SCIENTIFIC PROGRAM

THIRD INTERNATIONAL CONFERENCE ON CELLULAR ENVIRONMENTAL STRESSORS IN BIOLOGY AND MEDICINE: FOCUS ON REDOX REACTIONS

Day 1 – Wednesday June 25, 2014

13:00-17:00  Registration
13:45-14:00  Welcome
14:00-15:00  **Opening Lecture**

Chairperson: **Giuseppe Poli** (Italy)

*Linking ambient air pollution effects with oxidative biology and immune responses.*
**Frank Kelly** (UK)

**Session I - Pollution and diet-dependent carcinogenesis**

Chairpersons: **Huveyda Basaga** (Turkey) and **Henry J. Forman** (USA)

15:00-15:30  *Inflammatory mediators linking obesity and cancer.*
**Young-Joon Surh** (South Korea)

15:30-16:00  *Molecular damage and lung tumors in cigarette smoke-exposed mice.*
**Alberto Izzotti** (Italy)

16:00-16:30  *Smoke signals: activation of epithelial mesenchymal transition.*
**Henry Forman** (USA)

16:30-17:00  *Molecular pathogenesis of cigarette smoking-induced stable Chronic obstructive pulmonary disease (COPD).*
**Gaetano Caramori** (Italy)

17:00-17:30  Coffee Break

Chairpersons: **Frank Kelly** (UK) and **Fulvio Ursini** (Italy)

17:30-18:00  *Dietary inducers of an adaptive stress response.*
**Marc Birringer** (Germany)

18:00-18:30  *15-Hydroxyprostaglandin dehydrogenase as a novel target for chemoprevention of inflammation-associated carcinogenesis.*
**Hey-Kyung Na** (South Korea)

18:30-19:00  *The electronic cigarette: a blessing, or a villain in disguise.*
**Abraham Reznick** (Israel)
19:00-19:15  *Atg7-dependent autophagy protects melanocytes against premature senescence and contributes to the control of the Nrf2 stress response.*  
**Florian Gruber** (Austria)

19:15-19:30  *Oxygen metabolism in the cardiorespiratory system after an acute exposure to Ni-doped nanoparticles.*  
**Natalia D. Magnani** (Argentina)

20:00-21:30  Welcome reception
Day 2 – Thursday June 26, 2014

Session II. Environmental impact on plant and aquatic organisms

Chairpersons: Marcela Simontacchi (Argentina) and Francesco Regoli (Italy)

9:00-9:30  Role of ROS and RNS production in the redox regulation of symbiosis.  
           Alain Puppo (France)

9:30-10:00  Environmental pollution and function of plant leaves.  
           Elina J. Oksanen (Finland)

10:00-10:30  Redox signaling and stress tolerance in plants.  
           Sergi Munné-Bosch (Spain)

10:30-11:00  Nitric oxide and plant iron homeostasis.  
           Marcela Simontacchi (Argentina)

11:00-11:15  Coffee Break

Chairpersons: Alain Puppo (France) and Elena Fabbri (Italy)

11:15-11:45  Oxidative stress from aquatic invertebrates to humans.  
           Laura Canesi (Italy)

11:45-12:15  Oxidative stress in ecotoxicology: from the analysis of individual antioxidants to a more integrated approach.  
           Francesco Regoli (Italy)

12:15-12:30  The effects of marine environmental changes on the transcriptome of the bottlenose dolphin (Tursiops truncatus).  
           Annalaura Mancia (Italy)

12:30-12:45  Bacterial killing due to ROS production in photodynamic therapy (PDT) is enhanced by synergistic effect of potassium iodide.  
           Daniela Vecchio (USA)

Group photo

12:45-14:00  Lunch and poster viewing

Session III- Redox reactions and inflammation in disease progression

Chairpersons: Mario Comporti (Italy) and Josiane Cillard (France)
14:00-14:30  Short-term cigarette smoke exposure induces reversible changes in energy metabolism and cellular redox status independent of inflammatory responses in mouse lungs.  
**Enrique Cadenas** (USA)

14:30-15:00  Macrophage plasticity and polarization in chronic inflammation and cancer.  
**Antonio Sica** (Italy)

15:00-15:30  Inflammatory and redox reactions in colon carcinogenesis.  
**Fiorella Biasi** (Italy)

15:30-16:00  Autophagy versus apoptosis in high cholesterol induced cardiac failure.  
**Nesrin Ozer** (Turkey)

16:00-16:15  Coffee Break

Chairpersons:  
**Carlo Cervellati** (Italy) and  
**Nesrin Ozer** (Turkey)

16:15-16:45  Role of Nrf2 and sequestosome1/p62 in vascular oxidative stress and arterial remodeling.  
**Giovanni Mann** (UK)

16:45-17:15  Oxidative stress in Rett syndrome: chicken egg puzzle?  
**Joussef Hayek** (Italy)

17:15-17:30  Inflammation and oxidative balance: two key players engaged in the game of neuroblastoma chemoresistance.  
**Barbara Marengo** (Italy)

17:30-17:45  Novel redox-mediated anti-inflammatory pathways in white adipose tissue.  
**Katia Aquilano** (Italy)

17:45-18:00  Inflammation and plaque vulnerability: involvement of TLR4 activated by 27-hydroxycholesterol and 4-hydroxynonenal.  
**Simona Gargiulo** (Italy)

18:00-18:15  Oxidative stress and cerebral cavernous malformations (CCM): from disease mechanisms toward prevention and treatment.  
**Eliana Trapani** (Italy)

18:15-19:00  **Keynote Lecture**

Chairperson:  
**Fabio Virgili** (Italy)

*Flavanols and vascular health: a leading case to build evidence-based recommendations for bioactives.*  
**Cesar G. Fraga** (Argentina)

20:30  Gala Dinner and Awards Ceremony
Day 3 – Friday June 27, 2014

Session IV. Tolerance and adaptation to environmental stressors

Chairpersons: Enrique Cadenas (USA) and Cesar Fraga (Argentina)

09:00-09:30  A conserved role for the 20S Proteasome and the Nrf2 transcription factor in transient and reversible adaptation to oxidative stress.  
             Kelvin Davies (USA)

09:30-10:00  Pulsed high oxygen induces hypoxic-like responses in humans.  
             Fabio Virgili (Italy)

10:00-10:30  Human pharmaceuticals as emerging aquatic contaminants: insights into adaptive and stress responses in marine molluscs.  
             Elena Fabbri (Italy)

10:30-10:45  Nitroxides protect against protein glycoxidation  
             Izabela Sadowska-Bartosz (Poland)

10:45-11:00  Coffee Break

Session V. Adapted lifestyle and pharmaceutical interventions

Chairpersons: Maria Ciriolo (Italy) and Concetta Gardi (Italy)

11:00-11:30  Mindfulness-based interventions, a top down strategy to reduce stress and improve resilience.  
             Fabio Giommi (Italy)

11:30-12:00  Redox regulation of E3 ubiquitin ligases and their role in skeletal muscle atrophy  
             Carmen Gomez (Spain)

12:30-13:00  Antioxidants as therapeutic agents for liver disease.  
             Gaetano Serviddio (Italy)

13:00- 14.00  Lunch

Chairpersons: Carmen Gomez (Spain) and Giuseppe Valacchi (Italy)

14:00-14:30  Mechanisms underlying the beneficial health effects of (-)-epicatechin and derived procyanidins.  
             Patricia Oteiza (USA)

14:30-15:00  Blood thiols and erythrocyte glutathione-S-transferase: in vivo biomarkers of the systemic response of Nrf2 to xenobiotics, endobiotics and food bioactives.  
             Francesco Galli (Italy)
15:00-15:15  *Arbutin alleviates oxidative stress generated through tyrosinase reaction with L-tyrosine and L-DOPA: tested by electron paramagnetic resonance (EPR)-spin trapping method.*  
   **Mika Tada** (Japan)

15:15-15:30  *Grape seed flour prevents obesity related characteristics: metabolic diseases and changes microbiome in hamsters fed high fat diets.*  
   **Wallace Yokoyama** (USA)

15:30 -15:45  *Extra virgin olive oil polyphenols protect human intestinal cells against oxidative damage.*  
   **Monica Deiana** (Italy)

15:45-16:00  *Antioxidant capacity and phenolic composition of red wines from various grape varieties: specificity of Pinot Noir.*  
   **Joël Pincemail** (Belgium)

16:00  **Concluding Remarks**  
   Giuseppe Valacchi (Italy)  
   Giuseppe Poli (Italy)  
   Concetta Gardi (Italy)