9th International Conference on Skin Ageing & Challenges

SKIN AGEING & CHALLENGES 2018

Recent Innovations, Biotechnology Products and Devices

February 25 - 27, 2018

Hotel Crowne Plaza Porto
Porto - Portugal

www.skin-challenges.com
High environmental ozone levels and extrinsic skin aging

Kateryna Fuks
Leibniz Research Institute for Environmental Medicine, Germany

Reformulation of Valsartan for treatment of chronic diabetic wounds

Peter Abadir
Johns Hopkins University School of Medicine, USA

Skin: a treasure trove for a plethora of markers

Sanjiv Sharma
Swansea University, United Kingdom

The skin aging exposome: the interplay of UV and pollution

Tamara Schikowski
Leibniz Research Institute for Environmental Medicine, Germany

Skin microbiota & epithelial barrier: recent advances and perspectives

Katharina Bitschar
University of Tübingen, Germany

Messenger RNA processing and cellular senescence in ageing skin fibroblasts

Lorna Harries
University of Exeter, United Kingdom
Day 1 – February 25, 2018

17h30 / 18h30  Registration of Attendees – Badges & Abstracts book Distribution

Day 2 – February 26, 2018

07h30  Registration & Welcoming

08h55  Opening Ceremony

Session 1: Skin Challenges 2018 – State of the Art
Mechanistics Aspects

9h00  What’s new in extrinsic skin aging research – State of the art?
Jean Krutmann, Leibniz Research Institute for Environmental Medicine, Germany

9h25  Keratinocytes as sensors and central players in the immune defense against pathogens
Birgit Schittek, University of Tübingen, Germany

9h50  Skin Frailty: role of the Renin Angiotensin System
Peter Abadir, Johns Hopkins University School of Medicine, USA

10h15  Skin: a treasure trove for a plethora of markers
Sanjiv Sharma, Swansea University, United Kingdom

10h40  Coffee Break, Poster & Exhibition Session

11h25  Messenger RNA processing and cellular senescence in ageing skin fibroblasts
Lorna Harries, University of Exeter, United Kingdom

11h50  Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

Extracellular vesicle mediated cross talk of miRNAs in skin cell aging
Johannes Grillari, Christian Doppler Laboratory for Biotechnology of Skin Aging, Austria

Histone variant H2A.J as a novel biomarker of cellular senescence during human skin ageing
Claudia Rübe, Saarland University, Germany

Involvement of mitophagy in the elimination of damaged mitochondria during the process of UVB-induced senescence
Maria Cavinato, Universität Innsbruck, Austria

Skin mitohormesis by targeting hydroxycinnamic acid derivates to mitochondria
José Teixeira, Center for Neuroscience & Cell Biology, Portugal
Peptides and sugars, derived from plant somatic embryo cultures, attenuates ageing-associated phenotypes in skin cells

Fabio Apone, Arterra Bioscience/Vitalab, Italy

Acute UV exposure impairs NO-mediated cutaneous vasodilatation through degradation of the folate metabolite 5-MTHF

Larry Kenney, The Pennsylvania State University, USA

12h50 Lunch Break, Poster & Exhibition Session

Session 2: Exposomes & Skin Ageing – Recent Scientific Advances

14h00 The skin aging exposome – the interplay of UV and pollution
Tamara Schikowski, Leibniz Research Institute for Environmental Medicine, Germany

14h25 High environmental ozone levels and extrinsic skin aging
Kateryna Fuks, Leibniz Research Institute for Environmental Medicine, Germany

14h50 Deleterious synergy between some particulate matter components and UVA from sunlight contribution of "photo-pollution stress" to skin exposome
Laurent Marrot, L’Oréal Research & Innovation, France

15h10 AtmO3 spheric skin damages: the Ox-Inflammation phenomena
Giuseppe Valacchi, University of Ferrara, Italy

15h35 Coffee Break, Poster & Exhibition Session

16h35 Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

New perspectives on the synergistic effect of multiple environmental stressors on ageing and biomechanical properties of human stratum corneum
Reinhold H. Dauskardt, Stanford University, USA

Multifactorial protection of urban skin via direct and indirect mechanisms
Andrew Salazar, Merck, Germany

Exposome: preventive & curative botanical approach
Aïna Queiroz, ID Bio, France

Cellular signalling pathways implicated in the skin’ response to pollution
Emilie Bony, Greentech, France

Permeation and biochemical interactions of hazardous pollutants in human skin by confocal Raman spectroscopy
Airton Martin, Universidade Brasil, Brazil

Alterations in NO-mediated cutaneous endothelial function with hypertension as defined by the 2017 JNC/AHA guidelines
Lacy Alexander, The Pennsylvania State University, USA

Age-associated dermal stem cell niche dysfunction correlates with reduced SOX2 expression levels
Ander Izeta, Hospital Universitario Donostia, San Sebastian, Spain

VEGF mediates rejuvenation of aged human skin xenografts in young mice
Amos Gilhar, Skin Research Laboratory, Technion, Israel

17h55 End the first day

20h00 Skin Challenges 2018 Dinner
You can register online before February 7.
Day 3 – February 27, 2018

8h55 Opening of the second day

Session 3: Skin Microbiota: Recent Scientific Advances

9h00 Skin ageing and ultraviolet radiation. Is there a role for the skin microbiome?  
Jean-François Doré, International Prevention Research Institute, France

9h25 Skin microbiota & epithelial barrier: recent advances and perspectives  
Katharina Bitschar, University of Tübingen, Germany

9h50 Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

Is skin microbiota beneficial to human skin? Activation of the Nrf2-keap1 pathway via volatiles electrophiles  
Ron Kohen, The Hebrew University of Jerusalem, Israel

The skin microbiota: future challenges  
Mathieu Bey, Greentech, France

Skin microbiome and ageing: a new strategy for skin healthy aging?  
Cécile Clavaud, L’Oréal Research and Innovation, France

Carotenoid rich chocolate and ice cream to support skin health: from sebum to corneocytes and microbiota  
Ivan Petyaev, Lycotec Ltd., United Kingdom

10h40 Coffee Break, Poster & Exhibition Session

11h30 Skin-microbiome communication: human natriuretic peptides as regulators of propionibacterium acnes and staphylococcus aureus biofilm formation  
Andrei Gannesen, University of Rouen Normandy, France

Effect of an atmospheric pollutant, NO2, on bacterial species of skin microbiota  
Xavier Janvier, University of Rouen Normandy, France

Microenvironment impact on cutibacterium acnes: growth, virulence and biofilm formation of acneic and non-acneic strains  
Valérie Borrel, Normandie University, France

Handling a skin microbiome project: scientific watch associated to best practices for sampling, sequencing and analysis  
Ahmad Khodr, L’Oréal Research and Innovation, France

Special Session on Olfaction and the future of Biomarkers:
The evaluation and imaging of body volatils with non-invasive methods

12h10 Introduction by Marvin Edeas, Institut Cochin, Université Paris Descartes, France
A short session will be dedicated to skin challenges and how we will switch to non invasive methods and devices to evaluate the quality of skin. We will talk about Olfactory receptors, Bio-sniff or Sniff Camera and other devices which will be integrated in our Smartphone and may be in our path rooms.

12h20 Gas-imaging system (SNIFF-CAM) of dermal volatiles for skin condition and aging analysis  
Kohji Mitsubayashi, Tokyo Medical and Dental University, Japan

12h45 Lunch Break, Poster & Exhibition Session
Session 4: Algae & Skin Ageing – Interest in Cosmetic

14h00  From chemical ecology to marine biotechnology: bioactives compounds from algae
Claire Hellio, Université de Brest, France

14h25  Marine algae as attractive source to skin care
Edith Filaire, Université Orléans, France

14h50  Original oligosaccharides from a red microalgae: relevant actions on irregular skin patterns
Jean-Paul Cadoret, Greensea Biotechnologies, France

15h15  Learning with the development of bionatural, a unique skin solar protector, with high beta-carotene content from dunaliella microalgae in 1997/8
Vítor Verdelho Vieira, Inácio Valle, Portugal

15h30  Coffee Break, Poster & Exhibition Session

16h00  Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

Selenium preserves keratinocyte stemness and delays senescence by maintaining epidermal adhesion
Walid Rachidi, Grenoble Alpes University, France

Applications of edible bird’s nest (EBN) in cosmetics development
Chan Gallant, The Hong Kong University of Science and Technology, Hong Kong

Quantitative nanohistology of human skin in health and disease
Laurent Bozec, University College London, United Kingdom

Non biological skin models: new tools for cosmetic research? From instrumental to sensory studies
Florine Eudier, Normandie University, France

The skin exposome: pollution, sunlight & beyond and innovative ideas to counteract the damages
Imke Meyer, Symrise, Germany

Activation of keratinocytes in response to repeated-exposure of a cosmetic sensitizer in a 3D skin model
Chloé Raffalli, Université Paris-Sud, France

Evaluation of the effects of intense pulsed light on the structure of collagen
Anna Maeva, University College London, United Kingdom

17h10  Round Table Discussion & Concluding Remarks

17h25  Skin Challenges 2018 Awards

17h30  End of Skin Challenges 2018