22nd International Conference on

Oxidative Stress Reduction, Redox Homeostasis & Antioxidants

PARIS REDOX 2020

October 8-9, 2020

VIRTUAL CONGRESS

INTERNATIONAL SOCIETY OF ANTIOXIDANTS IN NUTRITION & HEALTH

WWW.ISANH.NET
Dear Colleagues,

It is our great pleasure to present you the 22nd International Conference on Oxidative Stress Reduction, Redox Homeostasis and Antioxidants - Paris Redox 2020 – which will be organized as Virtual Congress, on October 8-9, 2020.

I am honored to serve as your new President for the upcoming Paris Redox World Congress 2020. Hereby I will also express my gratitude to professor Frédéric Batteux for his excellent leadership in the past years. In the upcoming meeting, we will discuss Redox signaling in the light of the Redox Signaling Interactome (RSI) implicating a role for reactive oxygen species, reactive nitrogen species and reactive sulfur species in the modulation of redox signaling pathways. The inclusion of multiple reactive species as driving forces of redox signaling will significantly broaden our scope. Abstracts on mechanisms by which cells respond to RSI stress and thereby prevent structural and functional damage and death are welcomed to a great extent. We also aim to highlight downstream biochemical alterations induced by RSI stress and evaluate recent advances on disease biomarkers, related to RSI alterations. To further elucidate the various mechanisms of redox control in oxidative stress-related pathologies and aging, we welcome data on the identification and dissection of the function of the key players in reactive species-related redox processes.

Paris Redox 2020 will make an important contribution to a better understanding of RSI-induced redox control in physiological and pathological conditions that will lead to novel therapeutic and disease-preventive agents. Clinical studies in the field are therefore of eminent importance.

In response to the critical situation and evolution of the COVID-19, the organizing Committee decided to organize Paris Redox 2020 as a Virtual Congress.

If you cannot attend in-person or virtual due to the restriction and time zone difference, you can access on-demand videos to this entire event, including synced audio/video and slides, access to the exhibit hall, and a poster session.

Among the strategic topics which will be discussed:

- COVID-19 & Oxidative Stress
- Redox 2020: Recent Advances & Perspectives
- Oxidative stress, Microbiota Diversity, Mitochondria, Redox and Inflammation
- Reactive Species Interactome Evaluation
- Redox & Fasting 2020
- Paris Redox Scientific & Innovation Awards 2020

We invite you to submit papers on reactive oxygen species, reactive nitrogen species and reactive sulfur species related to health and disease ranging from fundamental and technical aspects to experimental and clinical diseases.

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

Prof. Harry van Goor
President of ISANH
Department of Pathology and Medical Biology, University Medical Center
Groningen, The Netherlands
22nd ISANH International Conference on 
Oxidative Stress Reduction, Redox Homeostasis & Antioxidants 
PARIS REDOX 2020 
October 8 - 9, 2020 - Virtual Congress

Discussion & Scientific - Innovation Awards
- Covid-19 & Oxidative Stress
- Redox 2020: Recent Advances & Perspective
- Microbiota Diversity, Redox and Inflammation
- Reactive Species Interactome Evaluation
- Redox Medicine: Innovations & Clinical Studies
- Paris Redox Scientific & Innovation Awards 2020

Important Dates
- Short Oral presentation: Sep. 4
- Poster presentation: Sep. 14

Special Session
- Covid-19 & Oxidative Stress

Paris Redox 2020 Speakers

Angiotensin-converting enzyme-2 (ACE2), SARS-CoV-2 and pathophysiology (COVID-19)
Harry van Goor, President of ISANH & University Medical Center, The Netherlands

Are Reactive Sulfur Species The New Reactive Oxygen species?
Kenneth R. Olson, Indiana University School of Medicine in South Bend, USA

Oxidative Stress: Eustress and Distress
Helmut Sies, Heinrich Heine University Düsseldorf, Germany

Hemin-induced oxidative death – linked to labile iron
Melanie Merkert, University of Marburg, Germany

Iron: Innocent bystander or vicious culprit in COVID-19 pathogenesis?
Marvin Edeas, Institut Cochin - University Paris Descartes, France

Effects of Photobiomodulation on Cancer Cells through the Reactive Species Interactome, Proteases and Bioenergetic Metabolism
Laurent Chatre, Université de Caen-Normandie, France

Interaction between Hydrogen Sulphide and Nitric Oxide in the Diabetic Cardiomyopathy
Jin-Song Yan, National University of Singapore, Singapore

Red Blood Cells as a Central Hub in the Interaction among Reactive Species
Miriam Margherita Cortese-Krott, Heinrich Heine University Düsseldorf, Germany

Mitochondria, Oxidative Stress and Preeclampsia
Enrique Terán, Universidad San Francisco de Quito, Ecuador

Regulation of Oxidative Stress and Cell Death by Lysosomal Iron
Jonathan Geiger, University of North Dakota, USA

Ferroptosis and Necroptosis in Stroke
Marietta Zille, University of Luebeck, Germany

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**Paris Redox 2020**
22nd International Conference on
Oxidative Stress, Redox Homeostasis & Antioxidants 2020
October 7-8-9, 2020 – Virtual Congress & Workshop

**Day 1 – Wednesday, October 7, 2020**

**Workshop**
How to Evaluate Oxidative Stress & Antioxidants Activities?

Full agenda and information, please follow this link
[https://www.isanh.net/workshop/](https://www.isanh.net/workshop/)

**Day 2 – Thursday, October 8, 2020**

**Paris Redox 2020 Agenda**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1 – Redox 2020: Recent Advances &amp; Perspectives</th>
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<tbody>
<tr>
<td>07:45</td>
<td>Welcoming &amp; Registration of Attendees</td>
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<tr>
<td>08:20</td>
<td>Opening of Paris Redox World Conference &amp; Introduction Remarks</td>
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<td><em>Harry van Goor</em>, President of Paris Redox 2020, University Medical Center, Groningen, The Netherlands</td>
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<td>08:30</td>
<td>Introduction to Redox 2020: Today &amp; Tomorrow</td>
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**Session 1 – Redox 2020: Recent Advances & Perspectives**

<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>09:10</td>
<td>Oxidative stress: Eustress and distress</td>
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<td><em>Helmut Sies</em>, Heinrich Heine University Düsseldorf, Germany</td>
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<td>Redox &amp; Fasting 2020: Periodic fasting improves blood oxidative stress profile in humans</td>
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<td><em>Dimitrios Kouretas</em>, University of Thessaly, Greece</td>
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<td>Mitochondria, oxidative stress and preeclampsia</td>
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<td><em>Enrique Terán</em>, University San Francisco de Quito, Ecuador</td>
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<td>Red blood cells as a central hub in the interaction among reactive species</td>
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<td><em>Laurent Chatre</em>, CNRS, UNICAEN, CEA, Université de Caen-Normandie, France</td>
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| Time  | 10:30 Coffee Break & Poster Session |

<table>
<thead>
<tr>
<th>Time</th>
<th>Short oral presentations</th>
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<tbody>
<tr>
<td>11:20</td>
<td>Physical plasma as source of reactive species: cysteine as molecular beacon</td>
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<td><em>Giulliana Bruno</em>, Leibniz Institute for Plasma Science and Technology, Germany</td>
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<td>Roles of SUMO1-mediated sumoylations in lens development and catactogenesis</td>
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<td><em>David W. Li</em>, Sun Yat-sen University, China</td>
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<td>Maximal excercice-induced oxidative damage to proteins depends on body composition in young men</td>
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<td><em>Mateusz Mardyla</em>, University of Physical Education in Krabow, Poland</td>
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<td>The role of aquaporin-8 (AQP8) in cytokine-mediated beta-cell toxicity</td>
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<td><em>Christina Schaal</em>, Hannover Medical School, Germany</td>
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12:35 Lunch break, Exhibition & Poster session

Session 2 – Microbiota Diversity, Redox and Inflammation

13:35 Sildenafil (H2S and NO donor) for fetal growth restriction, a promise not fulfilled
Wessel Ganzevoort, Academisch Medisch Centrum Universiteit Amsterdam, The Netherlands

Probiotic inhibition of microbiota-mediated oxidative stress in the gastrointestinal tract
Stan Kubow, School of Human Nutrition, McGill University, Canada

Systemic oxidative stress, microbiota and redox-targeted therapeutics in inflammatory bowel disease
Arno Bourgonje, University Medical Center Groningen, The Netherlands

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

15:10 Coffee Break, Exhibition & Poster Session

Session 3: ROS, RNS, RSS & Antioxidants: Recent Advances on Evaluation

15:30 Are reactive sulfur species the new reactive oxygen species?
Kenneth R. Olson, Indiana University School of Medicine in South Bend, USA

Reductive Stress Causes Pathological Cardiac Remodeling and Diastolic Dysfunction
Rajasekaran Namakkal-Soorappan, the University of Alabama at Birmingham, USA

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

10:30 Coffee break, Exhibition & poster session

Session 4: Redox Medicine: Innovations & Clinical Studies

Day 3 – Friday, October 9, 2020

9:00 Interaction between hydrogen sulphide and nitric oxide in the diabetic cardiomyopathy
Jin-Song Bian, Southern University of Science and Technology, China

The role of oxidative stress in the initiation and progression of systemic sclerosis
Udo Mulder, University of Groningen, The Netherlands

Upregulation and functional role of hydrogen sulfide producing enzymes in cancer
Csaba Szabo, University of Fribourg, Switzerland

Bioactive lipids-based therapeutic approach to cancer
Undurti Das, UND Life Sciences, USA

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

Impairment of glutathione system and lipid peroxidation in patients with Hemoglobin H (HbH) disease: Possible role of HbH concentration
Ionnis Papassotiriou, “Aghia Sophia” Children’s Hospital, Greece

Antioxidants in male infertility treatment – Improving sperm motility
Biljana Markovska, PZU Plodnost Bilota, North Macedonia
Therapeutic ROS provide immunoprotection against malignant melanoma
Ramona Clemen, Leibniz Institute for Plasma Science and Technology, Germany

12:35 Lunch break, Exhibition & poster session

Special Session – Cytokine Storm, Iron & Oxidative Stress in COVID-19 patients: A Vicious Circle

14:00 Iron: Innocent bystander or vicious culprit in COVID-19 pathogenesis?
Marvin Edeas, Institute Cochin - University Paris Descartes, France

Angiotensin-converting enzyme-2 (ACE2), SARS-CoV-2 and pathophysiology of coronavirus disease 2019 (COVID-19)
Harry van Goor, University Medical Center, Groningen, The Netherlands

Potential role of hydrogen gas in the treatment of Kawasaki disease
Ho-Chuang Kuo, Kaohsiung Chang Gung Memorial Hospital, Taiwan

Short oral presentations

Symposium: The crosstalk between ferroptosis, regulated necrosis and mitochondrial death signaling in human disease

15:00 An unexpected antiferroptotic activity of a sterol metabolite
Jose Friedmann-Angell, University of Würzburg, Germany

Ferroptosis in the heart
Fudi Wang, University School of Medicine, China

Regulation of oxidative stress and cell death by lysosomal iron
Jonathan Geiger, University of North Dakota, USA

Integrating signaling pathways of ferroptosis and necroptosis at mitochondria
Carsten Culmsee, University of Marburg, Germany

Ferroptosis and necroptosis in stroke
Marietta Zille, University of Luebeck, Germany

Hemin-induced oxidative death – linked to labile iron
Melanie Merkel, University of Marburg, Germany

Role of necroptosis and iron deposits in traumatic brain injury
Antonia Clarissa Wehn, Ludwig Maximilian University of Munich, Germany

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

16:20 Coffee break & poster session

16:50 Short oral presentations

The relationship between vitamin D deficiency and oxidative stress can be independent of age and gender
Alice Câmara, Federal University of Rio Grande do Norte, Brazil

The effect of vitamin e on oxidative stress and cardiovascular complications in hemodialysis patients
Leila Azouaou Toualbi, Nefissa Hamoud university hospital, Algeria

Oleuropein aglycone counteracts the oxidative stress in Alzheimer’s disease by disrupting amyloid βeta fibrils: investigation of the mechanism of action of this polyphenol from extra virgin olive oil
Simone Brogi, University of Pisa, Italy

17:30 Concluding remarks: Redox 2020

Paris Redox Scientific & Innovation Awards 2020

18:00 End of Paris Redox 2020 Congress
Workshop
How to Evaluate Oxidative Stress & Antioxidants Activities?

Wednesday, October 7, 2020
Online Workshop

In collaboration with the International Society of Antioxidants (ISANH), we are pleased to announce the organization of the first workshop dedicated to Oxidative Stress and Antioxidants Evaluation – How to Evaluate Oxidative Stress & Antioxidants activities? which will be held one day before Paris Redox 2020 Congress, on October 7, 2020.

For more information: www.isanh.net/workshop