21st ISANH International Conference on
Oxidative Stress Reduction,
Redox Homeostasis & Antioxidants

AGENDA

June 20-21, 2019 | Université Pierre et Marie Curie, Paris, France
Dear Colleagues,

It is our great pleasure to present you the 21st International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants - Paris Redox 2019 – which will be organized at University Pierre et Marie Curie, Paris, France in June 20-21, 2019.

During Paris Redox World Congress 2019, we will discuss the role of antioxidants as modulators of redox signaling pathways rather than players that counteract oxidative stress. Furthermore, we will analyze the mechanisms by which cells respond to oxidative stress and prevent cell damage and cell death. We will also highlight oxidative stress evaluation and discuss the recent advances on biomarkers, related to redox alteration. To understand mechanisms of redox control and their role in oxidative stress pathologies and aging, it is necessary to identify and dissect the function of the key players of redox processes.

Paris Redox 2019 aims to make an important contribution towards a better understanding of redox control in physiological and pathological states that will lead to new therapeutic and disease-preventive agents.

Among the strategic topics which will be discussed:

- Redox 2019: Advances, Mechanistic and Perspectives
- Oxidative stress, Mitochondria and Microbiota
- Oxidative stress implications in diseases
- Redox 2019 Innovations
- Paris Redox Scientific & Innovation Awards 2019

A round table discussion will be organized to discuss:

- Do we need to modify Redox Science Terminology: From ROS to Reactive Species Interactome?
- Redox 2020: Where is the Next Target?

We look forward to meeting you in Paris for this exciting program in June.

Prof. Frédéric Batteux
Institut Cochin, Inserm U1016, University Paris Descartes, France
President of Paris Redox 2019
Session 1 – Redox 2019: Advances, Mechanistic and Perspectives

Chairs: Frédéric Batteux, Marvin Edeas

09:10 Different roles of specific ROS in regulation of myogenic contractions in microarterioles
Christopher Wilcox, Georgetown University, USA

09:30 Chemogenetic approaches to dissect redox stress pathways in the cardiovascular system
Thomas Michel, Harvard Medical School, USA

09:50 Introduction on the Signaling Pathway & Redox
Paul-Henri Romeo, University of Paris Diderot, France

10:00 Keap1-Nrf2 Antioxidative stress response system
Masayuki Yamamoto, Tohoku University Graduate School of Medicine, Japan

10:20 Short oral presentations (7 minutes for presentation + 3 minutes for questions)
Targeting Nrf2-mediated redox signaling inhibits cancer cells growth in vitro and in vivo
Venugopal R. Bovilla, JSS Academy of higher Education & Research, India

PPAR-Gamma activation can improve NRF2–redox regulation, Nitric Oxid-bioavailability and risk biomarkers in hypertension
Ima Dovinova, Centre of Experimental Medicine, Slovak Acad Science, Slovak Republic

10:40 Coffee Break & Poster Session

11:15 Nrf2 in Duchenne muscular dystrophy
Jozef Dulak, Jagiellonian University, Poland

11:35 Uric acid, a major energy regulator of the cell turning into a killer of pancreatic beta-cells
Andrew Bahn, University of Otago, New Zealand

11:55 Ferroptosis, a cell death modality caused by lipid peroxidation
Sebastian Doll, Helmholtz Zentrum Münche, Germany

12:15 Short oral presentations (7 minutes for presentation + 3 minutes for questions)
HDAC8 is modulated by a redox-switch
Franz-Josef Meyer-Almes, University of Applied Sciences Darmstadt, Germany

12:30 Lunch break, Exhibition & poster session

Chairs: Pedro Buc Calderon, Carsten Culmsee

14:00 Phagocyte NADPH oxidase, oxidative stress and lipids: anti or pro ageing
Chantal Houée, Université Paris Sud, France

14:20 Short oral presentations (7 minutes for presentation + 3 minutes for questions)
SIRT1 inhibition by peroxynitrite mediates nicotine-induced arterial stiffness in mice
Ping Song, Georgia State University, USA

Nitric oxide regulates protein homeostasis by S-Nitrosylations of the chaperone HSPA8 and the ubiquitin ligase UBE2D
Imgard Tegeder, Goethe-University Hospital, Germany
Oxidative stress-induced KLF4 activates inflammatory response through IL17RA and its downstream targets in retinal pigment epithelial cells
David Li, Sun Yat-Sen University, China

Genetic variation in glutamate cysteine ligase as a susceptibility factor for Type 2 Diabetes
Iuliia Azarova, Kursk State Medical University, Russia

Effect of high protein diet and feed restriction on oxidative stress parameters in early weaned pigs
Elodie Bacou, DSM, France

15:10 Coffee Break, Exhibition & Poster Session

15:50 Hypoxia and iron homeostasis: Recent Advances and perspective
Carole Peyssonnaux, Inserm, Université Paris Descartes, France

16:10 Oxidative stress, signaling pathways and Metabolome: Advances and strategies
Carlos Malpica, Proteigene, France

Chairs: Carole Nicco, Miria Ricchetti

16:25 Short oral presentations (7 minutes for presentation + 3 minutes for questions)

The oxidative stress sensor Heme-regulated inhibitory (HRI) kinase controls general protein homeostasis by triggering a cytosolic unfolded protein response
Stephen E. Girardin, University of Toronto, Canada

β-Catenin activated hepatocellular carcinomas are protected against oxidative stress
Mathilde Savall, Cochin Institute, France

Targeting integrin-linked kinase-mediated oxidative metabolism impairs therapy resistance of quiescent cancer stem cells in BCR-ABL+ Human Leukemia
Xiaoyan Jiang, University of British Columbia, Canada

Activation of endothelial cell-specific mineralocorticoid receptor promotes diastolic dysfunction in western diet fed male mice via enhanced oxidative stress
Guido Lastra Gonzalez, University of Missouri, USA

Modulation of diesel exhaust particles-induced oxidative distress and related injury in human umbilical vein endothelial cells by rooibos (aspalathus linearis)
Jeanine L Marnewick, Cape Peninsula University of Technology, South Africa

Aryl Hydrocarbon Receptor (AHR)-mediated keratinocyte differentiation is dependent on metabolic reprogramming and the production of ROS
Thomas Robert Sutter, University of Memphis, USA

QR2 detoxifies quinones in human neuroblastoma cells by cooperation with conjugation enzymes
Monivan Chhour, Laboratoire Pharma-Dev, France

Possible mechanisms counteracting age-related intensification of oxidative stress in the mouse brain
Volodymyr I. Lushchak, Precerpathian National University, Ukraine

Evaluating the effects of antioxidants Vitamin E and N-Acetyl-Cysteine against DNA damage caused by ionizing radiation
Alireza Senejani, University of New Haven, USA

Roles of vitamin C and dimethyl sulfoxide combination on electrolytes, inflammation and oxidative stress biomarkers of wistar rats induced with ischemic stroke
Lawal Bilbis, Usmanu Danfodiyo University Sokoto, Nigeria

Avermectin suppresses neutrophil extracellular traps formation via negatively regulating the PI3K-ERK pathway in carp
Shufang Zheng, Northeast Agricultural University, China

Dietary inorganic nitrate attenuates hyperoxia-induced oxidative stress in obese type 2 diabetic male rats
Asghar Ghasemi, Shahid Beheshti University of Medical Sciences, Iran

Modulation of DNA methylation profile of SRXN1 gene promoter in HT29 cells exposed to catechins of different redox activity
Patrycja Jakubek, Gdansk University of Technology, Poland

18:40 End of the first day
20:30 Paris Redox 2019 Dinner
Day 2 - June 21, 2019

Session 2: Oxidative stress, Mitochondria and Microbiota

Chairs: Sebastian Doll, Rheinallt M. Jones

08:00  Introduction & Remarks: Mitochondria, Redox and Microbiota
  Marvin Edeas, Institut Cochin, Inserm U1610, University Paris Descartes, France

08:20  Commensal microbiota induced redox signaling activates proliferative signals in the intestinal stem cell microenvironment
  Rheinallt M. Jones, Emory University School of Medicine, USA

08:40  Redox and Microbiota: Effects of Antioxidants
  Jamila Faivre, Inserm, Paul-Brousse University Hospital, France

09:00  Redox and Other Metabolic Disorders Associated with Autism: Strategic role of Butyrate
  Richard Frye, Phoenix Children’s Hospital, USA

09:20  Metabolic switches saving mitochondria from oxidative stress
  Carsten Culmsee, Center for Mind, Brain and Behavior - CMBB, Germany

09:40  Dynamic Relationship between the reactive species interactome and bioenergetic metabolism in Brain
  Laurent Chatre, CNRS, University of Caen-Normandie, France

10:00  Short oral presentations (7 minutes for presentation + 3 minutes for questions)

  Escherichia Coli mediated resistance of entamoeba histolytica to oxidative stress is triggered by oxaloacetate
  Serge Ankri, Technion, Israel

  Levels of serum free thiols are superior to fecal calprotectin in predicting endoscopic disease activity in inflammatory bowel disease
  Arno Rolf Bourgonje, University Medical Center Groningen, The Netherlands

  The cytoprotective potential of novel mitochondria-targeted iron chelators against UVA- and Hydrogen Peroxide-Mediatred oxidative cell death in Friedreich’s Ataxia fibroblasts
  Charareh Pourzand, University of Bath, United Kingdom

  10:30 Coffee break, Exhibition & poster session

Session 3: Oxidative stress implications in diseases

Chairs: Richard Frye, Harry van Goor

11:15  Lipoic acid for treating multiple sclerosis
  Dennis Bourdette, Oregon Health & Science University, USA

11:35  Recent advances on the neuroprotective role of the novel TLDC proteins against oxidative stress
  Mattea Finelli, University of Oxford, United Kingdom

11:55  Oxidative stress and inflammation in liver diseases: state of the issue and promising leads
  Patrick Gonzalez, Inserm, Paul-Brousse University Hospital, France

11:15  Short oral presentations (7 minutes for presentation + 3 minutes for questions)

  Mitochondrial oxidative stress plays a critical role in the cardiotoxicity of sunitinib
  Jamal Boultibir, University hospital Basel, Switzerland

  New formulations of melatonin to induce oxidative stress and cell death xenografts of head and neck cancer cells
  Laura Martinez Ruiz, University of Granada, Spain

  12:35 Lunch break, Exhibition & poster session

Session 4 - Redox 2019 Innovation

Chairs: Kenneth Olson, Daniel Vaiman

13:00  Thiosulfate as a therapeutic option in Redox diseases
  Harry van Goor, University Medical Center Groningen, The Netherlands

13:50  Myeloperoxidase, oxidative stress, and diseases: can we stop it?
  Semira Galijasevic, Sarajevo School of Science and technology, Sarajevo Medical School, Bosnia
14:10 Biological Oxycombustion: Biological fuels and fire extinguishers
Eric Postaire, Académie des Sciences, France

14:30 Multiresponsive hydrogel flexible sensors for metabolic oxidative stress analytics
Samuel Mugo, MacEwan University, Canada

14:50 Short oral presentations (7 minutes for presentation + 3 minutes for questions)
Oxidative stress markers in stroke patients: A Clinical study
Susana Rey Alonso, Bioquochem SL, Spain

Advanced Water S-100: a new ionized water for innovative healthcare products
Georges Bouille, Adwallis SA, Switzerland

Upstream of pathology; a new tool to diagnose the oxidative stress
Thierry Berna, SOS Stress Oxydatif Solutions, Switzerland

15:40 Coffee break & poster session

Chairs: Laurent Chatre, Ludivine Doridot

16:10 Short oral presentations (7 minutes for presentation + 3 minutes for questions)
The effect of Cold Atmospheric Pressure plasma (CAP) on cell migratory behaviors and molecular markers of wound healing machinery
Debarati Shome, Leibniz Institute for Plasma Science and Technology, Germany

Preventing protein damage in reproductive cells through the inhibition of Arachidonate 15-lipoxygenase
Elizabeth Grace Bromfield, Utrecht University, The Netherlands

Mitoprotection by next generation antioxidant carbon nanomaterials: Direct evidence for support of electron transfer
Thomas Kent, Texas A&M University, USA

Antioxidant power series (APS) as a tool for rational design and assessment of health promoting properties of functional foods based on antioxidant phytochemicals
Agnieszka Bartoszek, Gdansk University of Technology, Poland

Effect of reactive species generated by Cold Atmospheric Plasma on membrane lipids in presence of lipophilic and hydrophilic antioxidants
Mehdi Ravandeh, University of Greifswald, Germany

Effects of weak static magnetic fields on ROS concentrations and the growth rates of cancer cells and planarian
Frank Stephenson Barnes, University of Colorado, USA

Addressing glutathione redox status in clinical samples using a novel assay based on two-step alkylation and mass spectrometry
Tamara Tomin, Medical University of Graz, Austria

Dietary antioxidants, total antioxidant capacity and the risk of diabetes, hypertension and cardiovascular outcomes: a longitudinal population-based study
Zahra Bahadoran, Shahid Beheshti University of Medical Sciences, Iran

17:10 Concluding remarks: Redox 2019
Harry van Goor, University Medical Center Groningen, The Netherlands

Discussion: Chaired by Oliver Nüsse with the participation of speakers and scientific committee
- Do we need to modify Redox Science Terminology: From ROS to Reactive Species Interactome?
- Redox 2020: Where is the Next Target?

Paris Redox Scientific & Innovation Awards 2019

17:30 End of Paris Redox 2019 Congress

Last updated on June 7, 2019