

13th International Conference

Skin & Ageing Challenges



November
16-18, 2022

Lisbon
Portugal

Dear Colleagues,

The scientific committee is delighted to announce to you their newest edition concerning Skin Ageing & Challenges. The 13th International Conference on Skin Ageing and Challenges 2022 will be held on November 17-18, 2022 at Altis Grand Hotel, Lisbon, Portugal and Online., Portugal and Online.

During both days, many oral and poster communications will be presented and will cover many hot topics. Skin Challenges 2022 is organized under the patronage of the International Society of Microbiota (ISM).

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 2022, 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?

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

Skin microbiome and mycobiome, skin cancer, atopic skin inflammation, wound healing, engineered stem cells and silk biomaterials, exosome technology, mitochondrial transplantation, skin ageing, skin rejuvenation, senolytic flavonoids, skin photo-protection, facial aesthetics, diet and skin, artificial intelligence, electronic skin, the impact of olfactory receptors on microbiota & wound healing, and more...

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



Prof. Jean Krutmann,
President of Skin Ageing & Challenges 2022,
IUF – Leibniz Research Institute for Environmental Medicine
Leibniz, Germany

Skin Challenges 2022 Speakers



Rapid Detection and Online Analysis of Human Skin Microbial Changes by Flow Cytometry (FloSoFine™)
Jean Krutmann, President of Skin Challenges, Leibniz Research Institute for Environmental Medicine, Germany



Turning Back the Clock – Harnessing Reprogramming to Rejuvenate Cells
Inês Milagre, Instituto Gulbenkian de Ciência, Portugal



Electronic Skin that Anticipates and Perceives Touch from Different Directions
Oliver Schmidt, Chemnitz University of Technology, Germany



Elucidating the Molecular Landscape of the Stratum Corneum Using 3D OrbiSIMS
Nichola Starr, University of Nottingham, United Kingdom



Unlocking the Power of AI Skin Tech in the Dermatology Industry
Sylvain Delteil, PerfectCorp, Europe



Extracellular Vesicle Therapy for Skin Injuries
Piul S. Rabbani, New York University School of Medicine, USA



Skin Microbiome Profile of Healthy Cameroonians and Japanese
Kazuhiro Ogai, Kanazawa University, Japan



Skin Microbiome and Mycobiome in Aging
Woo Jun Sul, Chung-Ang University, South Korea



Extracellular Vesicles in Facial Aesthetics
Jia Xian Law, Universiti Kebangsaan Malaysia, Malaysia



Science and Clinical Applications of Exosomes
Duncan Ross, Kimera Labs, Inc., USA



Recent Artificial Intelligence Developments for Skin Cancer Detection
Ricardo Vardasca, ISLA Santarém, Portugal



Doctor Jekyll and Mr Hyde – Two Faces of Opioids in a Wound Treatment
Marek Konop, Warsaw Medical University, Poland



DA Gene Variant of AKR1C3 Contributes to Interindividual Susceptibilities to Atopic Dermatitis Triggered by Particulate Air Pollution
Thomas Haarmann-Stemann, Leibniz Research Institute for Environmental Medicine, Germany



Exosome Technology: Pearls & Pitfalls for Skin Rejuvenation
Saranya Wyles, Mayo Clinic Department of Dermatology, USA



Atmospheric Pollution Impairs Skin Barrier Function: Focus on PM-Associated Pollutants Under UVA Exposure
Laurent Marrot, L'Oréal R&D, France



Mitochondria-Targeted Hydrogen Sulfide Delivery Molecules for Skin Sun Protection and Aging Prevention
Uraivan Panich, Mahidol University, Thailand



Olfactory Receptors, Microbiota & Wound Healing
Marvin Edeas, Institut Cochin, INSERM, Université de Paris, France



The Fungal Skin Microbiota in Health and in Atopic Dermatitis
Philipp Bosshard, University Hospital Zurich, Switzerland



Rapid Detection and Online Analysis of Human Skin Microbial Changes by Flow Cytometry (FlowSoFine™)
Charlotte Esser, Leibniz Research Institute for Environmental Medicine, Germany



Skin Physiology and Two Staphylococci Associated with the Recurrence of Pressure Injuries
Kohei Ogura, Kanazawa University, Japan



Skin Regeneration with Engineered Stem Cells and Silk Biomaterials
Hongwei Ouyang, Zhejiang University School of Medicine, China



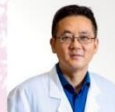
Extracellular Vesicles in Facial Aesthetics
Jia Xian Law, Universiti Kebangsaan Malaysia, Malaysia



The Zone of Tissue Activation Delineates Immediate and Long-Term Response of Skin to Wounding and Associates with Markers of Senescence and Regeneration
Mikolaj Ogrodnik, Ludwig Boltzmann Research Group Senescence and Healing of Wounds, Austria



Mechanisms Interconnecting Genotype, Transcriptome and Microbiome during Atopic Skin Inflammation
Bernhard Homey, University Hospital in Düsseldorf, Germany



Menopause, iron, and aging skin: Is there a connection?
Xi Huang, I-On Skincare, Inc., USA

Skin
CHALLENGES

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MICROBIOTA

www.skin-challenges.com

13th International Conference



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Congress Program Day 1 - November 17, 2022

Welcome Note & Introduction Remarks

8h00 – Materials Distribution & Welcome Coffee



9h00 – Welcome Note & Introductory Remarks

Jean Krutmann, President of Skin Challenges 2022, Leibniz Research Institute for Environmental Medicine, Germany

Session 1: Skin Microbiota – Recent Scientific Advances



9h15 - Rapid Detection and Online Analysis of Human Skin Microbial Changes by Flow Cytometry (FloSoFine™)

Charlotte Esser, Leibniz Research Institute for Environmental Medicine, Germany



9h40 - Skin Microbiome Profile of Healthy Cameroonians and Japanese

Kazuhiro Ogai, Kanazawa University, Japan



10h05 - The Fungal Skin Microbiota in Health and in Atopic Dermatitis

Philipp Bosshard, University Hospital Zurich, Switzerland

10h30 - Coffee Break Networking & Poster Session



11h10 - Skin Microbiome and Mycobiome in Aging
Woo Jun Sul, Chung-Ang University, South Korea



11h35 - Mechanisms Interconnecting Genotype, Transcriptome and Microbiome during Atopic Skin Inflammation
Bernhard Homey, University Hospital in Düsseldorf, Germany

Session 2: Wound Healing and Skin Regeneration



12h00 - Olfactory Receptors, Microbiota & Wound Healing
Marvin Edeas, Institut Cochin, INSERM, Université de Paris, France

12h25 - Lunch Break Networking & Poster Session



14h00 - The Zone of Tissue Activation Delineates Immediate and Long-Term Response of Skin to Wounding and Associates with Markers of Senescence and Regeneration
Mikolaj Ogrodnik, Ludwig Boltzmann Research Group Senescence and Healing of Wounds, Austria



14h25 - Skin Physiology and Two Staphylococci Associated with the Recurrence of Pressure Injuries
Kohei Ogura, Kanazawa University, Japan



14h50 - Skin Regeneration with Engineered Stem Cells and Silk Biomaterials
Hongwei Ouyang, Zhejiang University School of Medicine, China



15h15 - Doctor Jekyll and Mr Hyde – Two Faces of Opioids in a Wound Treatment
Marek Konop, Warsaw Medical University, Poland

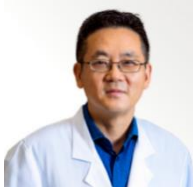
15h40 - Coffee Break, Networking, & Poster Session

Session 3: Lifestyle, Diet and Skin Aging: The Inside Beauty



16h10 - Atmospheric Pollution Impairs Skin Barrier Function: Focus on PM-Associated Pollutants Under UVA Exposure

Laurent Marrot, L'Oréal, France



16h35 - Menopause, iron, and aging skin: Is there a connection?

Xi Huang, I-On Skincare, Inc., USA



17h00 - A Gene Variant of AKR1C3 Contributes to Interindividual Susceptibilities to Atopic Dermatitis Triggered by Particulate Air Pollution

Thomas Haarmann-Stemann, Leibniz Research Institute for Environmental Medicine, Germany

17h25 - The Effect of Facial Exercise on Perceived Appearance, Self-esteem, Face Image, and Well-being Among Adult Women

Topaz Broitman, Reichman University, Israel

17h35 - Skin-Aging Enzyme Inhibition and Oxidative Stress Protection by Hairless Canary Seed (*Phalaris Canariensis* L.) Peptides

Andrea Liceaga, Purdue University, USA

17h45 - Role of the Trpv3 Channel in the Default of Cutaneous Thermoregulation During Aging

Lisa Martin, Claude Bernard University, France

17h55 - Cell Imaging for Dermocosmetic Claims Substantiation Through *In vitro* Assessment on Cellular Skin Models

Oceane Guyot, HCS Pharma, France

Skin Ageing & Challenges 2022 Posters

Umbilical Cord Mesenchymal Stem Cells Characterization: In Vitro Preliminary Assessments for Chronic Wound Healing

Patrícia Sousa, University of Porto, Portugal

MIR-30A-5P Alters Epidermal Terminal Differentiation During Aging by Regulating BNIP3L/NIX-Dependent Mitophagy

Fabien Chevalier, Claude Bernard University Lyon, France

Brazilian Red Propolis – A Product from Natural Origin for Healing Skin Lesions of Secondary Intention

Claudia Helena Pellizzon, São Paulo State University, Brazil

Interaction of Skin Cells with Skin Microbiota

Zeynab Moinipoor, University of West Minster, The United Kingdom

Ameliorative Effect of Fermented Cabbage Extracts on Wound Healing and Contact Dermatitis

Sooah Kim, Jeonju University, Republic of Korea

Dermatological Manifestations in Patients with Covid-19 Pneumonia in Veracruz, Mexico

Luis del Carpio-Orantes, Instituto Mexicano del Seguro Social, Mexico

Histopathological Evaluation of Skin Biopsies in Benghazi

Salma Al-Sunousi, University of Benghazi, Libya

Fisetin Inhibits UVA-Induced Expression of MMP-1 and MMP-3 Through the NOX/ROS/MAPK Pathway in Human Dermal Fibroblasts and Human Epidermal Keratinocytes

Thi-Hung Le, Jeonbuk National University, Korea

Basigin Controls Matrix Remodeling, the Secretory Phenotype and Metabolic Adaptations of Senescent Keratinocytes and Their Epidermal Microenvironment

Gruber Florian, Medical University of Vienna, Austria

Protective Effects of Quercetin-loaded PLGA Nanoparticles Against UVA-Induced Photoaging in Mouse Skin

Weerawon Thangboonjit, Mahidol University, Thailand

18h05 – End of Conference Day 1

Congress Program Day 2 - November 18, 2022

8h50 – Welcome Coffee & Introductory Talk

Session 4: Skin Challenges 2022 Innovations

4.1. Artificial Intelligence & Skin: Advances & Perspective



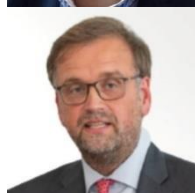
9h00 - Unlocking the Power of AI Skin Tech in the Dermatology Industry

Louis Chen, EVP and Chief Strategy Officer at PerfectCorp, Taiwan



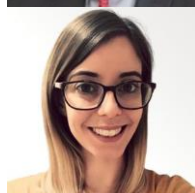
9h25 - Recent Artificial Intelligence Developments for Skin Cancer Detection

Ricardo Vardasca, ISLA Santarém, Portugal



9h50 - Electronic Skin that Anticipates and Perceives Touch from Different Directions

Oliver Schmidt, Chemnitz University of Technology, Germany



10h15 - Elucidating the Molecular Landscape of the Stratum Corneum Using 3D OrbiSIMS

Nichola Starr, University of Nottingham, United Kingdom

10h40 - Coffee Break Networking & Poster Session

4.2. Extracellular Vesicles & Skin: The Points of View



11h20 - Science and Clinical Applications of Exosomes

Duncan Ross, Kimera Labs, Inc., USA



11h45 - Exosome Technology: Pearls & Pitfalls for Skin Rejuvenation

Saranya Wyles, Mayo Clinic Department of Dermatology, USA



12h10 - Extracellular Vesicle Therapy for Skin Injuries
Piul S. Rabbani, *New York University School of Medicine*

12h35 - Coffee Break, Networking, & Poster Session



14h00 - Extracellular Vesicles in Facial Aesthetics
Jia Xian Law, *Universiti Kebangsaan Malaysia*

14h25 - Comparative Profiling of Stem Cell Derived Extracellular Vesicle Sources for Applications in Skin Rejuvenation
Soraya Williams, *Loughborough University, United Kingdom*

4.3. Other Skin Innovations



14h35 - Turning Back the Clock – Harnessing Reprogramming to Rejuvenate Cells
Inês Milagre, *Instituto Gulbenkian de Ciência, Portugal*



15h00 - Novel Mitochondria-Targeted Sulfide Delivery Molecules Prevent Photo-Ageing
Uraiwan Panich, *Mahidol University, Thailand*

15h25 - Coffee Break Networking & Poster Session

16h05 - Anti-aging Potentials of Methylene Blue for Human Skin Longevity
Kan Cao, *University of Maryland College Park, USA*

16h15 - Natural and Sustainable Sugarcane Based Cosmetic Ingredient with Anti-Aging Properties
Maria João Carvalho, *Universidade Católica Portuguesa, Portugal*

16h25 - Mauritius Tea Extract Activate Skin Antioxidant and Bioenergetic Systems
Tanesha Naiken, *LVMH Recherche, France*

16h35 – Discussion

17h05 – Skin Ageing & Challenges 2022 Awards

18h00 – End of Skin Ageing & Challenges 2022