

The background of the entire page is a photograph of the Eiffel Tower in Paris, France. The tower is shown from a low angle, looking up towards the top. The sky is a clear, bright blue. In the foreground, there are several large, vibrant flowers in shades of pink, red, and white, which are slightly out of focus. The overall scene is bright and sunny.

15th International Conference on

Oxidative Stress Reduction, Redox Homeostasis & Antioxidants

**June 22-24, 2015
Institut Pasteur, Paris**

3-Days Program

June 22: Workshop on Oxidative Stress Evaluation

June 23-24: Plenary Sessions

GENERAL INFORMATION

DATE

June 22-24, 2015

PARTICIPANTS

250 - 300 participants expected

CITY/COUNTRY

Paris, France

REGISTRATION & PRACTICAL INFORMATION

ISANH

Antioxidants 2015 Secretary

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CONFERENCE VENUE

Pasteur Institute
25 rue du Dr Roux
75015 Paris, France



WELCOME NOTE

It is a great pleasure to announce the organization of **15th International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants**, which will be held **at Institut Pasteur in Paris, from June 22 to 24, 2015**. **A workshop dedicated to Oxidative Stress Evaluation** will be held on June 22.

ISANH Antioxidants 2015 will highlight the mechanisms of redox regulation of cellular processes. 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 aim that Paris Antioxidants 2015 will contribute to a better understanding of redox control in physiological and pathological states and in ageing, leading to new therapeutic and disease-preventive agents.

During Paris Antioxidants World Congress 2015, we will be interested to understand the ways in which cells respond to oxidative stress and how to prevent damage and cell death, with a particular focus on neurons and neurological conditions, stroke, Alzheimer's disease, Kidney and Liver pathologies... We will discuss the role of antioxidants as modulators of redox signaling pathways rather than players that counter "balance" oxidant formation. Indeed, antioxidants affect cells signaling provided by redox processes. Mitochondria constitute a localized signaling domain and produce ROS, which are signaling molecules generated by the respiratory chain.

Among strategic topics discussed during ISANH Antioxidants 2015:

- *Oxidative Stress, Redox Regulation & Modulation and Redox-Active Agents*
- *Oxidative Stress & Biomarkers: Imaging of Oxidative Stress in 2015*
- *Beneficial effects of Oxidative Stress vs deleterious effects of antioxidants*
- *New Players in Redox balance*
- *Oxidative Stress, Ageing & Longevity: Where are we now?*
- *Oxidative Stress & Chronic Diseases: From Predictive to Preventive Medicine*
- *Oxidative Stress, Antioxidants & Innovations*

Oxidative Stress Evaluation Workshop

The aim of this workshop is to present the latest innovations on oxidative stress evaluation by highlighting:

- *Towards an oxidative stress' signature from Exhaled Breath Condensate*
- *Biosensor for Detection of Oxidative Stress*
- *Oxidative Stress Biomarkers*
- *Redox State Visualization & Imaging*
- *Oxidative Stress, Antioxidants & Human Studies*
- *Comet Assays*

Oxidative Stress Imaging in vitro / in vivo

During Paris Antioxidants 2015, we will discuss and present recent advances on visualization and imaging of oxidative stress using new methods. The scientific committee will allocate time for several presentations on the in vivo evaluation of oxidative stress and its impact on proteins, DNA, and mitochondria.

To conclude this congress, we will organize a round table discussion to answer two strategic questions:

- ***Oxidative Stress and Antioxidants: The “positive” and “negative” sides of the coin for antioxidants and ROS***
- ***The subtle balance between redox homeostasis, ROS, and mitochondria homeostasis***
- ***What are the Best & Adequate Methods to Evaluate Oxidative Stress & Antioxidants in vitro vs in vivo & in Humans?***

With this exciting program, we wish to meet you in lovely Paris next June.

On behalf of the Scientific Committee

Marvin Edeas - Chairman of the Scientific Committee

Miria Ricchetti – Chairperson of the Local Organizing Committee



PRELIMINARY TIMETABLE

Monday, June 22, 2015

TIME

<i>8h00 – 9h00</i>	<i>Registration & Welcoming of Workshop participants</i>
9h00 – 10h30	Part 1 of Workshop
<i>10h30 – 11h00</i>	<i>Coffee Break, Posters Session & Exhibition Viewing</i>
11h00 – 13h00	Part 2 of Workshop
<i>13h00 – 14h00</i>	<i>Lunch Break, Posters Session & Exhibition Viewing</i>
14h00 – 15h45	Part 3 of Workshop
<i>15h45 – 16h15</i>	<i>Coffee Break, Posters Session & Exhibition Viewing</i>
16h15 – 18h00	Part 4 of Workshop
<i>18h00</i>	<i>End of Workshop</i>

Tuesday, June 23, 2015

TIME

<i>7h30 – 9h00</i>	<i>Registration & Welcoming</i>
9h00 – 9h15	Welcome Address
9h15 – 10h30	Session 1: Plenary Session
<i>10h30 – 11h00</i>	<i>Coffee Break, Posters Session & Exhibition Viewing</i>
11h00 – 12h30	Session 2: Plenary Session
12h30 – 13h00	Short Oral Presentations (Part I)
<i>12h30 – 14h00</i>	<i>Lunch Break, Posters Session & Exhibition Viewing</i>
14h00 – 15h30	Session 3: Plenary Session
<i>15h30 – 16h00</i>	<i>Coffee Break, Posters Session & Exhibition Viewing</i>
16h00 – 17h30	Session 4: Plenary Session
17h30 – 18h00	Short Oral Presentations (Part II)
19h30 – 22h00	Special Dinner with Speakers & Attendees

Wednesday, June 24, 2015

TIME

9h00 – 10h40

Session 5: Plenary Session (Part I)

10h40 – 11h10

Coffee Break, Posters Session & Exhibition Viewing

11h10 – 11h40

Session 5: Plenary Session (Part II)

11h40 – 12h00

Short Oral Presentations Session (Part II)

12h00 – 12h30

Lunch Break, Posters Session & Exhibition Viewing

13h30 – 14h45

Session 6: Plenary Session

14h45 – 15h45

Short Oral Presentations Session (Part III)

15h45 – 16h15

Discussion & Conclusions

16h15 – 18h00

Network Session, Poster Session & Exhibition Viewing



Participants of ISANH Antioxidants World Congress 2014

AGENDA OF ISANH ANTIOXIDANTS 2015

15th International Conference on

Oxidative Stress Reduction, Redox Homeostasis & Antioxidants

June 22-24, 2015
Institut Pasteur, France

Day 1 - June 22, 2015

Oxidative Stress Evaluation & Biomarkers: Recent Advances & Recommendations

*Chairmen: Laurent Chatre, Oliver Nüsse, Thierry Patrice
Yasuyoshi Sakai, Paul Thornalley*

08:55 Opening of Oxidative Stress & Antioxidants World Conference

Marvin Edeas, Miria Ricchetti, Chairpersons, France

09:00 Oxidative Stress, Antioxidants & Biomarkers: Where is the Golden Standard?

Marvin Edeas, Chairman of ISANH, France

09:30 Evaluation of Antioxidants Activity & Oxidative Stress: Towards a ISANH Standard

Why we failed with other methods: A Critical Point of View

José Ángel Rufián-Henares, Departamento de Nutrición y Bromatología Facultad de Farmacia, Spain

Oxidative Stress, Antioxidants & Human Studies

10:00 Oxidative stress Evaluation in Human Clinic: A New Method

Thierry Patrice, CHU Nantes, France

10:30 Coffee Break

11:00 F2-isoprostane, 15(S)-8-iso-prostaglandin F2 α Measurement in Biological Samples by GC-MS or GC-MS/MS: Recent Advances & Perspectives

Dimitros Tsikas, Eicosanoids and Oxidative Stress Centre of Pharmacology and Toxicology, Germany:

11:30 Salivary Oxidative Status in Patients with Oral Lichen Planus

Palina Vyhouskaya, Jagiellonian University, Poland

Redox State Visualization & Imaging

11:40 Visualization of Local Redox State in Cells: Its Application to Biology and Drug Screening

Yasuyoshi Sakai, Kyoto University, Japan

12:10 Screening Antioxidant Activators of Nrf2 - Have we been Misreading the Signals?

Frequency modulated translocational oscillations of Nrf2 regulate the antioxidant response element cytoprotective transcriptional response

Paul Thornalley, University of Warwick, United Kingdom

12:40 **Neuroimaging Biomarkers of Oxidative Stress in Brain Aging and Injury**
Janna L. Harris, University of Kansas Medical Center, USA

12:55 *Lunch Break*

Oxidative Stress Biomarkers & Biosensors
Exhaled Breath Condensate

14:00 **Assessment of Oxidative Stress Biomarkers in Exhaled Breath Condensate: Practical Point of View**
Pietro Celi, University of Sydney, Australia

Oxidative Stress & Biosensors

14:30 **Redox-Sensitive GFP and YFP Sensors for Monitoring Nuclear Redox Dynamics**
Meng-Er Huang, CNRS - Institut Curie, France

15:00 **New Biosensors for Spatio-Temporal Detection of Phagosomal ROS Production**
Laurent Nault, Université Paris Sud, France

15:30 **Deciphering Additional Properties of a Compound that Affects Mitochondrial Function and Oxidative Stress**
Laurent Chatre, Institut Pasteur, France

15:45 *Coffee Break*

16:15 **DMPD (N,N-Dimethyl-p-Phenylene Diamine) on Nafion Membrane as an Oxidative Stress Biomarker and Colorimetric Antioxidant Sensor**
Mustafa Resat Apak, Istanbul University, Turkey

Comet Assays

16:30 **Comet Assays: Recent Advances & Recommendations**
Towards a standardization of DNA damage biomarker assay for human biomonitoring
Monica Neri, IRCCS San Raffaele Pisans, Italy

17:00 Round Table Discussion

**What are the Best & Adequate Methods to Evaluate Oxidative Stress & Antioxidants
in vitro vs *in vivo* & in Humans?**

*Each speaker will provide critics and comments about
the best methods of oxidative stress & antioxidants evaluations.*

18:00 **Discussion & Questions:**

- **New Generation of Oxidative Stress Biomarkers from Exhaled Breath Condensate**
- **Chronic Diseases & Oxidative Stress Signature**
- **ISANH Platform to Evaluate Oxidative Stress & Mitochondrial Dysfunction: Towards a ISANH Standard**

18:00 **End of the First Day**

16:30 – 18:00 **Registrations for Days 2 & 3**

15th International Conference on
Oxidative Stress Reduction, Redox Homeostasis & Antioxidants
Institut Pasteur, France

Day 2 - June 23, 2015

07:15 Registration

08:25 Opening of Oxidative Stress & Antioxidants World Conference

Marvin Edeas, Miria Ricchetti, Chairpersons, France

08:30 Introduction Note - Oxidative Stress & Antioxidants: What's next?

Marvin Edeas, Chairman of ISANH, France

Opening Lecture (25 + 5 minutes)

08:45 Is Oxidative Protein Damage the Root Cause of Aging and Age-Related Diseases?

Miroslav Radman, INSERM, France

Session 1 - Oxidative Stress, Redox Regulation-Modulation and Mechanistics

Positive Effects of Oxidative Stress vs Negative Effects of Antioxidants

Major Talks (20 + 5 minutes)

09:15 Antioxidants vs Pathologies: Pros and Cons

Per Lindahl, University of Gothenburg, Sweden

09:40 Regulation of Catalase Expression in Cancer Cells

- A pro-oxidant strategy to kill cancer cells
- ROS levels in cancer cells: a double-edged sword

Pedro Buc Calderon, Louvain University, Belgium

10:05 A Novel Mechanism Controlling Transition between Good and Bad ROS in Cancer Cells

Mikhail Nikiforov, Roswell Park Cancer Institute, USA

10:20 The Effect of Redox Modulation on Immune, Inflammatory & Metabolic Pathways in Diseases

Impact of metalloporphyrins on Reduction inflammation & auto-immunity

Jon Piganeli, Children's Hospital of Pittsburgh of UPMC, USA

10:45 Coffee Break & Posters Session

11:15 Oxidative & Metastatic Process: Recent Advances and Strategies

Thierry Tchénio, LBPA, France

11:40 SUMO: A (Oxidative) Stressed Sensor Protein in Neurodegenerative Diseases

Marco Feligioni, EBRI, Italy

12:05 Peroxisomes and Redox Homeostasis: Recent Advances in Adrenoleukodystrophy and Therapeutic Strategies

Stéphane Savary, Université de Bourgogne, France

12:30 Lunch Break & Posters Session

14:00 Progress and Emerging Challenges: Hmox1 in the Spotlight

Gabor Czibik, Université Paris Est, France

14:25 Strategies to Modulate Oxidative Stress: Nutritional Approaches vs Extracellular Vesicles

Ramaroson Andriantsitohaina, INSERM, France

14:50 Short Oral Presentations for Sessions 1 & 2 (5 + 2 minutes)

Ambient Ultrafine Particles Increase Reactive Oxygen Species Formation in Quiescent Human Monocytic Cells

Arezoo Campbell, University of California, USA

Inflammation-Responsive Antioxidant Polymeric Prodrug Nanoparticles

Dongwon Lee Chonbuk, National University, Korea

Oxidative Stress and Repairing Mechanisms Associated with Air Pollution

Marie-Abèle Bind, Harvard University, USA

Influenza Virus Replication in Lung Epithelial Cells Depends on Redox-Sensitive Pathways Activated by Nox4-Derived ROS

Donatella Amatore, "Sapienza" University of Rome, Italy

Modulation of Reactive Oxygen Species Production by Integrin-Linked Kinase

Lina Dagnino, The University of Western Ontario, Canada

Activation of the Kynurenine Pathway Leads to Reactive Oxygen Species-Mediated Apoptosis of Human Retinal Endothelial Cells: Implications for Diabetic Retinopathy

Ram Nagaraj, University of Colorado, USA

NADPH Oxidase DUOX1 Promotes Long-Term Persistence of Oxidative Stress after an Exposure to Irradiation

Rabii Ameziane El Hassani, Institut Gustave Roussy, France

Thiol-Reactive Peptidomimetic sk053 Targets Dimeric Peroxiredoxins in Human Lymphoma Cell Lines

Malgorzata Firczuk, Medical University of Warsaw, Poland

16:00 Coffee Break & Posters Session

Session 2 - Oxidative Stress Evaluation

16:30 Oxidative Stress Evaluation in Human Clinic: The Perfect Clinical Study

Thierry Patrice, CHU Nantes, France

16:55 Oxidative Stress Serum Markers and Mortality – Pooled Results from four Population-Based Cohort Studies

Ben Schöttker, German Cancer Research Center, Germany

17:20 Age-Related Changes on DNA Damage and Repair Activity in Humans: Effects of Physical Exercise Training and Oxidative Stress

Jorge Soares, CIDESD, UTAD, Portugal

17:55 Visualization and Imaging of Local Redox State in Cells: Strategic Applications in Drug Screening

Yasuyoshi Sakai, Kyoto University, Japan

18:10 Short Oral Presentations for Sessions 1 & 2 (5 + 2 minutes)

Nrf2-mediated Antioxidant Response: Implications for the Prevention of Fetal Alcohol Spectrum Disorders

Shao-yu Chen, University of Louisville Health Sciences Center, USA

Redox Regulation of the Type II Diabetes-Associated Protein MitoNEET

Huangen Ding, Louisiana State University, USA

Regulation of Hematopoiesis by Myeloid Cell-Derived Reactive Oxygen Species

Hongbo Luo, Harvard Medical School and Children's Hospital Boston, USA

Influence of Lipids on ROS Production by NADPH Oxidase

Rawand Masoud, Université Paris Sud, France

Polyphenol Induces Blood Level Low Density Lipoprotein (LDL) Influx in Macrophages

Jacob Vaya, Tel Hai Academic College and Migal Research Institute, Israel

Gamma Glutamyl Transferase (GGT) Activity: An Early Predictor of Metabolic and Oxidative Risk Markers in Apparently Healthy Young Adults

Jumana Saleh, Sultan Qaboos University, Oman

Biochemical & Molecular Studies of the Oxidative Stress and Antioxidant Capacity in Saudi Women with Recurrent Miscarriage

Mourad Aboul-Soud, King Saud University, King Saudi Arabia

Regulation of Age-Related Hypertension by Modulation of *in Vivo* Redox

Kumuda C. Das, Texas Tech University Health Sciences, USA

Study of the Prolonged Consumption of two Species of Açai, in two Different States of Processing (Pasteurized or Not) on Postprandial Glycemia in Marathon Runners

Leandro Camargo Neves, Federal University of Roraima, Brazil

19:15 End of Second Day

20:00 Dinner in a French Typical Restaurant

If you would like to participate, please register before May 31 directly on website.

Day 3 - June 24, 2015

08:25 Opening of the Third Day

Session 3 - Oxidative Stress, Ageing & Longevity

08:30 Oxidative Stress and Aging: Role of Mitochondria & Maillard Reaction

Ladislav Robert, Hôtel-Dieu, France

08:55 A Novel Paradigm for Oxidative and Nitrosative Stress in a Precocious Aging Syndrome

Miria Ricchetti, Institut Pasteur, France

09:20 Nrf2 Activation by Resveratrol Protects Skin against Acute Oxidative Stress, through Glutathione Mobilization

Laurent Marrot, L'Oréal, France

09:45 Short Oral Presentations (5 + 2 minutes)

Mitochondrial Activations in Pancreatic Beta-Cells: Ca²⁺- and Redox- Dependent Signal Transduction

Umberto De Marchi, Nestlé Institute of Health Science, Switzerland

Epigenetic Regulation of Redox Enzyme System

Jayasri Nanduri, The University of Chicago, USA

High Dose Resveratrol in Human Subjects over 84 Days: Implications on Plasma Levels of Resveratrol

Jeremy J. Johnson, University of Illinois, USA

Antioxidant Activity of Cocoa Stem Cells Extract for Extrinsic and Intrinsic Cytoprotection

Corinne Reymermier, BASF Beauty Care Solutions France, France

Interleukin33 is Critical for Controlling Tissue Oxidative Stress and Aging through Regulation of Disposal of Unwanted Cells

Yahuan Lou, University of Texas Health Science Center, USA

10:20 Coffee Break & Posters Session

Session 4 - Oxidative Stress & Chronic Diseases: Innovations in Predictive & Preventive Medicine

10:50 Depression, Oxidative Stress & Biomarkers: Strategies & Perspectives

Catherine Black, VU University Medical Center, The Netherlands

11:15 Membrane Proteins as Redox Hubs in the Brain

Hajjeva Parvana, Johannes Gutenberg University, Germany

11:40 Role of Reactive Oxygen Species in the Pathophysiology and Treatment of Systemic Sclerosis

Frédéric Batteux, Université Paris Descartes, France

12:05 Role of Oxidative Stress in Liver Injury Induced by Drugs and other Xenobiotics

Bernard Fromenty, INSERM, Université de Rennes, France

12:30 Lunch Break & Posters Session

14:00 Oxidative Stress-Related Mechanisms Affecting Response to Aspirin in Diabetes Mellitus

Francesca Santilli, D'Annunzio University Center of Excellence of Aging, Italy

14:25 The Truncated Thioredoxin Rod-derived Cone Viability Factor induces Cone Survival by Stimulating Aerobic Glycolysis

Thierry Lèveillard, INSERM, France

14:50 The Nrf2/HO-1 Axis as a Therapeutic Target against Oxidative Stress and Inflammation

Roberta Foresti, INSERM, Université Paris-Est, France

15:15 Oxidative Stress in Ruminants: Enhancing Productivity through Antioxidant Supplementation

Pietro Celi, University of Sydney, Australia

15:40 Short Oral Presentations (5 + 2 minutes)

Antioxidative Functions of Natural Pigments on Gastric Ulcer and Cancer

Hyo-Ihl Chang, Korea University Anam-Dong, Korea

Clinical Applicability of Thioredoxin-Albumin Fusion Protein for Oxidative Stress Related Diseases

Masaki Otagiri, Sojo University, Australia

N-Acetylcysteine (NAC) in Huntington's Disease (HD) and Affective-Like Disorders

Thibault Renoir, University of Melbourne, Australia

16:00 Lunch Break & Posters Session

16:30 Short Oral Presentations (5 + 2 minutes)

Biodisponibility Study of an Innovative Orobuccal Formulation of Glutathione

Daniela Buonocore, University of Pavia, Italy

Novel Use of a Superoxide Radical Dismutating Agents as a Therapeutic Approach to Hamper the Progression of Parkinson's Disease

Marco Bisaglia, University of Padova, Italy

Glutathionylated Proteins Released in Inflammation and Infection

Paola Checconi, Sapienza University of Rome, Italy

Oxidative Stress and the Aging Eye

Julie Lim, University of Auckland, New Zealand

Maintenance of Glutathione Homeostasis in the Eye – Is the Lens a Reservoir of Glutathione?

Ankita Umpathy, University of Auckland, New Zealand

Genetic Variations in the Oxidative Stress Related Genes are Associated with Pulmonary Complications in Community-Acquired Pneumonia

Lyubov E. Salnikova, Russian Academy of Sciences, Russia

Antioxidant Therapy in Inducible Mild Colitis in Rats: Does N-Acetyl-Cysteine and Lipoic Acid Work?

Marilia O.F. Goulart, *Instituto de Química e Biotecnologia, Universidade Federal de Alagoas, Brazil*

Are Vitamin Supplements Good for Healthy Aging?

Eugene Jansen, *National Institute for Public Health and the Environment, The Netherlands*

The Effect the “Poisonous” Beta-Carotene and the “Wholesome” Vitamin E on DNA Adduct Formation

Guido R. Haenen, *Maastricht University, The Netherlands*

Reaction Dynamics of Carotenoids as Antioxidant

Ruimin Han, *Renmin University of China, China*

Oxidative DNA Damage Induced by Blood Pressure-Regulating Hormones and Possible Strategies for Prevention

Nicole Schupp, *University of Düsseldorf, Germany*

Xanthohumol Improved Neuro-Inflammation Process and Dysfunction of Synaptic Plasticity in the Brain of Female Senescence Accelerated Mouse

Roman Kireev, *University Complutense of Madrid, Spain*

Mushrooms as an Exciting and Innovative Source of Natural Antioxidants: The Case of the Oyster Basidiomycete *Pleurotus Ostreatus*

Joaquín Humberto Morris, *University of Oriente, Cuba*

18:05 Round Table Discussion

- Oxidative Stress and Antioxidants: The “positive” and “negative” sides of the coin
- The subtle balance between redox homeostasis, ROS, mitochondria & microbiota
- Towards a golden standard of Oxidative Stress & antioxidants in medicine

18:20 Closing Keynote Lectures

Miroslav Radman, *INSERM, France*

Frédéric Batteux, *Université Paris Descartes, France*

18:30 End of ISANH Antioxidants Conference

ISANH ANTIOXIDANTS 2015 INSTITUTIONAL PARTNERS

