Skin Challenges & Ageing 2019 Sessions:
- Draft the state of the art in skin ageing
- Present the different mechanisms involved in Skin Aging
- Discuss the role of microbiota and skin microbiota
- Highlight the recent innovations in skin ageing and photo ageing
- Present the role of lifestyle and circadian rhythm on the skin

Submit your Abstract and Innovation before February 13

Key dates to remember
- Early Bird Registration: Feb. 17, 2019
- Short Oral Submission: Feb. 13, 2019
- Poster Submission: Feb. 17, 2019

Skin Challenges Speakers

Jean Krutmann
Leibniz Research Institute for Environmental Medicine, Germany

Techniques for collecting skin microbiome samples: Limits and perspective
Shigefumi Okamoto
Kanazawa University, Japan

What is the effects of UVA and UVB on the skin microbiome?
Nabiha Yusuf
University of Alabama, USA

Targeting DNA repair in skin: Role of the aryl hydrocarbon receptor
Thomas Haarmann-Stemmann
Leibniz Research Institute for Environmental Medicine, Germany

Explaining human skin perception from barrier and biomechanical properties
Reinhold H. Dauskardt
Stanford University, USA

Rational design of drug carriers to the hair follicles
Nethanel Friedman
The Hebrew University, Israel

Rethinking the definition of hygiene? – Mutual interactions between the human microbiome and the built environment microbiome
Markus Eger
Furtwangen University, Germany

Dialogue between the skin and the microbiota: The immune system is under control
Chantal Pichon
French National Centre for Scientific Research, France

New insights into extrinsic skin aging: Crosstalk between UV and air pollution
Tamara Schikowski
Leibniz Research Institute for Environmental Medicine, Germany

Characterization of the age-associated dermal stem cell dysfunction
Anders Izeta
Instituto Biomonastia, Spain

Application of weighted risk scores to estimate the relative contribution of environmental and genetic factors to skin aging: A step towards individualized cosmetics
Claudia Wigmull
Leibniz Research Institute for Environmental Medicine, Germany

SRB1 as a redox target of pollution induced skin damage
Giuseppe Valacchi
University of Ferrara, Italy

skin-challenges.com
On behalf of the members of the scientific committee, we are pleased to welcome you for the 10th International Conference on Skin Ageing and Challenges which is held on February 25-27, 2019 in Porto, Portugal.

Skin Challenges 2019 is held under the patronage of the International Microbiota Society (IMS) and the International Society of Antioxidants in Nutrition and Health (ISANH).

Ageing is an international issue that has social, economic and individual impacts. Preventing it and decreasing its side effects (all related pathologies) are major challenges for humanity. Thus, the understanding of ageing and in particular skin ageing mechanisms will allow us to live longer, better and healthier.

**During Skin Challenges 2019,** the Scientific Committee will allocate significant time to discuss the latest advances related to skin homeostasis and ageing. Our objective is to provide answers and to give a future vision and trends on how can the current researches delay the side effects of ageing and skin ageing?

We will provide also more time and space to present the recent innovations, biotechnology products and devices.

The aims of Skin Challenges 2019 are to:

- Draft the state of the art in skin ageing
- Present the different mechanisms involved in homeostasis and skin aging but also to address the different tracks and pathways (signaling, transcription factors...) involved in this process
- Discuss the role of microbiota and skin microbiota
- Highlight the recent innovations in skin ageing and photo ageing
- Present the role of life style and circadian rhythm on the skin
- Select recent innovations related to skin

A general discussion will be organized between chairpersons and speakers at the end of the conference.

As always, we very much look forward to seeing you in sunny Porto for this exciting event.

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Prof. Jean Krutmann,
President of Skin Ageing & Challenge 2019
UF – Leibniz Research Institute for Environmental Medecine,
Germany
Scientific Agenda

Chairpersons: Reinhold H. Dauskardt, Marvin Edeas, Markus Egert, Ander Izeta, Nabiha Yusuf, Giuseppe Valacchi, Chantal Pichon, Jean Krutmann, Shigefumi Okamoto, Thomas Haarmann-Stemmann, Tamara Schikowski, Alessandra Napolitano, Carole Nicco

Day 1 – February 25, 2019

17:30-19:00 Registration of Attendees – Badges & Abstracts book Distribution

Day 2 – February 26, 2019

7:30-8h55 Registration & Welcoming

8:55 Introduction by Skin Ageing & Challenges 2019 Chairpersons

Session 1: Skin Ageing & Challenges 2019 – State of the Art

Chairpersons: Marvin Edeas, Jean Krutmann, Reinhold H. Dauskardt

9:00 Crosstalk between different wavelengths regions present in natural sunlight: Implications for photo-protection
Jean Krutmann, Leibniz Research Institute for Environmental Medicine, Germany

9:30 Targeting DNA repair in skin: Role of the aryl hydrocarbon receptor
Thomas Haarmann-Stemmann, Leibniz Research Institute for Environmental Medicine, Germany

10:00 Characterization of the age-associated dermal stem cell dysfunction
Ander Izeta, Instituto Biodonostia, Spain

10:30 Coffee Break & Poster Session

11:00 Explaining human skin perception from barrier and biomechanical properties
Reinhold H. Dauskardt, Stanford University, USA

11:30 New insights into skin fibroblast evolution during ageing
Valérie Haydont, L’Oréal, Paris

12:00 Skin ageing in female scalp: changes in the extracellular-matrix hair follicle environment – a comparison of cultured dermal fibroblasts & hair follicle dermal sheath cells
Rachael Sutherland-Sedman, University of Bradford, United Kingdom
12:15  Lunch Break & Poster Session

Session 2: Life Style, Circadian Rhythm and Skin

Chairpersons: Thomas Haarmann-Stemmann, Giuseppe Valacchi

14:00  New insights into extrinsic skin aging: Crosstalk between UV and air pollution
Tamara Schikowski, Leibniz Research Institute for Environmental Medicine, Germany

14:30  Application of weighted risk scores to estimate the relative contribution of environmental and genetic factors to skin aging: A step towards individualized cosmetics
Claudia Wigmann, Leibniz Research Institute for Environmental Medicine, Germany

15:00  Melanin and skin pigmentation: functional role and application opportunities
Alessandra Napolitano, University of Naples Federico II, Italy

15:30  Coffee Break & Poster Session

Chairpersons: Alessandra Napolitano, Carole Nicco

16:15  SRB1 as a redox target of pollution induced skin damage
Giuseppe Valacchi, University of Ferrara, Italy

16:45  Natural and bioinspired phenolic compounds for the treatment of skin hyperpigmentation
Lucia Panzella, University of Naples Federico II, Italy

Nanocellulose-hyaluronic acid microneedles for cosmetic applications
Daniela Filipa da Silva Fonseca, University of Aveiro, Portugal

Evaluation of collagen fibril damage in ex-vivo porcine model due to ageing and radiation exposure: New techniques for micro and macro evaluation
Anna Romanovna Maeva, University College of London, United Kingdom

Characterization of biochemical Changes in human skin due to the incidence of blue light irradiation by confocal raman spectroscopy
Airton Abrahao Marti, Universidade Brasil Sao Paulo, Brazil

Principal component analysis of facial ageing phenotypes in the Rotterdam study
Luba Milena Pardo, Erasmus Medical Center, The Netherlands

Involvement of inflammasome pathway in ozone induced skin damage
Francesca Ferrara, University of the Studies of Ferrara, Italy

Epidemiology and determinants of facial telangiectasia: A cross-sectional study
Selma Mekic, Erasmus MC, The Netherlands

Evaluation of natural extracts from winemaking waste streams for cosmetic applications
Melanie Santos Matos, Instituto de Biologia Experimental e Tecnológica (iBET), Portugal

18:10  End of the second day

20:30  Skin Challenges 2019 Dinner (to participate, please register online): will be held at the Crowne Plaza

Day 3 – February 27, 2019

Session 3: Skin Microbiota: Recent Scientific Advances

Chairpersons: Markus Egert, Tamara Schikowski

09:00  The built environment microbiome and the human microbiome (Skin & Gut): The new concepts & challenges
Markus Egert, Furtwangen University, Germany

09:30  What is the effects of UVA and UVB on the skin microbiome?
Nabiha Yusuf, University of Alabama, USA
10:00 Techniques for collecting skin microbiome samples: Limits and Perspective
Shigefumi Okamoto, Kanazawa University, Japan

10:30 Coffee Break & Poster Session

Chairpersons: Shigefumi Okamoto, Nabiha Yusuf

11:15 Dialogue between the skin and the microbiota: The immune system is under control
Chantal Pichon, French National Centre for Scientific Research, France

11:45 The spectacle and the skin – Cultivation-based analysis of the bacteriota on spectacles in a university and a nursing home-setting
Birgit Fritz, Hochschule Furtwangen University, Germany

Lactobacillus pentosus extract: Effect on host defense stimulation and skin microbiota
Sandie Gervason, GreenTech, France

12:15 Lunch Break & Poster Session

Session 4: Skin Challenges 2019: Presentation of Innovations

Chairpersons: Ander Izeta, Chantal Pichon

13:30 Rational design of drug carriers to the hair follicles
Nethanel Friedman, The Hebrew University, Israel

14:00 Biomimetic approaches for a positive skin aging: Effect on senescence skin markers
Marion Napoli, GreenTech, France

Peg free topical formulations towards an effective antioxidant delivery to prevent skin ageing
Laurianne Simon, Montpellier University, CNRS, France

How does our skin sense the environment? Exploring opsin photoreceptors and bitter taste receptors in human skin
Ludivine Mur, ASHLAND, Global Skin Research Center, Sophia-Antipolis, France

Disruptive anti-ageing strategy using skin stem cells and preserving skin microbiota balance for healthier skin
Morgane De Tollenaere, Givaudan, France

White-light supercontinuum laser-based multiple wavelength excitation for tcspc-flim of cutaneous nanocarrier uptake in skin models of UV-induced aging of the skin
Ulrike Alexiev, Freie Universität Berlin, Germany

The potential of menthol-fatty acids deep eutectic solvents as skin wound healing enhancers
Ana A. Matias, iBET, Portugal

15:00 Round Table Discussion

16:00 Concluding Remarks by the chairpersons

15:30 Coffee Break & Networking

17:00 End of Skin Challenges 2019