

13th International Conference

Skin Ageing Challenges



Agenda

SkIn
CHALLENGES

November
17-18, 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.

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 Ageing Challenges

November
17-18, 2022Lisbon
Portugal

Skin Challenges 2022 Speakers



Welcome Note & Introduction Remarks

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

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



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



Regeneration in the Fly Brain: Wake-Up Signals for Quiescent Neural Stem Cells

Christa Rhiner, Champalimaud Foundation, Portugal



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&I, France



Mitochondria-Targeted Hydrogen Sulfide Delivery Molecules for Skin Sun Protection and Aging Prevention

Uraiwan 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



The p-rp56-zone Delineates Wounding Response and the Healing Process

Mikolaj Ogronik, 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



Induction of the Transcription Factor FOXM1 Drives Healthspan Extension in Progeroid and Naturally Aged Mice

Elsa Logarinho, I3S Association, Universidade do Porto, Portugal



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



Connecting the Intracellular Labile Ironome to Susceptibility of Skin Cells to Sunlight: A Powerful Approach Towards Personalised Sun Protection

Charareh Pourzand, University of Bath, The United Kingdom

Skin Ageing Challenges

November
17-18, 2022

Altis Grand Hotel
Lisbon, Portugal

Congress Program Day 1 - November 17, 202

8h00 – Materials Distribution



8h50 – Welcome Note & Introductory Remarks

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



Marvin Edeas, Chairman of Skin Ageing & Challenges 2022, Institut Cochin, INSERM, Université de Paris, France

Session 1: Skin Microbiota – Recent Scientific Advances

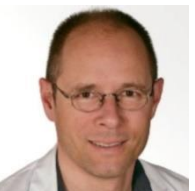
Presentations lengths: 20 minutes + 5 minutes of discussion

Chairs: Charlotte Esser & Marvin Edeas



9h00 - Rapid Detection and Online Analysis of Human Skin Microbial Changes by Flow Cytometry (FloSoFine™)

Charlotte Esser, Leibniz Research Institute for Environmental Medicine, Germany



9h25 - The Fungal Skin Microbiota in Health and in Atopic Dermatitis

Philipp Bosshard, University Hospital Zurich, Switzerland



9h50 - Skin Microbiome and Mycobiome in Aging
Woo Jun Sul, *Chung-Ang University, South Korea*



10h15 - Skin Microbiome Profile of Healthy Cameroonians and Japanese
Kazuhiro Ogai, *Kanazawa University, Japan (online talk)*

10h30 - Coffee Break Networking & Poster Session

Chair: Philipp Bosshard



11h15 - 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*



11h40 - Mechanisms Interconnecting Genotype, Transcriptome and Microbiome during Atopic Skin Inflammation
Bernhard Homey, *University Hospital in Düsseldorf, Germany (online talk)*

12h05 – Skin Microbiome in Ageing Meta-analysis: New Challenges for the Future of Skin Science
Antonia Bruno, *University of Milano-Bicocca, Italy (online talk)*

12h15 - Lunch Break Networking & Poster Session

Session 2: Wound Healing and Skin Regeneration

Presentations lengths: 20 minutes + 5 minutes of discussion

Chair: Thomas Haarmann-Stemann



13h45 - Olfactory Receptors, Microbiota & Wound Healing
Marvin Edeas, *Institut Cochin, INSERM, Université de Paris, France*



14h10 - The p-rpS6-zone Delineates Wounding Response and the Healing Process
Mikolaj Ogrodnik, *Ludwig Boltzmann Research Group Senescence and Healing of Wounds, Austria*



14h35 - Doctor Jekyll and Mr. Hyde – Two Faces of Opioids in a Wound Treatment
Marek Konop, *Warsaw Medical University, Poland*



15h00 - Skin Physiology and Two Staphylococci Associated with the Recurrence of Pressure Injuries
Kohei Ogura, *Kanazawa University, Japan (online talk)*

15h25 – Role of the Trpv3 Channel in the Default of Cutaneous Thermoregulation During Aging
Lisa Martin, *Claude Bernard University, France*

15h35 - Coffee Break, Networking, & Poster Session

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

Presentations lengths: 20 minutes + 5 minutes of discussion

Chairs: Charareh Pourzand & Laurent Marrot



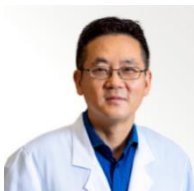
16h10 - Atmospheric Pollution Impairs Skin Barrier Function: Focus on PM-Associated Pollutants Under UVA Exposure

Laurent Marrot, L'Oréal, France



16h35 - Connecting the Intracellular Labile Ironome to Susceptibility of Skin Cells to Sunlight: a Powerful Approach Towards Personalised Sun Protection

Charareh Pourzand, University of Bath, United Kingdom



17h00 - Menopause, iron, and aging skin: Is there a connection?

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

17h25 - Short Oral Presentations

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

Andrea Liceaga, Purdue University, USA

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

Oceane Guyot, HCS Pharma, France

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

Topaz Broitman-Shaharabani, Reichman University, Israel (online talk)

17h55 – End of Conference Day 1

20h00 – **Speakers Dinner** (for ticket holders only)

[Register for the dinner.](#)

Congress Program Day 2 - November 18, 2022

8h50 – Welcome & Introductory Talk

Session 4: Artificial Intelligence & Skin: Advances & Perspective

Presentations lengths: 20 minutes + 5 minutes of discussion

Chair: Ricardo Vardasca



9h00 - Unlocking the Power of AI Skin Tech in the Dermatology Industry
Louis Chen, EVP and Chief Strategy Officer at Perfect Corp., 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 - Coffee Break Networking & Poster Session

Session 5: Extracellular Vesicles & Skin: The Points of View

Presentations lengths: 20 minutes + 5 minutes of discussion

Chairs: Uraiwan Panich, Oliver Schmidt



10h50 - Science and Clinical Applications of Exosomes
Duncan Ross, Kimera Labs, Inc., USA



11h15 - Exosome Technology: Pearls & Pitfalls for Skin Rejuvenation
Saranya Wyles, Mayo Clinic Department of Dermatology, USA (online talk)



11h40 - Extracellular Vesicle Therapy for Skin Injuries
Piul S. Rabbani, New York University School of Medicine, USA (online talk)



12h05 - Extracellular Vesicles in Facial Aesthetics
Jia Xian Law, Universiti Kebangsaan Malaysia (online talk)

12h30 - Comparative Profiling of Stem Cell Derived Extracellular Vesicle Sources for Applications in Skin Rejuvenation
Soraya Williams, Loughborough University, United Kingdom

12h40 - Exosome-Like Nanovesicles Derived from *Phellinus Linteus* Inhibit Mical2 Expression through Cross-kingdom Regulation and Inhibit Ultraviolet-Induced Skin Aging
Caibin Zhu, Shanghai Cheermore Biotech Co., Ltd, China (online talk)

12h45 – Lunch Break, Networking, & Poster Session

Session 6: Skin Ageing & Challenges 2022 Innovations

Presentations lengths: 20 minutes + 5 minutes of discussion

Chair: Inês Milagre, Christa Rhiner



13h45 - Turning Back the Clock – Harnessing Reprogramming to Rejuvenate Cells
Inês Milagre, Católica Biomedical Research Centre / Católica Medical School/ Universidade Católica Portuguesa, Portugal



14h10 - Regeneration in the Fly Brain: Wake-Up Signals for Quiescent Neural Stem Cells
Christa Rhiner, Champalimaud Foundation, Portugal



14h35 - Novel Mitochondria-Targeted Sulfide Delivery Molecules Prevent Photo-Ageing
Uraiwan Panich, Mahidol University, Thailand



15h00 - Elucidating the Molecular Landscape of the Stratum Corneum Using 3D OrbiSIMS
Nichola Starr, University of Nottingham, United Kingdom

15h25 - Coffee Break Networking & Poster Session



15h55 - Induction of the Transcription Factor FOXM1 Drives Healthspan Extension in Progeroid and Naturally Aged Mice
Elsa Logarinho, i3S Association, University of Porto, Portugal (online talk)

16h20 - Short Oral Presentations

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

Mauritius Tea Extract Activate Skin Antioxidant and Bioenergetic Systems
Tanisha Naiken, LVMH Recherche, France

New Method for Claim Substantiation for Cosmetics Using Lipidomics Analysis
Paolo Bonini, oloBion S.L., Parc Científic de Barcelona, Spain

Anti-aging Potentials of Methylene Blue for Human Skin Longevity
Kan Cao, University of Maryland College Park, USA (online talk)

17h00 – Discussion: Skin Ageing & Challenges 2022 – AI & Beauty: Where is the Target?

17h30 – Skin Ageing & Challenges 2022 Awards

The best short oral and best poster presentation awards will be discerned.

17h45 – End of Skin Ageing & Challenges 2022

Posters will be displayed during the coffee & lunch breaks

Dermaval Offsets Impact of Glucose on Blood Levels of Metalloproteinases and Cytokines that Regulate Extracellular Matrix

Zbigniew Pietrkowski, FutureCeuticals, USA

How to Save Your Own Skin with Tomatoes

Oliver Dillon, University of East Anglia, The United Kingdom

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

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

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

Weerawon Thangboonjit, Mahidol University, Thailand

Is It Just Skin Deep? Exploring the Host Skin Response to Bacteria

Katie Griffiths, University of East Anglia, The United Kingdom

Influence of Water-Filtered Infrared-A (wIRA) Hyperthermia on Autophagy of Human Skin Fibroblasts

Barbara Hochecker, Albstadt-Sigmaringen University, Germany

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

Florian Gruber, Medical University of Vienna, Austria

Effect on the Skin of Extracts Isolated from the Portuguese Coast's Sargaço

Cláudia Pereira, University of Coimbra, Portugal

In Vitro and In Vivo Evaluation of Keratin-trimethylamine N-oxide as a Potential Novel Therapeutics Wound Dressing in Diabetic Rats

Mateusz Szudzik, Medical University of Warsaw, Poland

Inflammation in Skin – An Age-old Problem

Damon Bevan, University of East Anglia, The United Kingdom

MultiLamellar Vesicle Conjugated to Polymer – A New Platform for Skin-Care Products

Asaf Levin, Liposphere Ltd., Israel

Skin Cell Lines Response to Death Pathway Modulation

Malgorzata Adamec-Organisciok, Silesian University of Technology, Poland

Anti-Aging Effects of Dimocarpus Longan Fruit Concentrate on Skin

Theodor Braun, Austrian Drug Screening Institute GmbH, Austria

Screening the Dermatological Potential of Water-based Extract from Defatted Microalgae Biomass

Michal Szczepanczyk, Malmö University, Sweden

Ketoprofen Nanoemulsions for Melanoma Treatment: Formulation, Development and Characterization

Ana Cláudia Paiva-Santos, University of Coimbra, Portugal

Online Posters

Effect of Hesperidin and Its Structural Part Hesperetin, Rutinose and Rhamnose on Collagen I and Matrix Metalloproteinase 1 Production in the Normal Dermal Human Fibroblasts

Denisa Škařupová, Palacký University Olomouc, Czech Republic

Interaction of TAGLN and USP1 Promotes ZEB1 Ubiquitination Degradation in UV-Induced Skin Photoaging

Youjie Zheng, Shanghai Cheermore Biological Products Co., Ltd, China

Exosome-Like Nanovesicles Derived from *Phellinus Linteus* Inhibit Mical2 Expression through Cross-kingdom Regulation and Inhibit Ultraviolet-Induced Skin Aging

Caibin Zhu, Shanghai Cheermore Biotech Co., Ltd, China

New Marine-Inspired Compounds As Dual Anti-Pruritic/Anti-Inflammatory Agents

Isabel F. Almeida, University of Porto, Portugal

Cleansing Stick for Atopic Dermatitis: Determination of Foaming Capacity

Ana Rita Gama, University of Beira Interior, Portugal