolism/Bioenergetics	Fri, Nov 18	128
<b>Asvi Arora Francois</b> Queen Mary, University of London	Identification of Cardiac Proteins that Sense Oxidants by Intra- disulfide Formation	Cardiovascular and Pulmonary	Fri, Nov 18	090
Norma Frizzell University of South Carolina	Impaired Metabolic and Inflammatory Responses in a Murine Model of Leigh Syndrome	Inflammation and Immunity	Thurs, Nov 17	027
<b>Sarah Fu</b> University of Alabama at Birmingham	Elevated protein O-GlcNAcylation is associated with change of glucose metabolism enzyme levels and their link to nNOS in Alzheimer's disease postmortem brains	Neurodegenerative Disease	Thurs, Nov 17	045



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Felipe Fuzita University of São Paulo - Brazil	A simple and direct approach for cysteine-based redox proteomics by differential isobaric labeling validated in human and rat aortic smooth muscle cells	Cardiovascular and Pulmonary	Fri, Nov 18	091
Abhrajit Ganguly University of Oklahoma Health Sciences Center	Hyperoxic Injury in Human Primary Airway Epithelial Cell Is Associated with Changes in Hydrogen Sulfide Metabolism	Cardiovascular and Pulmonary	Fri, Nov 18	092
Scott Gillham Liverpool John Moores University	The effects of cannabidiol on ROS signalling and cytokine/chemokine production in mature C2C12 myotubes	Inflammation and Immunity	Thurs, Nov 17	029
Andrew Giromini West Virginia University	Does hepatocyte-specific knockout of xanthine dehydrogenase mediated prevention of hyperuricemia alter metabolic outcomes allied to obesity?	Metabolism/Bioenergetics	Fri, Nov 18	130
Lucia Gonzalez Perilli Universidad de la Republica - Uruguay	Lipoxygenase-dependent lipid mediators formation in M1 and M2 macrophages	Inflammation and Immunity	Thurs, Nov 17	030
Anna Guiotto University of Ferrara	Involvement Of Ferroptosis In Rett Syndrome	Neurodegenerative Disease	Thurs, Nov 17	046
Thamir Hamoh University of Groningen	FNDs for the selective labelling and localized free radical measurements in sperm cells	Aging	Thurs, Nov 17	005
Xiaojia He Emory University	Pulmonary inflammation and fibrotic signaling in mouse lungs chronically exposed to low-dose vanadium pentoxide	Environmental Toxicology/Pharmacology	Thurs, Nov 17	064
Robert Heaton the University of Liverpool	Regulation of Peroxiredoxin Oxidation for the Maintenance of Muscle Mass and Function in Ageing	Aging	Thurs, Nov 17	006
Katiana Hebbert Kansas City University	Targeting lipolysis in pancreatic cancer microenvironment induces lipid peroxidation and suppresses cancer cells growth.	Cancer	Sat, Nov 19	175
Jason Held Washington University	GSTP1 silencing in breast cancer is a redox vulnerability that redirects the flux of cysteine oxidation in the proteome	Cancer	Sat, Nov 19	176
<b>David Heppner</b> The State University of New York at Buffalo	Architecture of the NADPH oxidase family of enzymes	Chemical Biology	Sat, Nov 19	222
Victor Hernandez Bahamondes Universidad de Atacama	Molecular Oxidation on Day and Night Shift High Altitude Workers.	Metabolism/Bioenergetics	Fri, Nov 18	132



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Alexandria Hernandez-Nichols University of Alabama at Birmingham	Red Blood Cells Exposed To Redox Mediators Have Increased High Mannose N-Glycans Present On Their Surface	Inflammation and Immunity	Thurs, Nov 17	031
Madeline Hines The University of Iowa	Preventing Lipid Peroxidation Stimulates Loss of Glutathione Reduction Potential Coincident with Increased Mitochondrial Staining in Articular Chondrocytes	Aging	Thurs, Nov 17	007
<b>Aki Hirayama</b> Tsukuba University of Technology	Clinical Significance of Serum Multiple Radical Scavenging Activity Assay (MULTIS) in a Diagnostic Screening of Autism Spectrum Disorders	Neurodegenerative Disease	Thurs, Nov 17	047
Annika Höhn German Institute of Human Nutrition	Islet function during aging and senescence	Aging	Thurs, Nov 17	008
Claire Holden Emory University	The Role of Bile Acid Signaling in Differentiation of Vascular Smooth Muscle Cells	Cardiovascular and Pulmonary	Fri, Nov 18	094
Blanka Holendova Institute of Physiology, Czech Academy of Sciences	NOX4 activity in mouse ?-cells is important for the development of inflammation upon chronic overnutrition	Metabolism/Bioenergetics	Fri, Nov 18	133
Robert Hondal University of Vermont	A Szeto-Schiller Peptide Containing 2-thioHistidine Has Enhanced Antioxidant Activity in vitro	Chemical Biology	Sat, Nov 19	223
Fuminori Hyodo Gifu University	Comparison of redox alteration and cancer metabolism after radiation treatment of tumor using in vivo DNP-MRI and dissolution DNP-MRS	Cancer	Sat, Nov 19	177
Hiroshi Ichikawa Doshisha University	Induction of oxidative stress tolerance by ultrasound irradiation extends the lifespan of C. elegans	Aging	Thurs, Nov 17	009
Alex Inague University of São Paulo - Brazil	7-Dehydrocholesterol protects membrane phospholipids from oxidation	Chemical Biology	Sat, Nov 19	224
Hiromu Ito National Institutes for Quantum Science and Technology	Adjunctive effects with continual X-ray irradiation for effective photodynamic therapy	Chemical Biology	Sat, Nov 19	225
Martin Jaburek Institute of Physiology, Czech Academy of Sciences	Mitochondrial Redox Signaling Promotes GPR40 Agonist- Dependent Amplification of Insulin Secretion at Low Substimulating Glucose	Metabolism/Bioenergetics	Fri, Nov 18	134
Zachery Jarrell Emory University	Dietary Phytochelatins and Their Impact on Selenium Reuptake	Metabolism/Bioenergetics	Fri, Nov 18	135



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<b>Petr Jezek</b> Institute of Physiology of the Czech Academy of Sciences, Prague	Mitochondrial Redox Signaling during Fatty Acid-Stimulated Insulin Secretion	Metabolism/Bioenergetics	Fri, Nov 18	136
Chang Jiang H. Lee Moffitt Cancer Center and Research Institute	Targeting Glutathione Reductase in KEAP1/NRF2 Mutant NSCLC	Cancer	Sat, Nov 19	179
Samantha Jones University of Liverpool	MicroAge Mission: Human Muscle Constructs for Studies of Redox- Related Cytokine and Chemokine Release in Microgravity	Aging	Thurs, Nov 17	010
Tetsuro Kamiya Gifu Pharmaceutical University	Potential Role of Exosomes and N-glycosylation in the Extracellular Secretion and Function of LOX Family Proteins in Human Breast Cancer MDA-MB-231 Cells	Cancer	Sat, Nov 19	180
Nana Katsuta Tokai University	The evaluation of S-(2-succinyl)cysteine, a marker for mitochondrial dysfunction, in chronic kidney disease	Metabolism/Bioenergetics	Fri, Nov 18	138
Oleh Khalimonchuk University of Nebraska-Lincoln	An ALS-linked mutation in the metallopeptidase Oma1 impinges on its activity and impairs mitochondrial fidelity	Metabolism/Bioenergetics	Fri, Nov 18	139
Vitaly Koltover Federal Research Center of Problems of Chemical Physics and	Reliability of Electron-Transport Mitochondrial Membranes and the Oxygen Anion-Radical Timer of Aging	Aging	Thurs, Nov 17	012
Sivareddy Kotla The University Of Texas MD Anderson Cancer Center	An ERK5-NRF2 axis mediates senescence-associated stemness and atherosclerosis	Cardiovascular and Pulmonary	Fri, Nov 18	095
Adolf Koudelka University of Pittsburgh	Arachidonic acid-derived lipoxin A4 yields an electrophilic 15-oxo metabolite that induces anti-inflammatory responses independent of FPR2 receptor signaling	Inflammation and Immunity	Thurs, Nov 17	032
Alicia Kowaltowski Universidade de São Paulo	Adiponectin Promotes Glucose-Sensitive Insulin Secretion and Prevents Beta-Cell Damage by Obesity	Metabolism/Bioenergetics	Fri, Nov 18	140
Jennifer Krznarich University of Minnesota Medical School	The Glutamate-Cystine Antiporter xCT is Repressed by the Glucocorticoid Receptor	Environmental Toxicology/Pharmacology	Thurs, Nov 17	065
KENSHIN KUROKAWA Doshisha University	UVB induces intracellular ROS production in HaCaT keratinocytes	Aging	Thurs, Nov 17	013
Felix Lamontagne CRCHUM - Université de Montréal - Canada	DUOX2 regulates secreted factors in virus-infected respiratory epithelial cells that contribute to neutrophil attraction and activation	Inflammation and Immunity	Thurs, Nov 17	033



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Jerome Lapointe Agriculture and Agri-Food Canada	Feeding high levels of zinc oxide to post-weaned piglets perturbs mitochondrial energy production, antioxidant defences and copper metabolism.	Metabolism/Bioenergetics	Fri, Nov 18	141
<b>Alexandra Latini</b> Universidade Federal de Santa Catarina	Tetrahydrobiopterin metabolism is impaired in chemically-induced, idiopathic and genetic mitochondrial deficiencies	Metabolism/Bioenergetics	Fri, Nov 18	142
Caitlin Lewis University of Colorado	Extracellular Superoxide Dismutase Affects Interstitial Macrophage Accumulation and Reprogramming During Pulmonary Hypertension	Cardiovascular and Pulmonary	Fri, Nov 18	097
Haojian Li National Institutes of Health	CRISPR Metabolic Screen Identifies ATM and KEAP1 as Targetable Genetic Vulnerabilities in Solid Tumors	Cancer	Sat, Nov 19	182
Linhui Li University of California, Davis	A New Paradigm in Inositol and Pulmonary Fibrogensis	Metabolism/Bioenergetics	Fri, Nov 18	143
Suryamin Liman The University of Iowa	Targeting Hemoproteins with Carbon Monoxide Prevents Hyperoxia-induced Cartilage Injury	Chemical Biology	Sat, Nov 19	227
<b>Taiming Liu</b> Loma Linda University	Nitrite reverses nitroglycerin tolerance-Role of a nitrodilator- activated intracellular NO store (NANOS) in vascular wall	Cardiovascular and Pulmonary	Fri, Nov 18	098
<b>Taiming Liu</b> Loma Linda University	Artifacts introduced by sample handling in chemiluminescence assays of NO species	Chemical Biology	Sat, Nov 19	228
Irshad Lone Govt. Degree College Handwara (affliated to the University of Kashmir,	Chemopreventive effect of dietary aloin on diethylnitrosamine (DEN)/ferric nitrolotriacetate (Fe-NTA) mediated hepatic carcinogenesis - delineation of its implicated mechanisms	Cancer	Sat, Nov 19	184
Lucia Lopes University of São Paulo	Protein disulfide isomerase regulation of Nox1 contributes to vascular dysfunction in hypertension	Cardiovascular and Pulmonary	Fri, Nov 18	099
<b>Camilo Lopez</b> Pontificia Universidad Católica de Chile	Role of Amino Acid Oxidation in the Peroxyl Radical Mediated Inactivation of Glucose-6-Phosphate Dehydrogenase and 6- Phosphogluconate Dehydrogenase: Two Key Enzymes of the	Chemical Biology	Sat, Nov 19	230
<b>Camilo Lopez</b> Pontificia Universidad Católica de Chile	Functional Changes of Glucose-6-Phosphate Dehydrogenase Induced by Peroxyl Radicals and Peroxynitrite: Oxidation of Specific Amino Acids and Relevance of Protein Unfolding	Chemical Biology	Sat, Nov 19	231
Yongke Lu Marshall University	Peroxisomes contribute to the development of alcohol-related liver disease	Environmental Toxicology/Pharmacology	Thurs, Nov 17	067



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<b>Qing Lu</b> Center for Translational Science, Florida International University	The anti-apoptotic protein, Survivin induces a shift in endothelial cell in carbon metabolism through a mitochondrial-ROS-dependent increase in HIF-1a signaling	Cardiovascular and Pulmonary	Fri, Nov 18	100
<b>Mijiti Maihemuti</b> Indiana University	Cysteine 65 in Ref-1 is essential for Ref-1 redox function and transcriptional regulation in human PDAC cells	Cancer	Sat, Nov 19	185
Santiago Mansilla Universidad de la República - Uruguay	Characterization of human mitochondrial aconitase and its interaction with frataxin	Metabolism/Bioenergetics	Fri, Nov 18	145
<b>Syed Masood</b> University of North Carolina at Chapel Hill	Detecting Protein Sulfenylation in Human Airway Epithelial Cells (HAEC) Exposed to an Environmental Peroxides	Environmental Toxicology/Pharmacology	Thurs, Nov 17	069
Raffaella Mastrocola University of Turin, Italy	Anti-inflammatory and anti-glycative properties of zinc-enriched spirulina in diet-induced obese/diabetic mice	Metabolism/Bioenergetics	Fri, Nov 18	146
Beatriz Mateo-Victoriano University of Miami	Cellular 8-oxodGTPase activity as a novel target in KRAS-driven pancreatic cancer	Cancer	Sat, Nov 19	186
Miranda Mathieson Queens University	Developing a Novel Approach to Assess Mitochondrial Bioenergetics in the Murine Optic Nerve	Metabolism/Bioenergetics	Fri, Nov 18	147
Kohei Matsuda Doshisha University	Unknown modification of DJ-1 is increased in red blood cells from Unmedicated patients with Parkinson's disease	Neurodegenerative Disease	Thurs, Nov 17	048
<b>Ken-ichiro Matsumoto</b> National Institutes for Quantum Science and Technology	Evaluation of redox responses of mouse colorectum tissue after X- ray irradiation	Chemical Biology	Sat, Nov 19	232
Hideo Matsuzaki University of Fukui	Linoleic acid and linoleate diols in neonatal cord blood influence birth weight	Metabolism/Bioenergetics	Fri, Nov 18	148
Joshua A. McDowell University of Nebraska Medical Center	The role of adipose tissue signaling in response to therapeutic radiation exposure	Cancer	Sat, Nov 19	187
<b>Marc Mendonca</b> Indiana University School of Medicine, IUPUI	Radiation-induced Pancreatic Cancer Cell Killing by Simultaneous Inhibition of NF-kB and Warburg Metabolism	Cancer	Sat, Nov 19	188
Elena Menshchikova Federal Research Center for Basic and Translational Medicine	Protective Effect Of Novel Phenolic Antioxidant TS-13 in Mouse Model of Parkinson's Disease	Neurodegenerative Disease	Thurs, Nov 17	049



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<b>Elena Menshchikova</b> Federal Research Center for Basic and Translational Medicine	Antiproliferative Effect of Novel Phenolic Antioxidant TS-13 in vitro	Chemical Biology	Sat, Nov 19	234
Ginger Milne Vanderbilt University Medical Center	A Bidirectional and Phase-Dependent Effect of Oxidative Stress on Colorectal Cancer: First Evidence in Humans	Cancer	Sat, Nov 19	190
Edwin Miranda University of Utah	Muscle GLO1 is Attenuated with Obesity and Regulated by SIRT2 and NAMPT via NAD+	Metabolism/Bioenergetics	Fri, Nov 18	149
Edwin Miranda University of Utah	Exploration of the Proteomic and Redox Consequences of NAMPT Inhibition or Knock Down in Human Immortalized Skeletal Muscle Cells	Aging	Thurs, Nov 17	014
Matias Moller Universidad de la Republica	Hydrogen peroxide diffusion across human red blood cell membranes is not facilitated by aquaporins	Chemical Biology	Sat, Nov 19	235
Daniel Moreira University of Brasilia	Redox Imbalance and Oxidative Eustress during Larval-Pupal Transition in a Holometabolous Insect	Chemical Biology	Sat, Nov 19	236
Edward Moreira Bahnson University of North Carolina at Chapel Hill	Selective Delivery of Antioxidant Response Activating nanoParticles (ARAPas) Reduces Atherosclerotic Burden in LDL KO Mice	Cardiovascular and Pulmonary	Fri, Nov 18	102
Allison Moreno Samayoa University of Arizona	Sulfur Restriction and N-Acetyl Cysteine Induces Cell Death in Breast Cancer	Cancer	Sat, Nov 19	191
Katherine Morton Duke University	Utilizing S1QEL1.1 to determine the role of NADH:Ubiquinone oxidoreductase derived superoxide in dopaminergic neurodegeneration	Neurodegenerative Disease	Thurs, Nov 17	050
<b>Annika Mueller-Eigner</b> Research Institute for Farm Animal Biology (FBN)	Optogenetic Increase in Mitochondrial Protonmotive Force Causes Increased Lifespan in C. elegans	Aging	Thurs, Nov 17	015
<b>Ryoji Nagai</b> Tokai University	Detection of several AGEs for evaluation of oxidative stress and metabolic disorders in vivo	Metabolism/Bioenergetics	Fri, Nov 18	150
<b>Ikuo Nakanishi</b> National Institutes for Quantum Science and Technology	pH Effect on the Kinetic Isotope Effect in the Hydrogen Transfer from Trolox to Water-Solubilized 2,2-Diphenyl-1-picrylhydrazyl Radical in Phosphate Buffer Solutions	Chemical Biology	Sat, Nov 19	237
Thi-Tina Nguyen University of Colorado Anschutz Medical Campus	The Effect of SOD Mimetic Treatment on Interstitial Macrophage Accumulation in Chronic Hypoxic Pulmonary Hypertension	Cardiovascular and Pulmonary	Fri, Nov 18	103



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<b>Kyle Nguyen</b> Oregon State University	Nitrated Hsp90 Supports Glioblastoma Multiforme Cell Survival by Maintaining P2X7 Receptor Activation	Cancer	Sat, Nov 19	193
Marina Nogueira Vanderbilt University Medical Center	Interplay between lipid peroxidation and miRNA profiles in women	Chemical Biology	Sat, Nov 19	238
<b>Rebecca Oberley-Deegan</b> University of Nebraska Medical Center	Redox Metabolism in the context of Radiation Damage in Fibroblast and Adipocytes	Cancer	Sat, Nov 19	194
John Onukwufor University of Rochester	Ferroptosis induced mitochondrial dysfunction in Alzheimer's disease-like phenotype in C. elegans	Neurodegenerative Disease	Thurs, Nov 17	052
John Onukwufor University of Rochester	Iron exacerbates site-specific amyloid beta thermal sensitivity in C. elegans	Neurodegenerative Disease	Thurs, Nov 17	053
Xiaosen Ouyang University of Alabama at Birmingham	Cardiomyocyte ZKSCAN3 regulates cardiac adaption to pressure- overload induced hypertrophy	Cardiovascular and Pulmonary	Fri, Nov 18	104
Xiaosen Ouyang University of Alabama at Birmingham	Role of ZKSCAN3 and redox signaling in bacterial lung infection	Cardiovascular and Pulmonary	Fri, Nov 18	105
Andrew Paek The University of Arizona	Activation of p53 and FOXO Transcription Tactors in Response to Oxidative Stress Occurs in Distinct Temporal Phases	Cancer	Sat, Nov 19	195
<b>Antonio Marcus Paes</b> Federal University of Maranhão - Brazil	Resistance Training Reverts Skeletal Muscle Oxidative and Endoplasmic Reticulum Stresses Induced by Early Dietary Exposure to Added Sugars.	Metabolism/Bioenergetics	Fri, Nov 18	152
Arianna Pasqui University of Siena	Mutations Specific Redox Regulation Pathway In Rett Syndrome By The Use Of Transcriptomics And Proteomics Approaches	Neurodegenerative Disease	Thurs, Nov 17	054
Alessandra Pecorelli North Carolina State University	Loss of Scavenger Receptor B1 (SR-B1) in Brain of a Rett Syndrome Mouse Model	Metabolism/Bioenergetics	Fri, Nov 18	153
Edward Pennington Oak Ridge Science Institute for Science and Education	Real Time Adaptations of Human Airway Epithelial Cells Exposed to the Environmental Peroxide Isoprene Hydroxy Hydroperoxide	Environmental Toxicology/Pharmacology	Thurs, Nov 17	070
Shazib Pervaiz National University of Singapore	mTORC2 mediated ROS-induced Activation of Akt Selectively Targets Mutant KRAS Addicted Cancers	Cancer	Sat, Nov 19	196



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Le Gia Cat Pham Albany Medical College	Investigating the role of cytoglobin in regulating fibroblast function during vascular remodeling	Cardiovascular and Pulmonary	Fri, Nov 18	106
Claudia Pizarro-Rosas Universidad de Atacama	The Use of Blueberry Extract to Prevent Oxidative Damage Produced by Acute Mountain Disease in Workers at High Geographical Altitude	Aging	Thurs, Nov 17	016
Marissa Pokharel Florida International University	NAMPT induces Mitochondrial and Barrier Dysfunction in Pulmonary Endothelial Cells	Cardiovascular and Pulmonary	Fri, Nov 18	107
<b>Manuela Pose</b> Universidad de la Republica - Uruguay	Selective Hydrogen Sulfide Fluorescent Detection in Biochemical Systems though Excimer Formation	Chemical Biology	Sat, Nov 19	240
Pavla Pruchova Institute of Physiology Czech Academy of Sciences	Redox-Sensitive Mitochondrial Phospholipase A2? Participates in Oxidant-Stimulated and Norepinephrine-Stimulated UCP1- Dependent Thermogenesis	Metabolism/Bioenergetics	Fri, Nov 18	154
Casey Pulliam The University of Iowa	Pharmacological Ascorbate (P-AscH-) Combined with SOD mimetic GC4711 Induces Radio-chemo-sensitization via Fe- and H2O2- dependent Mechanisms in Human Non-Small Cell Lung Cancer	Cancer	Sat, Nov 19	198
Raphael Queiroz Universidade Estadual do Sudoeste da Bahia	A novel diselenide attenuates the carrageenan-induced inflammation in mice by inhibiting neutrophil chemotaxis	Inflammation and Immunity	Thurs, Nov 17	035
Irfan Rahman University of Rochester	E-Cigarette Synthetic Cooling Agent WS-23 and Nicotine Aerosols Differentially Modulate ROS generation and Airway Epithelial Cell Toxicity Responses	Environmental Toxicology/Pharmacology	Thurs, Nov 17	071
Abinayaa Rajkumar University of Madras	Understanding The HDL Proteome Differences Between CVD And Non-CVD Prone Populations	Cardiovascular and Pulmonary	Fri, Nov 18	108
Dario Ramirez Laboratory of Experimental and Translational Medicine - National	The nitrone 5,5-dimethyl-1-pyrroline N-oxide improves adipogenesis and reduces insulin resistance in obese mice	Inflammation and Immunity	Thurs, Nov 17	024
Dario Ramirez Laboratory of Experimental and Translational Medicine - National	In silico analysis of nitrones with possible Nrf2 agonist activities	Inflammation and Immunity	Thurs, Nov 17	028
<b>Dario Ramirez</b> Laboratory of Experimental and Translational Medicine - National	Intracerebroventricular injection of aggregated beta-amyloid (1-42) modifies the daily temporal organization of cognitive performance and antioxidant enzymes in the temporal cortex of the rat	Neurodegenerative Disease	Thurs, Nov 17	051
Dario Ramirez Laboratory of Experimental and Translational Medicine - National	Marmesin and marmelosin interact with the heparan sulfatase-2 active site: Potential mechanism for the antitumor effect of phytochemicals from bael fruit	Cancer	Sat, Nov 19	200



# **POSTER PRESENTATIONS**

Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
Yadira Ramírez Rodríguez Instituto Potosino de Investigación Científica y Tecnológica A.C.	Vasoactive effects associated with calcium channel blockade through a pitaya juice concentrate (Stenocereus huastecorum): Identification of compounds bioactive.	Chemical Biology	Sat, Nov 19	242
Luiz Ramos University of São Paulo	Triplet carbonyls generated by peroxynitrite-treated Schiff base: a model study	Chemical Biology	Sat, Nov 19	243
Daniela Ramos Truzzi University of Sao Paulo	The influence of non-thiol biomolecules on dinitrosyl iron complex (DNIC) formation	Chemical Biology	Sat, Nov 19	244
Sherif Rashad Tohoku University	Codon usage and mRNA stability are translational determinants of cellular response to canonical ferroptosis inducers	Cancer	Sat, Nov 19	199
<b>Aníbal M. Reyes</b> Universidad de la Republica - Uruguay	Human peroxiredoxin 3 is rapidly oxidized and hyperoxidized by lipid hydroperoxides	Chemical Biology	Sat, Nov 19	245
Karina Ricart University of Alabama at Birmingham	Does the Oral microbiome modulate nitric oxide signaling and BPD risk in premature infants?	Cardiovascular and Pulmonary	Fri, Nov 18	109
Nathália Rocco Machado National Institutes of Health	Activation of Ca2+/Calmodulin Dependent Kinase II (CaMKII) by Oxidation	Chemical Biology	Sat, Nov 19	246
Yesica María Rodríguez Cortés Universidad Nacional Autónoma de México - Mexico	Silymarin improves post-cerebral ischemia survival and increases BDNF levels in obese mice	Inflammation and Immunity	Thurs, Nov 17	037
Melinda R Rydberg Oregon State University	Role of Nitrated Proteins in Triple Negative Breast Cancer Survival/Proliferation and Migration	Cancer	Sat, Nov 19	201
Katrin Schroeder Goethe University	NoxO1 and Erbin- a cooperation to control EGFR-signaling ?	Cancer	Sat, Nov 19	203
Lucia Seale University of Hawaii	Ferroptosis in the brown adipose tissue of mice lacking selenocysteine lyase	Metabolism/Bioenergetics	Fri, Nov 18	155
Madison Seman West Virginia University	Maternal Inhalation of Electronic Cigarette Vapor Increases XOR Activity in the Dam and Her Offspring	Cardiovascular and Pulmonary	Fri, Nov 18	111



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Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
Vlad Serbulea University of Virginia	Augmentation of Smooth Muscle Aerobic Glycolysis Rescues Atherosclerosis-associated Mortality in Mice	Metabolism/Bioenergetics	Fri, Nov 18	156
Abhishek Shastry Queen's University - Canada	Mitochondrial DNA-Dependent Changes in Lipid Flux and Oxidative Stress in Skeletal Muscle	Metabolism/Bioenergetics	Fri, Nov 18	157
Laura Sherlock University of Colorado	Neonatal selenium deficiency decreases selenoproteins in the lung and impairs pulmonary alveolar development	Cardiovascular and Pulmonary	Fri, Nov 18	112
Navaneeth Shibu University of Alabama at Birmingham	N-Acetyl Cysteine Administration Impairs EKG Signals in the Humanized Reductive Stress Mouse	Cardiovascular and Pulmonary	Fri, Nov 18	113
Mekhla Singhania The University of Iowa	Investigating the Role of Hydrogen Peroxide and Fe in Pharmacological Ascorbate induced Chemo-Radio-sensitization in Lung Cancer	Cancer	Sat, Nov 19	204
Matthew Ryan Smith Emory University	The Role of Aconitase Dysregulation in Group 3 Pulmonary Hypertension.	Cardiovascular and Pulmonary	Fri, Nov 18	114
<b>Ibukunoluwa Sodiya</b> Villanova University	Quantitating Nrf2-regulated cytoprotective proteins using an LC- MS/MS data-independent acquisition method	Chemical Biology	Sat, Nov 19	248
Ruthia Soh University of California Riverside	Hyperglycemia Induced Oxidative Stress Alters the FOXO/AMPK Pathway Which Leads to Loss of Pluripotency	Aging	Thurs, Nov 17	017
Pradoldej Sompol University of Kentucky	Oxidative stress-associated cerebrovascular pathology in Alzheimer's disease	Neurodegenerative Disease	Thurs, Nov 17	057
Caroline Amy Staunton University of Liverpool	Aquaporins: regulators of H2O2 transport and homeostasis in skeletal muscle	Aging	Thurs, Nov 17	018
<b>Hikari Sugawa</b> Tokai University	Elucidation Of The Pathway For CML Formation From Ribose	Chemical Biology	Sat, Nov 19	250
<b>Xutong Sun</b> Center for Translational Science and Department of Environmental Health	Mitochondrial redistribution of eNOS is regulated by CHIP mediated disruption of Dimerization	Cardiovascular and Pulmonary	Fri, Nov 18	115
Sini Sunny University of Alabama at Birmingham	Chronic Reductive Stress Modifies Ribosomal Proteins in Nrf2 Transgenic Mouse Hearts	Cardiovascular and Pulmonary	Fri, Nov 18	116



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Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
<b>lldiko Szanto</b> Geneva University Hospitals	The NADPH oxidase NOX4 and the transcription factor STAT6 as two key regulators of peripheral fat distribution in diet-induced obesity	Metabolism/Bioenergetics	Fri, Nov 18	158
Yuxiao Tang second military medical university	An iron-deficient diet prevents alcohol- or diethylnitrosamine- induced acute hepatotoxicity in mice by inhibiting ferroptosis	Environmental Toxicology/Pharmacology	Thurs, Nov 17	072
Priscilla Tang University of Pittsburgh	SIRT3 supports anchorage-independent survival of ovarian cancer cells by regulating mitochondrial redox signaling	Cancer	Sat, Nov 19	205
Andrew Tennyson Clemson University	A catalase mimic with unparalleled activity, stability, and selectivity	Chemical Biology	Sat, Nov 19	251
<b>Max Thorwald</b> University of Southern California	ApoE4 is associated with lower antioxidant levels and increased oxidative damage in human and mouse brain	Neurodegenerative Disease	Thurs, Nov 17	058
Changhai Tian University of Kentucky	Cardiac-derived extracellular vesicles contribute to sympathetic excitation by disrupting the central redox homeostasis in heart failure	Cardiovascular and Pulmonary	Fri, Nov 18	117
Antonella Tramutola Sapienza University of Rome	Intranasal Insulin Administration Reduces Oxidative Stress-Induced Damage And Improves Mitochondrial Bioenergetics In Alzheimer Disease	Neurodegenerative Disease	Thurs, Nov 17	059
Andres Trostchansky Facultad de Medicina, Universidad de la República	Molecular mechanism of Prostaglandin endoperoxide H synthase 2 (PGHS2) inhibition by Nitroarachidonic acid	Inflammation and Immunity	Thurs, Nov 17	038
Jose Trujillo Hernandez National Institutes of Health	Deciphering the mechanism for resistance to oxidative stress of a mouse lacking methionine sulfoxide reductases.	Chemical Biology	Sat, Nov 19	252
Jose Pablo Vazquez-Medina University of California, Berkeley	Peroxiredoxin 6 suppresses ferroptosis in lung endothelial cells	Cardiovascular and Pulmonary	Fri, Nov 18	118
Murugesan Velayutham West Virginia University	Systemic Redox Imbalance in COVID-19 Pathophysiology	Environmental Toxicology/Pharmacology	Thurs, Nov 17	073
Monica Vidal-Franco Oregon State University	Establishing Nitrated Hsp90 Cellular Interactome	Chemical Biology	Sat, Nov 19	253
Jazmine Virzi University of South Florida	Use of urinary DNA adductomics to dissect the substrates and pathways of DNA repair	Environmental Toxicology/Pharmacology	Thurs, Nov 17	074



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Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
<b>Peter Vitiello</b> University of Oklahoma Health Sciences Center	Decreased mitochondrial respiration in cardiac fibers isolated from a mouse model of Friedreich's ataxia	Cardiovascular and Pulmonary	Fri, Nov 18	120
Dario Vitturi University of Alabama at Birmingham	Redox Modulation by Tryptophan Metabolism: Role of Kynurenine- derived Electrophiles	Chemical Biology	Sat, Nov 19	255
Anezka Vodickova University of Rochester	Mitochondrial energy state impacts foraging behavior in C. elegans	Metabolism/Bioenergetics	Fri, Nov 18	160
<b>Daniela Weber</b> German Institute of Human Nutrition (DIfE) Potsdam-Rehbruecke	Evaluation of different carotenoid assessment methods in a human study	Aging	Thurs, Nov 17	019
<b>Mia Wilkinson</b> Queen's University / Kingston - Canada	Nuclear-Mitochondrial DNA Mismatch Induces Tissue-Specific Gene Expression Profiles: Transcriptomic Analysis of Subcutaneous and Visceral White Adipose Tissues in Mice	Metabolism/Bioenergetics	Fri, Nov 18	162
Xena Williams West Virginia University	Xanthine Oxidase Contributes to Diminished Vascular Function Mediated by Inhalation of Nano-TiO2	Chemical Biology	Sat, Nov 19	256
<b>Yakov Woldman</b> Valdosta State University	Quantitation of Reactive Species in Cellular Systems	Chemical Biology	Sat, Nov 19	257
James Woodcock Medical College of Wisconsin	Significance of alternative reductases in the biosythesis of tetrathydrobiopterin revealed by studies knocking out sepiaptern reductase in human cells	Neurodegenerative Disease	Thurs, Nov 17	060
Jialin Wu Florida International University	S1PR3 Plays a Key Role in Ventilator-induced Lung Injury: Promoter Activation, Barrier Disruption, and Therapeutic Evaluation	Cardiovascular and Pulmonary	Fri, Nov 18	121
Dianna Xing University of Alabama at Birmingham	Mitochondrial Metabolism Protects Against Rotenone-Induced Complex I Inhibition	Metabolism/Bioenergetics	Fri, Nov 18	163
Libin Xu University of Washington	Differential contributions of distinct free radical peroxidation mechanisms to the induction of ferroptosis	Chemical Biology	Sat, Nov 19	258
Jongtae Yang Thermo Fisher Scientific	MitoSOX Green for Visualizing Superoxide in Mitochondria	Chemical Biology	Sat, Nov 19	259
Hongwei Yao Brown University	Fatty acid synthesis during postnatal lung development and injury in mice	Cardiovascular and Pulmonary	Fri, Nov 18	122



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Presenting Author	Abstract Title	Category	Presentation Day	Poster No. Travel Award
Manivannan Yegambaram Florida International University	Mitochondrial Hyperfusion Disrupts Carbohydrate Metabolism In Lung Endothelial Cells By Modifying The Activities Of Electron Transport Chain Complexes I And III	Metabolism/Bioenergetics	Fri, Nov 18	164
Mohamed Yousef The American University in Cairo	Selective inhibition of GSK3? mediates an Nrf2-independent anti- inflammatory microglial response	Inflammation and Immunity	Thurs, Nov 17	039
Hua Zhong University of Oklahoma Health Sciences Center	Meconium from Neonates as a Source of In-Utero Metal Exposures	Environmental Toxicology/Pharmacology	Thurs, Nov 17	075
<b>Yuan Zhou</b> Tohoku University	Neuronal sensitivity to oxidative stress is epitranscriptionally programmed	Neurodegenerative Disease	Thurs, Nov 17	061
Ester Zito Mario Negri Institute of pharmacological science	ERO1 alpha deficiency impairs angiogenesis by increasing N- glycosylation of a proangiogenic VEGFA	Cancer	Sat, Nov 19	206
Nicole zur Nieden University of California Riverside	The Oxidative Stress Protector FOXO Governs Skeletal Deformities and Osteogenic Differentiation in Response to Prenatal Snus Exposure	Environmental Toxicology/Pharmacology	Thurs, Nov 17	076