

## SfRBM 2018 • Oral Presentation Schedule • Chicago

DAY 1: THURSDAY, NOVEMBER 15, 2018



### SESSION 1 TITLE: Cardiovascular and Pulmonary Diseases I

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Yvonne Janssen-Heininger	University of Vermont	Control of protein cysteine oxidation in lung fibrosis via a coordinated network of protein disulfide oxidase
2:50 pm - 3:10 pm	Hongwei Yao	Brown University	Role of fatty acid oxidation in hyperoxia-induced endothelial-to-mesenchymal transition in lung endothelium
3:10 pm - 3:30 pm	Evgeny Zemskov	The University of Arizona	The Tyrosine Nitration of PKG-1 $\alpha$ Inhibits Its Regulatory Function in the Pulmonary Endothelium
3:30 pm - 3:50 pm	Cassandra Moshfegh	University of Nebraska Medical Center	Psychological Stress-Mediated Hypertension is Regulated via Redox-Signaling in T-lymphocytes
3:50 pm - 4:10 pm	Ligia Kiyuna	University of Sao Paulo - Brazil	4-HNE-Mediated Post-Translational Modulation of DICER in Heart Failure

### SESSION 2 TITLE: Chemical Biology

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Patrick Badger	Brigham Young University	Independent Regulation of Thioredoxin-1 and Glutathione in UVB-Irradiated Keratinocytes (HaCaT)
2:50 pm - 3:10 pm	Nan Shu	University of Copenhagen - Denmark	Kinetics and biological consequences of quinone-induced protein adduction
3:10 pm - 3:30 pm	Matias Vazquez	National University of Cordoba - Argentina	CD36 a new cellular target of electrophilic Nitro-Fatty Acids.
3:30 pm - 3:50 pm	Anibal Reyes	Universidad de la República - Uruguay	Interactions of hydrogen sulfide with AhpE from Mycobacterium tuberculosis: formation and reaction with
3:50 pm - 4:10 pm	Jun-Feng Wang	University of Manitoba - Canada	Thioredoxin-interacting protein, a potential pharmacological target for the treatment of depression

### SESSION 3 TITLE: Cancer and Metabolic Reprogramming

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Joshua Lewis	Georgia Institute of Technology	Genome-Scale Metabolic Modeling Identifies Novel Targets of Redox Metabolism in Radiation-Resistant Cells
2:50 pm - 3:10 pm	John Skoko	University of Pittsburgh	Loss of PRDX1 increases RAD51 Cys319 oxidation and decreases homologous recombination
3:10 pm - 3:30 pm	Sarah Short	Vanderbilt University Medical Center	Tissue-specific pools of Selenoprotein P differentially contribute to colitis-associated carcinogenesis
3:30 pm - 3:50 pm	Joe Bonanno	Indiana University	SLC4A1111 Provides NH3 Sensitive Mitochondrial Uncoupling and ROS Prevention that Facilitates Cell Growth
3:50 pm - 4:10 pm	Joshua Hayes	Wake Forest University	PKM2 S-Glutathionylation Promotes the Reprogramming of Macrophage Metabolism and Activation

DAY 2: FRIDAY, NOVEMBER 16, 2018

### SESSION 4 TITLE: Metabolism and Bioenergetics

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Dan Harmon	University of Pittsburgh	Hepatic-Specific Ablation or Whole Body Inhibition of Xanthine Oxidase in Mice Corrects Obesity-Induced
2:50 pm - 3:10 pm	Edward Chouchani	Harvard Medical School / Dana-Farber Cancer Institute	A novel redox-activation pathway controls the anti-obesity function of brown adipose tissue
3:10 pm - 3:30 pm	Damian Guerra	University of Colorado	nNOS phosphorylation mediates gastrointestinal motility
3:30 pm - 3:50 pm	Chay Teng Yeo	Medical College of Wisconsin	The regulation of oxidative metabolism by nitric oxide protects $\beta$ -cells from DNA damage-induced cell death
3:50 pm - 4:10 pm	Sanjit Dhar	University of Kentucky	Manganese superoxide dismutase regulates mTORC2 mediated UVB-induced mitophagy

### SESSION 5 TITLE: Cardiovascular and Pulmonary Diseases II

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Jordan Chambers	Boston University	ABC10 deletion in cardiomyocytes leads to mitochondrial dysfunction and early death.
2:50 pm - 3:10 pm	Brandon Schickling	Duke University	Alternative splicing of Nox4 regulates subcellular redox-dependent pathways in vascular smooth muscle
3:10 pm - 3:30 pm	Maki Niihori	The University of Arizona	Pulmonary Hypertension in Rats with Human Mutation of NFU1 is oxygen sensitive
3:30 pm - 3:50 pm	Kristen Bubbs	University of Sydney - Australia	Oxidative modification of the cardiac sodium potassium pump is worsened in the absence of FXR1
3:50 pm - 4:10 pm	Cheryl van de Wetering	University of Vermont	Glutathione-S-transferase $\pi$ promotes Interleukin-1 $\beta$ induced pulmonary inflammation in association with

### SESSION 6 TITLE: Oncogenic Redox Signaling

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Marcelo Bonini	Medical College of Wisconsin	Acetylation activates an alternative function of SOD2 as a stemness factor in breast cancer
2:50 pm - 3:10 pm	Shazib Pervaiz	National University of Singapore	Rac1-induced ROS is implicated in the sustained activation of anti-apoptotic protein Bcl-2 in cancer cells
3:10 pm - 3:30 pm	Yueming Zhu	Northwestern University	Lysine 68 acetylation regulates the dichotomous role of MnSOD: a protective tetrameric detoxification
3:30 pm - 3:50 pm	Luksana Chaiswing	University of Kentucky	ReiB-BLNK axis: A Novel Determinant of Cell Fate
3:50 pm - 4:10 pm	Brian Spurlock	University of Alabama at Birmingham	MODULATION OF MITOCHONDRIAL FISSION ACTIVITY MAINTAINS OVARIAN TUMOR INITIATION

**DAY 3: SATURDAY, NOVEMBER 17, 2018****SESSION 7 TITLE: Inflammation and Immunity**

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Christopher Dustin	University of Vermont	DUOX1-dependent IL-33 secretion from the airway epithelium involves positive feedback signaling th
2:50 pm - 3:10 pm	Johanna Lanner	Karolinska Institutet - Sweden	Identification of oxidative hotspots on actin which promote skeletal muscle weakness in rheumatoid a
3:10 pm - 3:30 pm	Caspar Schiffers	University of Vermont	The Transient Receptor Potential Vanilloid 1 (TRPV1) channel is a critical factor in allergen-induced i
3:30 pm - 3:50 pm	Yanru Huang	University of Yamanashi - Japan	Connexin43 Regulates Inflammasome Activation and LPS-initiated Acute Renal Injury via Modulator
3:50 pm - 4:10 pm	Nicolas Chamberlain	University of Vermont	Lung epithelial PDIA3 plays a critical role in influenza infection

**SESSION 8 TITLE: Environmental Toxicology and Epigenetics**

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Maria Kadiiska	NIH/NIEHS	The exposure-dependent increases in 8-iso-PGF2 $\alpha$ and the significance of decoding its sources to ic
2:50 pm - 3:10 pm	Sutapa Sarkar	University of South Carolina	Protein phosphatase 2A (PP2A) inhibition in NAFLD leads to an underlying Intestinal Fibrotic patholo
3:10 pm - 3:30 pm	Rajesh Parsanathan	Louisiana State University	Epigenetic modifications of vitamin D-regulatory genes and glutathione-deficiency in FL83B mouse h
3:30 pm - 3:50 pm	Arul Duraisamy	Wayne State University	Epigenetic regulation of an oxidative stress mediator Rac1, in the development of diabetic retinopath
3:50 pm - 4:10 pm	Ghulam Mohammad	Wayne State University	Mitochondrial DNA damage in diabetic retinopathy: Role of epigenetics

**SESSION 9 TITLE: Aging and Neurodegenerative Diseases**

Chairs:

TIME	PRESENTER	AFFILIATION	ABSTRACT TITLE
2:30 pm - 2:50 pm	Ana Denicola	Universidad de la República - Uruguay	Nitro fatty acids as activators of hSIRT6 deacetylase activity
2:50 pm - 3:10 pm	Md. Imamul Islam	University of Manitoba - Canada	Thioredoxin system as a gatekeeper in caspase-6 activation and nuclear lamina integrity: Implication
3:10 pm - 3:30 pm	Gloria Salazar	Florida State University	SQSTM1/p62 deficiency induces oxidative stress and senescence in vivo and in vitro in VSMCs
3:30 pm - 3:50 pm	Bumsoo Ahn	Oklahoma Medical Research Foundation	Skeletal muscle specific overexpression of the mitochondrial H2O2 scavenger, peroxiredoxin 3, resc
3:50 pm - 4:10 pm	Yucheng Gao	Northwestern University	Dysregulation of MnSOD-K68 acetylation status leads to neurological and tumor-permissive phenoty