14th International Conference on

Oxidative Stress Reduction, Redox States & Antioxidants

12-13 June 2014 - Paris – France

Day 1 - June 12

07h30 Welcoming & Registration of Attendees

9h00 Introduction Remarks: Oxidative Stress Reduction Strategies, Microbiota & Antioxidants: What's Next?
Marvin Edeas, *Chairman of ISANH, Paris, France*

Session 1: Oxidative Stress, Redox Regulation & Modulation and Redox-Active Agents

Chairmen: P. Buc Calderon, M. Edeas & M. Ricchetti

9h30 Why Antioxidants Accelerate Lung Cancer Progression? The Dark Side of Antioxidants
Martin O. Bergo, *University of Gothenburg, Gothenburg, Sweden*

9h50 Targeting Reductive Stress Strategies: How to Prevent Excessive Antioxidant Activity in Heart Diseases?
Namakkal S. Rajasekaran, *University of Utah School of Medicine, Salt Lake City, USA*

10h10 Oxidative Stress Subtle Balance, Nrf2-Keap1 and Hsp90 Hyper-Expression: Between Defenses & Adaptation
Pedro Buc Calderon, *Louvain University, Louvain, Belgium*

10h30 Coffee Break – Posters Session

11h00 Altered Oxidant/Antioxidant Dynamics in a Precocious Ageing Disease
Miria Ricchetti, *Pasteur Institute, Paris, France*

11h20 A Novel Regulator of the Nitroso-Redox Imbalance
Laurent Chatre, *Pasteur Institute, Paris, France*

11h40 Peroxiredoxins and Ageing: Vision and Directions
Michel Toledano, *CEA, French Alternative Energies, Gif-sur-Yvette, France*

12h00 Short Oral Presentations *(5 minutes for Presentation + 3 minutes for questions)*

Role of Nrf2 and Heme Oxygenase-1 in Kidney Fibrosis – The Significance of microRNAs
Agnieszka Loboda, *Jagiellonian University, Kraków, Poland*

Pro-Oxidant Functions of Nrf2
Mikhail Nikiforov, *Roswell Park Cancer Institute, Buffalo, USA*

Keap1/Nrf2/Are Signaling System: Active Defense Against Acute, But Not Chronic Inflammation
Elena Menshchikova, *Center of Clinical and Experimental Medicine, Russia*

Pitx2 and Pitx3 Transcription Factors: Two Key Regulators of the Redox State in Adult Skeletal Muscle Stem Cells and Muscle Regeneration
Aurore L'honoré, *Institut Pasteur, Paris, France*

12h35 Lunch Break – Posters Sessions

Session 2: Oxidative Stress, Antioxidants & Biomarkers

Chairmen: M.O. Bergo, L. Leichert & V. Reipa

14h00 Probing the Intracellular Glutathione Redox Potential by In-Cell NMR Spectroscopy
Vytas Reipa, *National Institute of Standards and Technology, Gaithersburg, USA*

14h20 Electrochemical Study of Antioxidants Regeneration Mechanisms: Application in Dermocosmetics and Human Blood
Pierre Gros, *University Paul Sabatier, Toulouse, France*

14h40 Electrochemical Detections of ROS and RNS to Assess Antioxidant Activities
Stéphane Arbault, *University of Bordeaux 1, Pessac, France*

15h00 Fluorescent Detection of Specific ROS and their Subcellular Signaling Patterns
Thomas G. Cotter, *University College, Cork, Ireland*

15h20 Short Oral Presentations *(5 minutes for Presentation + 3 minutes for questions)*

The Association of Oxidative Stress Markers with Cardiovascular Risk: Prospective Results from the Hapiee Cohorts
Martin Bobak, *University College London, United Kingdom*

Monitoring Dynamic Changes of Glutathione Redox State in Subcellular Compartments of Human Cells – A Novel Approach Based on RXYFP Biosensors
Meng-Er Huang, *Institut Curie, Orsay, France*

Visualizing Redox Changes by the Redox-Sensitive Gfp2
Robert Marschall, *University of Münster, Münster, Germany*

Oxidation-Reduction Potential: A Global Marker of Oxidative Stress with Clinical and Research Applications
Charles W. Mains, *Centura Health Trauma System, Colorado, USA*

15h55 Coffee Break – Posters Session

Session 3: Redox Proteomics: The next step to Oxidative Stress Revolution

16h25 Redox Proteomics: A powerful tool to Study Redox Regulation
Lars Leichert, *Ruhr-University Bochum, Bochum, Germany*

Session 4: Natural & Synthetic Antioxidants

Chairmen: N.S. Rajasekaran & M. Toledano

Cerium Oxide Nanocrystals: The Creation of Super Antioxidants – Scheduled on Friday, June 13 at 15h00
Vicki Colvin, *Rice University, Rice, USA*

16h45 Catalytic Antioxidant Therapy and Beyond: Recent Advances by Macrocyclic Metal Complexes
Zeev Gross, *Schulich Faculty of Chemistry, Technion – Israel Institute of Technology, Haifa, Israel*

17h05 Super Oxide Dismutase 2014: Recent Advances, Clinical Applications & Perspectives
Julie Carillon, *Bionov, Montpellier, France*

17h20 Short Oral Presentations *(5 minutes for Presentation + 3 minutes for questions)*

Dual Oxidase 2 is a Novel Source of Reactive Oxygen Species Implicated in Glomerular Mesangial Cell Fibrotic Response to Angiotensin II
Yves Gorin, *University of Texas Health Science Center, San Antonio, USA*

Oxidative Stress Induces Caveolin 1 Degradation and Impairs Caveolae Functions in Skeletal Muscle Cells
Alexis Mougeolle, *University of Bordeaux , Pessac, France*

Effect of PPAR-Gamma Agonists Treatment on Radical and Cell Signaling, Antioxidant Response and Blood Pressure in Experimental Hypertension
Ima Dovinova, *Slovak Academy of Sciences, Bratislava, Slovakia*

An Inflammatory Extracellular Matrix is a Molecular Target of the ROS Scavenger HIP/PAP
Nicolas Moniaux, *Université Paris-Sud, Villejuif, France*

Selective Inhibition of Heme Oxygenase 1 Enzyme Induces Antitumor Activity and Synergizes with Taxanes in Preclinical Cancer Models
Moulay Alaoui-Jamali, *Mcgill University, Montreal, Quebec, Canada*

Urokinase-Type Plasminogen Activator (UPA) Increases Oxidative Stress via Downregulation of Paraoxonase 1 (PON1) Expression in Hepatocytes
Bianca Fuhrman, *Rambam Medical Center, Israel*

Identification of Phenolic Compounds and Molecular Mechanisms Behind Propolis Antioxidative Activity
Jamnik Polona, *University of Ljubljana, Slovenie*

Vitis Labrusca Extract Possesses Lithium-Like Effects on Cellular Dynamics and Redox Modulations in a Neuronal Cell Model
Gustavo Scola, *Department Of Psychiatry, University of Toronto, Canada*

New Potentiometric Method for Determination of Antioxidant/Oxidant Activity of Extracts, Sperm, Blood Serum and Tissue
Khiena Brainina, *Ural State University of Economics, Russia*

18h45 End of First Day

20h30 Dinner between Speakers & Attendees in a French typical Restaurant
If you are interested to take part to this dinner, please register online.

Day 2, June 13

08h30 Welcoming & Registration of Attendees

Session 5: Mitochondria Homeostasis & Oxidative Stress

Chairmen: R. Andriantsitohaina & L. Robert

9h00 Maturation & Role of mitoNEET in Fe-S Cluster Biogenesis: MitoNEET is a Mitochondrial Fe-S Protein of the Outer Mitochondrial Membrane & Novel Target of the Antidiabetes Drugs
Cécile Bouton, *CNRS, Paris, France*

9h20 Short Oral Presentations *(5 minutes for Presentation + 3 minutes for questions)*

N-Acetylcysteineamide Confers Neuroprotection, Improves Bioenergetics & Behavioral Outcome Following Traumatic Brain Injury
Patrick G. Sullivan, *University of Kentucky, USA*

N-Acetylcysteineamide Promotes Mitochondrial Bioenergetics & Functional Recovery Following Spinal Trauma
Alexander G. Rabchevsky, *University of Kentucky, USA*

Novel Mitochondria-Targeted Hydrogen Sulfide (H2s) Donors Ap39 And Ap123 Stimulate Cellular Bioenergetics and Protect Endothelial Cells From Oxidative Stress-Induced Injury and Mitochondrial DNA Damage
Matthew Whiteman, *University of Exeter Medical School, United Kingdom*

NCLX, but not LETM1, Mediates Mitochondrial Ca2+ Extrusion Thereby Limiting Ca2+-Induced Nad(P)H Production and Modulating Matrix Redox State
Umberto De Marchi, *Nestlé Institute of Health Sciences, Switzerland*

Session 6: Oxidative Stress & Skin 2014: Mechanistic & Strategies

9h55 Oxidative Stress, Normal Melanocytes & Melanoma
Laurence Denat, *L'Oréal Research & Innovations, Aulnay-sous-Bois, France*

10h15 UVC Bystander Effect is Mediated through Antioxidant Defense
Rita Ghosh, *University of Kalyani, West Bengal, India*

10h20 Coffee Break – Posters Session

Session 7: The Innovations of Oxidative Stress, Redox Modulation and Antioxidants in 2014: Targeting Chronic Diseases

10h50 Circulating Elastin Peptides Trigger Free Radical Release by Activation of the Elastin Receptor: Role in Atherogenesis
Ladislas Robert, *Hôtel Dieu, Paris, France*

11h10 Targeting Chelatable Iron as a Therapeutic Option in the Treatment of Parkinson's Disease
David Devos, *University of Lille Nord de France, Lille, France*

11h30 Strategies to Correct Oxidative Stress Induced by Extracellular Vesicles in Cardiovascular Diseases
Ramaroson Andriantsitohaina, *INSERM, Angers, France*

11h50 HIV Infection and Oxidative Stress Focusing on the Beneficial Effects of Glutathione in Controlling *Mycobacterium Tuberculosis* Infection
Vishwanath Venketaraman, *Western University of Health Sciences, Pomona, USA*

12h10 Tocopherol Derivate TFA-12 as a Potential Therapeutic Compound for Myelin Repair in Multiple Sclerosis
Brahim Nait Oumesmar, *Université Pierre et Marie Curie, Paris, France*

12h20 Discussion

12h30 Lunch Break – Posters Sessions

Chairmen: L. Chatre, D. Devos & V. Venketaraman

14h00 Treatment of Oxaliplatin-Induced Peripheral Neuropathy by Intravenous Mangafodipir
Frédéric Batteux, *University Paris Descartes, Paris, France*

14h20 Intravenous Iron and Oxidative Stress in Chronic Renal Failure: Myth or Reality?
Can we reduce or prevent oxidative stress?
Victorio Menoyo, *Association Echo, Vannes, France*

14h40 The Parasite Theileria Induces a Warburg Effect to Transform Host Leukocytes via Reprogramming of Glucose Metabolism and Redox Signaling
Souhila Medjkane, *Université Paris Diderot, Paris, France*

15h00 Cerium Oxide Nanocrystals: The Creation of Super Antioxidants
Vicki Colvin, *Rice University, Rice, USA*

15h20 Short Oral Presentations – Part I *(5 minutes for Presentation + 3 minutes for questions)*

Effects of a Short-Term Human Intervention Study with Low-Dosed Multivitamin/Minerals on Oxidative Stress Biomarkers
Eugene Jansen, *National Institute For Public Health, Netherlands*

Have Plants, Besides Tocopherols and Carotenoids, Evolved a Third Antioxidative Mechanism for Lipid Protection: Carnosic Acid?
Simona Birtic, *Naturex, France*

Antioxidant and Anti-Inflammatory Activities of Human Albumin in Diabetes Context
Philippe Rondeau, *Université de la Réunion, Réunion, France*

Cytochromes P450 Enzymes and their Role in Diabetic Nephropathy: What's New?
Assaad Eid, *American University of Beirut, Lebanon*

An Antioxidant Regenerating System for Continuous Quenching of Free Radicals in Chronic Wounds
Gibson Nyanhongo, *Institute of Environmental Biotechnology, Tulln, Austria*

16h00 Coffee Break – Posters Session

16h20 Short Oral Presentations – Part II *(5 minutes for Presentation + 3 minutes for questions)*

Protein S-Nitrosylation and DNMT2 Mediated Resistance to Nitrosative Stress in the Parasite *Entamoeba Histolytica*
Serge Ankri, *Technion-Israel Institute of Technology, Haifa, Israel*

Novel Natural Withanolides Inhibit Head and Neck Cancer Cells through Induction of Metabolic Oxidative Stress
Mark Cohen, *University of Michigan, Ann Arbor, USA*

The Metastasis Suppressor NM23 Prevents both Oxidative Stress-Related Activation of Jnks through its Nucleoside Diphosphate Kinase Activity and Cellular Senescence
Mathieu Boissan, *UPMC Université, Paris, France*

Ribose-Cysteine Enhances Glutathione-Based Antioxidant Status and Reduces Cholesterol Levels in Human Lipoprotein(A) Mice
Sally Mccormick, *University of Otago, Dunedin, New Zealand*

The Drug Toxicity can be Modulated by Superoxide Dismutase 2 Imbalance Genetically Determined? An in vitro Study of ALA16VAL-SOD2 Effect on Cells Exposed to Methotrexate
Barbisana Fernanda, *Afederal University of Santa Maria, Brazil*

Nox5 in Human Spermatozoa
Amina El Jamali, *University of Texas Health Science Center, San Antonio, USA.*

A Theoretical Antioxidant Pharmacophore for Small Caffeic Acid Derivatives
Alicja Urbaniak, *University School of Physical, Estkowskiego , Poland*

A Spatial Pattern of Radical Formation Regulates Endothelial Sprouting Angiogenesis and is Controlled by PON2
Sven Horke, *University Medical Center Mainz, Mainz, Germany*

Insights into the Antioxidant Mechanism of Novel Carbon Nanoparticles
Thomas Kent, *University of Texas Health Sciences Center, Houston, Texas*

A New Oxidative Stress Model, 2,2-Azobis(2-Amidinopropane) Dihydrochloride Induced Cardiovascular Damages in Chicken Embryo and the Screening of Nature Antioxidants
Rong-Rong He*, Jinan University, Guangzhou, China*

17h40 Discussion:

- **Presentation of ISANH Platform for Oxidative Stress & Antioxidants Evaluation**
  If you wish to join this group, please contact ISANH
- **Horizon 2020 Project**
- **ISANH 2014 Awards**

18h00 End of ISANH Antioxidants 2014