Dear Colleagues,

The scientific committee is delighted to announce to you their newest edition concerning Skin Ageing & Challenges. The 14th International Conference on Skin Ageing and Challenges 2023 will be held on November 9-10, 2023 at Altis Grand Hotel, Lisbon, Portugal and Online.

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.

Skin Challenges 2023 is organized under the patronage of the International Society of Microbiota (ISM).

During Skin Challenges 2023, 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?

During both days, many oral and poster communications will be presented and will cover many hot topics.

Among the Topics which will be discussed during 2 days congress:

- Climate Change & Environment: Consequences for Skin Health
- The Skin Microbiome: A Strategic Player in Health & Disease
- Skin Ageing & Challenges: Epigenetics, Metabolism and Innovations

As always, we are very much looking forward to meeting you.

Prof. Jean Krutmann,
President of Skin Ageing & Challenges 2023,
IUF – Leibniz Research Institute for Environmental Medicine
Leibniz, Germany
Skin Challenges 2023 Speakers

**Increased Temperature in Skin Aging: Mechanistic Insights**
Jean Krutmann, President of Skin Challenges, Leibniz Research Institute for Environmental Medicine, Germany

**Climate Change & Skin: An Overview**
Tamara Schikowskl, Leibniz Research Institute for Environmental Medicine, Germany

**Epigenetic Changes in the Pathogenesis of Hidradenitis Suppurativa**
Mohammad Athar, The University of Alabama at Birmingham, USA

**Clinical trials of Lactiplantibacillus plantarum LB244RF®**
Helena Falholt Elvebakken, Lactobio A/S, Denmark

**Targeting Mitochondria to Decrease Aging Effects: Current Prospects**
Paulo J. Oliveira, University of Coimbra, Portugal

**Hydroxyxycinnamic Acid Derivatives as Bifunctional Antioxidants and Iron Chelators for UVA Photoprotection in Skin Cells**
Charareh Pourzand, University of Bath, The United Kingdom

**Probiotic Bacillus to control Staphylococcus aureus colonization**
Michael Otto, National Institutes of Health (NIH), USA

**Natural Polymers as Smart Wound Biomedical Devices**
Rosalia Bertorelli, Instituto Italiano Di Tecnologia, Italy

**Dissecting Systemic Coordination of Epidermal Daily Physiology**
Thomas Mortimer, Institute for Research in Biomedicine, Spain

**The Skin Lipid and Microbiota Profiles Change with Age, With Consequences for the Epidermal Barrier and Skin Health**
Anna Nicolaou, University of Manchester, United Kingdom

**Microbiome and Microbiota Revolution: What is Next?**
Marvin Edeas, Institut Cochin, INSERM, Université de Paris, France

**Climate Change & Infectious Skin Diseases**
Eva Rawlings Parker, Vanderbilt University Medical Center, USA

**Impact of Pollution on Skin Health & Ageing: Standpoint 2023**
Luc Aguilar, L'Oréal R&D, France

**Effects of Spaceflight on Human Skin**
Árpád Farkas, Hautarztpraxis Glatthing, Switzerland

**The Role of Climate Change in Skin Aging: Epidemiological Evidence**
Nidhi Singh, IUF – Leibniz Research Institute for Environmental Medicine, Germany

**Targeting Epigenetic Age to Prevent Skin Cancer**
Manuel Rodríguez-Paredes, German Cancer Research Center (DKFZ), Germany

**Exploring Sensorial Perception, Unraveling Treatment Formulations & Gender Disparities in Male and Female Skin**
Anne Potter, L’Oreal R&D, France

**Skin Aging in Long-Lived Naked Mole-Rats: Mechanisms and Perspectives**
Vladimir A. Botchkarev, Boston University School of Medicine, USA

**Revitalizing Skin Structure: Countering Gravity’s Damaging Effects Through Macromolecular Reorganization**
Marie Meunier, Givaudan, France

**Metabolic Reprogramming of Skin Using Mitochondrial Sulfide Delivery Molecules**
Matt Whiteman, University of Exeter, United Kingdom

www.skin-challenges.com
Congress Program Day 1 - November 9, 2023

8h00 – Materials Distribution

8h50 – Welcome Note & Introductory Remarks

Jean Krutmann, President of Skin Ageing & Challenges 2023, Leibniz Research Institute for Environmental Medicine, Germany

Marvin Edeas, Chairman of Skin Ageing & Challenges 2023, Institut Cochin, INSERM, Université de Paris, France

Session 1: Climate Change & Environment: Consequences for Skin Health

Presentations lengths: 20 minutes

Chairpersons: Jean Krutmann & Eva Rawlings Parker

9h00 Climate Change & Skin: An Overview
Tamara Schikowski, Leibniz Research Institute for Environmental Medicine, Germany

9h25 The Role of Climate Change in Skin Aging: Epidemiological Evidence
Nidhi Signh, IUF – Leibniz Research Institute for Environmental Medicine, Germany

9h50 Increased Temperature in Skin Aging: Mechanistic Insights
Jean Krutmann, President of Skin Ageing & Challenges, Leibniz Research Institute for Environmental Medicine, Germany

10h15 Panel Discussion

10h30 Coffee Break, Networking, & Poster Session
**Session 2: The Skin Microbiome: A Strategic Player in Health & Disease**

*Presentations lengths: 20 minutes*

*Chairpersons: Marvin Edeas & Tamara Schikowski*

- **14h00** Microbiome and Microbiota Revolution: What is Next?  
  *Marvin Edeas, Institut Cochin, INSERM, Université de Paris, France*

- **14h25** The Skin Lipid and Microbiota Profiles Change with Age, With Consequences for the Epidermal Barrier and Skin Health  
  *Anna Nicolaou, University of Manchester, United Kingdom*

- **14h45** Probiotic Bacillus to control Staphylococcus aureus colonization  
  *Michael Otto, National Institutes of Health (NIH), USA*

- **15h10** Clinical trials of Lactiplantibacillus plantarum LB244R®  
  *Helena Falholt Elvebakken, Lactobio A/S, Denmark*
15h35 – Panel Discussion

15h50 - Coffee Break, Networking, & Poster Session

16h20 Temporal Variations of the Facial Skin Microbiome Are Not Indicative of Seasonal Patterns
Clémence Robert, Complife Italia, Italy

16h35 Updated Evidence on Age-Related Changes in The Facial Skin Microbiome at Different Life Stages
Federica Cascella, University of Eastern Piedmont "Amedeo Avogadro", Italy

16h50 The Effect of L. Reuteri on Human Skin- A Double Blinded, Randomized Clinical Trial
Ulf Åkerström, Skinome, Sweden

Space Flight and Gravity

Presentations lengths: 20 minutes

17h05 Effects of Spaceflight on Human Skin
Árpád Farkas, Hautarztpraxis Glattbrugg, Switzerland

17h25 Revitalizing Skin Structure: Counteracting Gravity’s Damaging Effects Through Macromolecular Reorganization
Marie Meunier, Givaudan, France

17h45 Panel Discussion

17h50 End of Conference Day 1

20h00 Skin Ageing & Challenges 2023 Dinner (for ticket holders only)
To join the dinner, you can register through this link.
Congress Program Day 2 - November 10, 2023

8h50 Welcome & Introductory Talk

Session 3: Skin Ageing & Challenges: Epigenetics, Metabolism and Innovations

Presentations lengths: 25 minutes

Chairpersons: Paulo J. Oliveira & Manuel Rodriguez-Paredes

9h00 Epigenetic Changes in the Pathogenesis of Hidradenitis Suppurativa
Mohammad Athar, The University of Alabama at Birmingham, USA

9h25 Targeting Epigenetic Age to Prevent Skin Cancer
Manuel Rodriguez-Paredes, German Cancer Research Center (DKFZ), Germany

9h50 Metabolic Reprogramming of Skin Using Mitochondrial Sulfide Delivery Molecules
Matt Whiteman, University of Exeter, United Kingdom

10h15 Panel Discussion

10h30 – Coffee Break, Networking, & Poster Session

11h10 Targeting Mitochondria to Decrease Aging Effects: Current Prospects
Paulo J. Oliveira, University of Coimbra, Portugal

11h35 Dissecting Systemic Coordination of Epidermal Daily Physiology
Thomas Mortimer, Institute for Research in Biomedicine, Spain
12h00  Skin Aging in Long-Lived Naked Mole-Rats: Mechanisms and Perspectives  
Vladimir A. Botchkarev, Boston University School of Medicine, USA

12h25  Panel Discussion

12h40 – Lunch Break, Networking, & Poster Session

Chairpersons: Michael Otto & Charareh Pourzand

13h45  Exploring Sensorial Perception, Unraveling Treatment Formulations & Gender Disparities in Male and Female Skin  
Anne Potter, L’Oreal R&D, France

14h10  Hydroxycinnamic Acid Derivatives as Bifunctional Antioxidants and Iron Chelators for UVA Photoprotection in Skin Cells  
Charareh Pourzand, University of Bath, United Kingdom

14h35  Natural Polymers as Smart Wound Biomedical Devices  
Rosalia Bertorelli, Instituto Italiano Di Tecnologia, Italy

14h50  Panel Discussion

Presentations lengths: 15 minutes

15h00  Skin Aging Criteria and Search for Anti-Aging Interventions  
Andrey Koptyug, Mid Sweden University, Sweden

15h15  A Novel Anti-Ageing Extract from Stemona Tuberosa Roots and Its Effect on the Skin Collagen Network  
Javier Arrieta-Escobar, Inabata, France

15h30  Diabetic Skin: New Cosmetic Treatments with a Ca2+ Vector System  
Julia Baumann, Mibelle Biochemistry, Switzerland

15h45  Novel Standardizable in-vitro Psoriasis Model Based on Human Stat3 Overexpressing Keratinocytes  
Hanna Glasebach, Fraunhofer Institute for Interfacial Engineering and Biotechnology, Germany
16h00  Ascorbic Acid Induces a Basal-like Phenotype in Immortalized Keratinocyte-derived Cells Through a Dose-Dependent Treatment and Influences 3D Culture Quality
   Angie Katherine Molina-Oviedo, University Carlos III of Madrid, Spain

16h15  Keratin-TMAO Wound Dressing Promotes Polarization of M2 Macrophages and Accelerates Wound Healing in Diabetic Rats
   Mateusz Rybka, Medical University of Warsaw - MUW, Poland

16h20  Skin Ageing & Challenges 2023 Awards

Getting Together Drinks and Appetizers

Skin Ageing & Challenges 2023 Posters

Posters will be discussed in the poster sessions during the breaks

1. Co-Exposure to UV Radiations and Pollution Modifies Epigenetic Marks and Splicing Factor Expression
   Marie Dorr, Groupe Clarins, France

2. Monitoring of Dynamic Nrf2 Activity in a Living Cell-Based Biosensor
   Uraiwan Panich, Mahidol University, Thailand

3. Influence of Water-filtered Infrared-A (wIRA) Hyperthermia and Spermidine on Autophagy in Human Skin Fibroblasts
   Barbara Hochecker, Hochschule Albstadt-Sigmaringen, Germany

4. Protective Effects of Sulforaphane Against UVA-Induced Photoaging In Mouse Skin via Downregulation of Mmp-1
   Phetthinnee Muanjumpon, Mahidol University, Thailand

5. Influence of Spermidine on DNA-repair and Gene Expression in Human Skin Fibroblasts
   Melanie Scherer, Albstadt-Sigmaringen University, Germany

6. Dermatological Potential of Rubus Caesius L. Extracts
   Anna Hering, Gdański Uniwersytet Medyczny, Poland

7. Insights on the Usage of Natural Phenolics in Anti-aging Products
   Ana Jesus, University of Porto, Portugal

8. Tectorigenin, A Non-Retinol Retinoic Acid Receptor-γ Selective Agonist, Effectively Inhibits Skin Photodamage
   Caibin Zhu, Shanghai Cheermore Biotech Co. Ltd, China (Online)

9. Anredera Cordifolia (Ten.) is Capable of Positively Modulating Healing: An In Vitro Study on Diabetic Wound Model
   Fernanda Barbisan, Universidade Federal De Santa Maria, Brazil (Online)