

INTERNATIONAL SOCIETY OF ANTIOXIDANTS

19th International Conference on
Oxidative Stress Reduction, Redox Homeostasis & Antioxidants

PARIS REDOX 2017

June 26-27, 2017
Paris, France

Agenda



WELCOME NOTE

Dear Colleagues,

It is with great pleasure to announce the organization of the 19th International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants to be held at the Université Pierre & Marie Curie, Campus Jussieu in Paris, France on June 26 and 27, 2017.

During Paris Redox World Congress 2017, we will discuss the role of antioxidants as modulators of redox signaling pathways rather than players that counteract oxidative stress. Antioxidants affect cell signaling provided by redox processes. Mitochondria consist of localized signaling domains and produce reactive oxygen species, ROS (i.e. Superoxide and Hydrogen Peroxide), which are signaling molecules generated by the respiratory chain.

Furthermore, we will analyze the mechanisms by which cells respond to oxidative stress and prevent cell damage and cell death, with a particular focus on neurons and neurological conditions, strokes, Alzheimer's disease, kidney, muscle, and liver pathologies. Additionally, the mechanisms of redox regulation of cellular processes will be discussed.

Little is known on the specific targets of ROS and how oxidant and antioxidant signals are transmitted in the cell. 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. We will also highlight oxidative stress evaluation and discuss the recent advances on biomarkers, related to redox alteration.

Paris Redox 2017 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 strategic topics discussed during ISANH Paris Redox 2017:

- Reactive Sulfide Species, Oxidative Stress and Redox Regulation-Modulation
- Oxidative Stress, Redox Regulation-Modulation and Redox-Active Agents
- Nrf2, Redox Signaling & Gene Regulation
- Oxidative Stress & Chronic Diseases
 - Oxidative Stress & Ocular Diseases
 - Oxidative Stress & Fertility
 - Oxidative Stress & Cancer
 - Oxidative Stress & Metabolic Syndrome
- Oxidative Stress, New Bio-sensors & Biomarkers: Imaging of Oxidative Stress in 2017
- Oxidative Stress, Antioxidants & Innovations

With this exciting program we wish to meet you in Paris.

Frédéric Batteux – Pedro Buc Calderon - Marvin Edeas – Miria Ricchetti

Chairperson of Paris Redox Scientific Committee

Paris Redox 2017

19th International Conference on
Oxidative Stress Reduction, Redox Homeostasis & Antioxidants

June 26-27, 2017
Université Pierre & Marie Curie, Paris, France

Scientific Agenda

- 07:45 Welcoming & Registration of Attendees
08:55 Opening of Paris Redox World Conference

Day 1 - June 26, 2017

Session 1: Reactive Sulfide Species, Oxidative Stress and Redox Regulation-Modulation

- 09:00 Metabolism of reactive sulfide species by "classical" antioxidants mechanisms: a parallel or predominant system?
Kenneth Olson, Indiana University School of Medicine, USA
- 09:25 Interaction of sulfide with cellular bioenergetics a first/last step in redox signaling?
Frédéric Bouillaud, Institut Cochin, INSERM, France
- 9:50 Integrating the chemical biology of Reactive Oxygen, Nitrogen and Sulfur Species: opportunities for redox signaling and precision medicine
Martin Feelisch, University of Southampton, United Kingdom
- 10:15 Redox signalling predicts disease progression and patient survival in various conditions
Harry van Goor, University Medical Center Groningen, The Netherlands

10:40 Coffee Break & Poster Session

Session 2: Oxidative Stress, Redox Regulation-Modulation and Redox-Active Agents

- 11:10 Role of iron overload initiating oxidative stress in congenital and acquired hemolytic anemias
Eliezer Rachmilewitz, Edith Wolfson Medical Center, Israel
- 11:35 Oxidative stress related history of patients with intracranial aneurisms
Thierry Patrice, CHU Nantes, France
- 12:00 Peroxiredoxin 1 protects telomeres from oxidative damage
Joachim Lingner, Ecole Polytechnique Fédérale de Lausanne, Switzerland
- 12:25 Redox regulation by coenzyme A in mammalian cells
Ivan Gout, University College London, United Kingdom
- 12:35 Identification of protein targets of catechol estrogens in liver tissues using click chemistry-based activity probes coupled with quantitative proteomics
Shu-Hui Chen, National Cheng Kung University, Taiwan

12:45 Lunch break & poster session

Session 3: Nrf2, Redox Signaling & Gene Regulation

- 14:00 **Skin redox balance maintenance and the role of Nrf2 in dermatology: recent scientific advances**
Laurent Marrot, L'Oréal R&D, France
- 14:25 **Modulation of proteostasis by transcription factor NRF2 and impact in Alzheimer's disease**
Ana Isabel Rojo Sanchís, Center for networked biomedical research in neurodegenerative diseases (CIBERNED), Spain
- 14:50 **Mitonneet, an FE-S cluster-containing redox switch involved in a new pathway dedicated in cytosolic aconitase reactivation**
Marie-Pierre Golinelli-Cohen, CNRS, France
- 15:00 **A novel pathway for Nrf2 proteasomal degradation in response to respiratory syncytial virus infection**
Narayana Komaravelli, University of Texas Medical Branch, USA
- 15:10 **Genetic invalidation of the cystine importer XCT (SLC7A11) suppresses pancreatic ductal adenocarcinoma cell (PDAC) growth, survival, and chemoresistance**
Milica Vucetic, Centre Scientifique de Monaco, Monaco
- 15:20 **Glutathione S-transferase P mediated protein S-glutathionylation of resident endoplasmic reticulum proteins influences sensitivity to drug-induced unfolded protein response**
Danyelle Townsend, Medical University of South Carolina, USA
- 15:20 **Reduced S-glutathionylation of estrogen receptor alpha promotes bone marrow derived dendritic cell differentiation**
Kenneth Tew, Medical University of South Carolina, USA

15:40 Coffee break & poster session

Session 4: Oxidative Stress & Chronic Diseases (Part 1)

Oxidative Stress & Ocular Diseases

- 16:10 **Oxidative Stress and cataracts: where are we now?**
Julie Lim, The University of Auckland, New Zealand
- 16:35 **The two faces of oxidative stress: from stress-response to pathogenic damage. The example of glaucoma molecular pathogenesis**
Alberto Izzotti, University of Genoa, Italy
- 17:00 **The nucleoredoxin-like 1 gene encodes for two proteins that contributes to a super-thioredoxin system**
Thierry Léveillard, Institut de la Vision, France
- 17:10 **The role of the cystine/glutamate antiporter (CGAP) in controlling redox balance in ocular tissues**
Renita Martis, The University of Auckland, New Zealand
- 17:20 **Endogenous lipid peroxidation product 9-HSa regulates progenitor fate in the vertebrate retina**
Shahad Albadri, Institut Curie, France
- 17:30 **Short oral presentations for sessions 3 & 4 upon abstracts submission**

Among short oral presentations already selected:

HIV-1-TAT protein induces mitochondrial ROS production, DNA damage and genomic instability in human B-cells
Rawan El Amine, Institut Gustave Roussy, France

Neuroprotective effects of Twendee X
Haruhiko Inufusa, Gifu University, Japan

Functioning of brain and liver mitochondria of rats with experimental audiogenic epilepsy, characterized by the development of oxidative stress

Galina Mironova, Institute of Theoretical and Experimental Biophysics RAS, Russia

Mice lacking the genes for NAP(P)H quinone reductase (NQO1) or NQO2 are more susceptible to hyperoxic lung injury than wild type mice in vivo: rescue by beta-naphthoflavone (bnf) administration

Bhagavatula Moorthy, Baylor College of Medicine, USA

18:30 End of the first day

20:00 Paris Redox 2017 Dinner

If you would like to participate, please register online before June 12.

Day 2 - June 27, 2017

08:30 Welcoming & Registration of Attendees

Session 4: Oxidative Stress & Chronic Diseases (Part 2)

Oxidative Stress & Fertility

09:00 **Male subfertility induced by heterozygous expression of catalytically inactive glutathione peroxidase 4 is rescued in vivo by systemic inactivation of the 15-lipoxygenase gene**

Astrid Borchert, University Medicine Berlin-Charité, Germany

09:25 **Placentation and oxidative stress: recent scientific advances**

Asif Ahmed, Aston Medical School, Aston University, United Kingdom

Oxidative Stress & Cancer

09:50 **Redox cycling quinones display antibacterial activity against Helicobacter pylori. Is oxidative stress playing a role?**

Pedro Buc Calderon, Université Catholique de Louvain, Belgium

10:15 **Oxidative Stress & Cancer: recent scientific advances**

Fatima Mechta-Grigoriou, Institut Curie - INSERM U830, France

10:40 Coffee Break & Poster Session

11:10 **Dissecting the role of the endogenous antioxidant response in lung cancer**

Volkan Sayin, Perlemutter Cancer Center, USA

11:35 **Metastatic reprogramming of lung cancer cells by antioxidants**

Clotilde Wiel, University of Gotenburg, Sweden

12:00 **Role of compartmentalized ROS and oxidative stress in angiogenesis and cancer**

Massimo Santoro, University of Turin, Italy

12:25 Lunch break & poster session

Oxidative Stress & Metabolic Syndrome

13:45 **Regional fat distribution in woman: the relation to lipogenic hormones, metabolic syndrome markers and oxidative risk**
Jumana Saleh, Sultan Qaboos University, Oman

14:10 **Short oral presentations for session 4 upon abstracts submission**

Among short oral presentations already selected:

Oxidative stress and periodontal disease in diabetic patients: a pilot study
Simone Marconcini, University of Pisa, Italy

Plasma cystathionine and risk of acute myocardial infarction among patients with coronary heart disease: results from two independent cohorts
Dhar Indu, University of Bergen, Norway

Session 5: Oxidative Stress, New Bio-sensors & Biomarkers: Imaging of Oxidative Stress in 2017

From 15:00 to 15:45

15:00 **Short oral presentations upon abstracts submission**

15:45 Coffee break & poster session

Session 6: Oxidative Stress, Antioxidants & Innovations

16:15 **Short oral presentations upon abstracts submission**

Among short oral presentations already selected:

Multifunctional radical quenchers as potential therapeutic agents
Sidney Michael Hecht, Arizona State University, USA

Increased survival in septic mice using whole body periodic acceleration (PGZ)
Jose A. Adams, Mount Sinai Medical Center, USA

17:30 **Concluding remarks by Paris Redox 2017 chairpersons**
Paris Redox Awards 2017

18:00 **End of Paris Redox 2017 Conference**