

**21<sup>st</sup> ISANH REDOX CONGRESS & 4<sup>th</sup> ISANH MIDDLE EAST WORLD CONGRESS**

# **REDOX, WASTE, MICROBIOTA**

**SULTAN QABOOS UNIVERSITY**

**4-5 MARCH 2019 - MUSCAT, OMAN**



**Sultan Qaboos University - Muscat, Oman**

**March 4-5, 2019**

Session 1

**REDOX**

Session 2

**WASTE**

Session 3

**MICROBIOTA**

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# REDOX, WASTE, MICROBIOTA

## SULTAN QABOOS UNIVERSITY

4-5 MARCH 2019 - MUSCAT, OMAN

Session 1

REDOX

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MICROBIOTA

### AMONG THE SPEAKERS



*Metabolic syndrome & redox: The redox system in diabetes type 1 and type II*

Harry van Goor, University Medical Center Groningen, The Netherlands



*Cancer and redox: Recent advances and strategies*

Martin Bergö, Sahlgrenska Cancer Center, Sweden



*Reproduction, Redox & Fertility: Strategic role of antioxidants*

Cristian O'Flaherty, McGill University, Canada



*Antioxidant and anticarcinogenic properties of edible Omani Wild plants*

Mostafa Waly, Sultan Qaboos University, Oman



*Reactive oxygen species mediate the anticancer activity of thymoquinone*

Hala Gali-Muhtasib, American University of Beirut, Lebanon



*Pomegranate (Punica granatum) attenuates cigarette smoke-induced nephropathy by down regulating Nox4 NADPH Oxidase*

Assaad A. Eid, American University of Beirut, Lebanon



*Sepsis and Microbiota: Metabolites of the microbiota in Sepsis*

Natalia Beloborodova, Negovsky Research Institute, Russia



*Valorization of olive leaves through the recovery of their polyphenol content*

Esperance Debs, University of Balamand, Lebanon



*Development of antioxidant therapeutic strategies for age-related macular degeneration*

Xinhua Shu, Glasgow Caledonian University, Scotland



*Antioxidants, food and health: Strategies and Perspectives*

Ivan M Petyaev, Lycotec Ltd, United Kingdom



*Redox and Muscle Regeneration: Strategic role of micro RNA*

Jozef Dulak, Jagiellonian University, Poland



*Antioxidant diet effect on Microbiota*

Annalisa Terranegra, Sidra Medicine, Qatar



*Middle East Waste 2019: Challenge and Perspective*

Richard Maroun, Saint Joseph University, Lebanon



*A deleterious cascade: chronic stress response, intestinal microbiology and food craving*

Gustav F. Jirikowski, Friedrich Schiller University Jena, Germany



*Agro-industrial Byproducts and Waste Valorization: Towards sustainable bioenergy approaches*

Zeina Hobaika, Saint Joseph University of Beirut, Lebanon



*Microbiota-gut-brain axis in brain disease: Overview of current evidence and novel immunomodulatory treatment options*

Maria Cecilia Giron, University of Padova



*Valorization of pomegranate peels using a combination of deep eutectic solvents with Ired-Irad® technology*

Hiba Rajha, Saint Joseph University of Beirut, Lebanon



*Clinical and molecular anti-oxidant pharmacologic strategies for prevention of retinopathy of prematurity and morbidities due to oxidative stress in premature newborns*

Jacob Aranda, State University of New York, USA

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Dear Colleagues,

On behalf of the International Society of Antioxidants in Nutrition and Health in the Middle-East (ISANH - ME) and the Scientific Committee, we are pleased to announce the **21<sup>st</sup> ISANH Redox Congress**, the **4<sup>th</sup> ISANH-ME Congress 2019** will be held at the Sultan Qaboos of Muscat, Oman, on March 4-5, 2019.

Oman will host a three days conference dedicated to three Hot Topics:

### **Day 1 – Session 1: Redox, Health & Medicine**

- Oxidative stress & antioxidants recent advances in Health and Medicine.
- Antioxidants and oxidative stress in cardiovascular diseases, metabolic syndrome, obesity, hyperlipidemia and diabetes. Innovations in the Middle East.

In this session the impact of oxidative stress, antioxidants and natural ingredients in diseases and in health will be treated.

### **Day 2 - Session 2: Bio-Waste Valorization: Antioxidants and Bioactive Molecules from Food Waste, A New Challenge for the Middle East**

The aim of this session is to highlight our knowledge in the food waste valorization processes and to encourage all stakeholders in the food waste field in the Middle East to participate in order to put in place a regional task force for an innovative initiative aiming towards a reliable plan for better food waste and byproducts management and valorization.

Food waste valorization practices have gained much attention lately as a means of sustainable management, which can increase the profit for local economies. The value of food waste is associated with their content in dietary fibers and several bioactive molecules which can be capitalized in the food, pharmaceutical, cosmetic and nutraceutical industries. So far, these materials constitute an underexploited source for the recovery and production of natural compounds for food and other multiple industrial applications especially in the Middle East where more than one trillion dollars' worth of food are wasted each year. Middle East nations are acknowledged as being the world's top food wasters.

### **Session 3: Microbiota & Metabolic Syndrome Middle East conference**

During this session, we will try to answer many questions, among them:

- Can we modulate the quality and diversity of human microbiota?
- What are the strategic mediators of gut microbiota?
- What is the influence of gut microbiota on the development and progression of chronic diseases?

Abstract submissions for consideration of potential inclusion as oral or poster presentation are welcome for all these topics.

With this exciting program, we look forward to welcoming you at the Sultan Qaboos University in Muscat, Oman next March.



**Prof. Richard Maroun**

President of ISANH Middle East  
Dean of Faculty of Sciences, Saint Joseph University, Lebanon



**Prof. Jumana Saleh**

Vice-President of ISANH Middle East  
College of Medicine of Sultan Qaboos University, Muscat, Oman

## Day 1 – March 4, 2019

07:30 – 9:00 Welcoming & Registration of Attendees: Badges & Material Distribution

9:00-10:00 Opening Ceremony of ISANH Middle East Congress

10:00 Coffee Break and Posters

Session 1

**REDOX**

### Session 1: Redox, Health & Medicine

10:30 **Cancer and Redox: Recent Advances and Strategies**  
*Martin Bergö*, Salhlgrenska Cancer Center, Sweden

10:55 **Metabolic Syndrome & Redox: The redox System in Diabetes type 1 and type II**  
*Harry van Goor*, University Medical Center Groningen, The Netherlands

11:20 **Reproduction, Redox & Fertility: Strategic role of Antioxidants**  
*Cristian O'Flaherty*, McGill University, Canada

11:45 **Reactive oxygen species mediate the anticancer activity of thymoquinone**  
*Hala Gali-Muhtasib*, American University of Beirut, Lebanon

12:10 Lunch Break and Posters

13:30 **Redox and Muscle Regeneration: Strategic Role of Micro RNA**  
*Jozef Dulak*, Jagiellonian University, Poland

13:55 **Antioxidants, Food and Health: Strategies and Perspectives**  
*Ivan M Petyaev*, Lycotec Ltd, United Kingdom

14:20 **Development of antioxidant therapeutic strategies for age-related macular degeneration**  
*Xinhua Shu*, Glasgow Caledonian University, Scotland

14:45 **Clinical and molecular anti-oxidant pharmacologic strategies for prevention of retinopathy of prematurity and morbidities due to oxidative stress in premature newborns**  
*Jacob Aranda*, State University of New York Downstate Medical Center, USA

15:10 **H<sub>2</sub>S is a unique mediator of NO - signalling activity in oxidative stress responses**  
*Svetlana Vasilieva*, Russian Academy of Sciences, Russian Federation

15h35 Coffee Break and Posters

16:05 **Antioxidant and Anticarcinogenic Properties of Edible Omani Wild Plants**  
*Mostafa Waly*, Sultan Qaboos University, Oman

16:30 **TRPM2 channel as potential drug target for treating epilepsy: Involvement of oxidative redox cycle**  
*Mustafa Naziroglu*, Suleyman Demirel University, Turkey

17:00 **Short Oral Presentations**

**Assessment of the probiotic bacterium enterococcus faecium nm213 in respect to antiviral ability and the presence of bacteriocin/ enterocin genes**  
*Nahla Mansour*, National Research Centre, Egypt

**Oxidative stress induced by static magnetic field in yeast and green chemistry biosynthesis of silver nanoparticles**  
*David Sheehan*, Khalifa University of Science and Technology, UAE

**Extraction of fucoidans from brown seaweed sargassum ilicifolium and their protective effects against gastric cancer in rats**  
*Marwa Hamed Said Al-Muqbal*, Sultan Qaboos University, Oman

**Redox imbalance and reductive stress in diabetes**  
*Liang-Jun Yan*, University of North Texas Health Science Center, USA

**Steroidal Glycoalkaloids: Mitochondrial Oxidative stress and their use as potential antioxidant/anticancer drugs**  
*Sirin A Adham*, Sultan Qaboos University, Oman

**Effect of C60 Fullerene water soluble (FWS, C60HyFn) nanoparticles supplemented to ram semen during freeze-processing on sperm viability, oxidative stress, amino acids and fatty acids**  
*Gaffari Türk*, Fırat University, Turkey

18h00 End of the first day

## Day 2 – March 5, 2019

9:00 **Gestational diabetes (GDM) - aspects on hormonal interactions and long-term consequences**  
*Gunnar Norstedt*, Karolinska Institute, Sweden

9:25 **Obstructive sleep apnea and oxidative stress and endothelial injury**  
*Mohammad Al-Abri*, College of Medicine and Health Sciences, Sultan Qaboos University, Oman

9:50 Coffee Break and Posters

Session 2

WASTE

### Session 2: Food Waste Valorization

10:20 **Middle East Waste 2019: Challenge and perspective**  
*Richard Maroun*, Saint Joseph University, Lebanon

10:45 **Pomegranate (*Punica granatum*) Attenuates Cigarette Smoke-induced Nephropathy by Down Regulating Nox4 NADPH Oxidase**  
*Assaad A. Eid*, American University of Beirut, Lebanon

11:10 **Agro-industrial Byproducts and Waste Valorization: Towards sustainable bioenergy approaches**  
*Zeina Hobaika*, Saint Joseph University of Beirut, Lebanon

11:35 **Valorization of pomegranate peels using a combination of deep eutectic solvents with Ired-Irad® technology**  
*Hiba Rajha*, Saint Joseph University of Beirut, Lebanon

12:00 **Valorization of olive leaves through the recovery of their polyphenol content**  
*Esperance Debs*, University of Balamand, Lebanon

12:25 Lunch Break & Posters Session

Session 3

MICROBIOTA

### Session 3: Microbiota & Metabolic Syndrome

13:45 **Microbiota Medicine: Recent Advances & Perspective**  
*Marvin Edeas*, University Paris Descartes, Inserm, France

14:10 **Interaction between diet, microbiota and epigenome: a novel approach to type 1 diabetes**  
*Annalisa Terranegra*, Sidra Medicine, Qatar

14:35 **Sepsis and microbiota**  
**Metabolites of the microbiota in sepsis**  
*Natalia Beloborodova*, Negovsky Research Institute of General Reanimatology, Russia

15:00 **Microbiota, Gut-Brain axis and brain diseases**  
*Maria Cecilia Giron*, University of Padova, Italy

**15:25**      **A deleterious cascade: chronic stress response; intestinal microbiology and food craving**  
*Gustav F. Jirikowski*, Friedrich Schiller University Jena

**15:50**      **Short Oral Presentations**

**Randomized Controlled Trial impacts benefits in gut microbiota and associated metabolites and other potential biomarkers of health promotion among Egyptian adults following the daily consumption of traditional fermented sour sobya**

*Laila Hussein*, National research center, Egypt

**Mitochondrial directed antioxidant therapy in mitigating parkinson's disease progression**

*Preeja Prabhakar*, Sultan Qaboos University, Oman

**17:15**      **Conclusion of OMAN Congress 2019**