

21st ISANH REDOX CONGRESS & 4th 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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Session 1

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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 **21st ISANH Redox Congress**, the **4th 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 Opening Ceremony of ISANH Middle East Congress

9:30 Cancer and Redox: Recent Advances and Strategies
Martin Bergö, Salhlgrenska Cancer Center, Sweden

10:00 Coffee Break and Posters



Session 1: Redox, Health & Medicine

Chairs: Marvin Edeas, Richard Maroun

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 Therapeutic potential of thymoquinone and its effect on regulation and subcellular localization of
bruton's tyrosine kinase (BTK) in B cell lymphoma
Maria Nejjari, University of Brunei Darussalam, Sultanate of Brunei

12:20 Lunch Break and Posters

Chairs: Jumana Saleh, Martin Bergö

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 H2S 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

Chairs: Harry van Goor, Hala Gali-Muhtasib, Josef Dulak

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

16:55 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-Muqbali, Sultan Qaboos University, Oman

Differential effects of fish oil on gut microbiota in diet-induced obese mice

Halima Bensmail, Qatar Computing Research Institute, Hamad Bin Khalifa University,

Redox imbalance and reductive stress in diabetes

Liang-Jun Yan, University of North Texas Health Science Center, USA

Steroid 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, Firat University, Turkey

Mitochondrial function of prostate cancer

Brian Miles, Houston Methodist Hospital, Weill Cornell Medicine affiliate, Department of Urology, USA

Modulatory effect of concomitant administration of sitagliptin and vitamin E on inflammatory biomarkers and oxidative stress parameters in rats fed with high fructose diet

Hussein Frouk Sakr, College of Medicine and Health sciences, Sultan Qaboos University, Muscat, Oman

18h30 End of the first day

Day 2 – March 5, 2019

Chairs: Mustafa Waly, Fahad Al-Zedjali

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 **Short Oral Presentations**

Antioxidant activity of polyphenol- enrich fraction of aquatic waste from rose oil production
Mahmoodreza Moein, University of Medical Sciences, Shiraz, Iran

A comprehensive evaluation of three microfluidic chemiluminescence devices for the determination of total phenolic contents in some fruit juices
Butheina Al Haddabi, Sultan Qaboos University, Oman

12:45 *Lunch Break & Posters Session*



Session 3: Microbiota & Metabolic Syndrome

Chairs: Esperance Debs, Assaad Eid, Maria Cecilia Giron

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

14:10 **Antioxidant diet effect on microbiota**
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 *Coffee Break & Posters Session*

15:50 **A deleterious cascade: chronic stress response; intestinal microbiology and food craving**
Gustav F. Jirikowski, Friedrich Schiller University Jena, Germany

16:15 **Short Oral Presentations**

Mitochondrial directed antioxidant therapy in mitigating parkinson's disease progression
Preeja Prabhakar, Sultan Qaboos University, Oman

16:25 **Concluding remarks of OMAN Congress 2019 by: Marvin Edeas, Richard Maroun, Jumana Saleh**

16:45 **End of the conference**