## December 6, 2024, Room A

## Opening

8:20-8:30

## Plenary Session I

8:30-10:15

Chairs: Manabu Fujimoto, Sang Ho Oh, Sayuri Yamazaki

### I-1 [P03-01]

### The interaction between CD155 and TIGIT promotes tumor proliferation in cutaneous T-cell lymphoma

O Ryoma Honda<sup>1</sup>, Naomi Takahashi-Shishido<sup>2</sup>, Tomomitsu Miyagaki<sup>2,3</sup>, Hikari Boki<sup>2</sup>, Shinichi Sato<sup>2</sup>, Makoto Sugaya<sup>1</sup>

<sup>1</sup>The Department of Dermatology, International University of Health and Welfare, Narita, <sup>2</sup>The Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, <sup>3</sup>Department of Dermatology, St. Marianna University School of Medicine, Kawasaki

### I-2 [P02-02]

## Non-human reads in human WGS identify endogenous HHV-6B and blood anellovirus virome associated with autoimmune diseases and COVID-19 risk

O Yukinori Okada¹, Sasa Noah¹³, Shohei Kojima², Rie Koide², Rei Watanabe¹⁴, Yuumi Nakamura¹, Shinichi Imaſuku⁵, Yayoi Tada⁶, Shinichi Sato³, Masatoshi Jinnin², Tatsuyoshi Kawamura⁶, Shinji Shimada⁶, Shigetoshi Sano⁶, Manabu Fujimoto¹, Akimichi Morita¹⁰¹Osaka University, Suita, ²RIKEN Center for Integrative Medical Sciences, Tokyo, ³The University of Tokyo, Tokyo, ⁴Juntendo University, Tokyo, ⁵Fukuoka University, Fukuoka, ⁴Teikyo University, Tokyo, ²Wakayama Medical University, Wakayama, ⁴University of Yamanashi, Yamanashi, 'Kochi University, Kochi, ¹⁰Nagoya City University, Nagoya

### I-3 [P04-02]

## Crosstalk Between Adipocyte Lineage Cells and Mast Cells Drives Skin Inflammation and Fibrosis in Atopic Dermatitis

O Shujun Heng, Zhuolin Guo, Jie Li, Ling-juan Zhang

The State Key Lab of Cellular Stress Biology, School of Pharmaceutical Sciences, Xiamen University, Xiamen

### I-4 [P09-02]

## Characterization of Circulating Monocytes in Atopic Dermatitis through Single-Cell RNA Sequencing

○ Yujin Lee

Department of Dermatology, Eunpyeong St. Marys Hospital, College of Medicine, The Catholic University of Korea, Seoul

### I-5 [P12-02]

## Dual Inhibition of FAK and PYK2 Overcomes Acquired Resistance to Immune Checkpoint Inhibitors by Suppressing the IFN-STAT1-PDL1 Pathway

○ Yuto Mizuno¹², Masanari Umemura², Chihiro Hayashi², Akane Nagasako², Yoko Ino³, Yayoi Kimura³, Yukie Yamaguchi², Yoshihiro Ishikawa¹

<sup>1</sup>Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, <sup>2</sup>Cardiovascular Research Institute (CVRI), Yokohama City University Graduate School of Medicine, Yokohama, <sup>3</sup>Advanced Medical Research Center, Yokohama City University, Yokohama

### I-6 [P13-01]

### Epidermal keratinocyte progenitors transiently emerge as ectomesenchyme from non-neural ectoderm

O Asaka Miura<sup>1,2,3</sup>, Yuki Kobayashi<sup>1</sup>, Yoshikazu Hirose<sup>1</sup>, Yuya Ouchi<sup>2</sup>, Tomomi Kitayama<sup>2</sup>, Eiichi Takaki<sup>2</sup>, Ryoma Yamamoto<sup>2</sup>, Sho Yamazaki<sup>2</sup>, Machika Kawamura<sup>2</sup>, Kotaro Saga<sup>1</sup>, Takashi Shimbo<sup>1</sup>, Manabu Fujimoto<sup>3</sup>, Katsuto Tamai<sup>1</sup>

<sup>1</sup>Department of Stem Cell Therapy Science, Osaka University Graduate School of Medicine, Suita-city, <sup>2</sup>StemRIM Institute of Regeneration-Inducing Medicine, Suita-city, <sup>3</sup>Department of Dermatology, Osaka University Graduate School of Medicine, Suita

### I-7 [P15-01]

### Proteomic Insights into Sex-Specific Pathways in Androgenetic Alopecia and Female Pattern Hair Loss

○ Sasin Charoensuksira¹, Jitlada Meephansan¹, Raksanawan Vanichvongvan¹, Poorichaya Somparn², Pattarin Tangtanatakul Tangtanatakul³⁴, Poonkiat Suchonwanit⁵

'Division of Dermatology, Chulabhorn International College of Medicine, Thammasat University, Pathum Thani, 'Center of Excellence in Systems Biology, Faculty of Medicine, Chulalongkorn University, Bangkok, 'Department of Transfusion Medicine and Clinical Microbiology, Faculty of Allied Health Sciences, Chulalongkorn University, Bangkok, 'Center of Excellence in Immunology and Immune-mediated diseases, Department of Microbiology, Chulalongkorn University, Bangkok, 'Division of Dermatology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok

# Concurrent Oral Session 1 (Epidermal Structure and Barrier Function)

10:20-11:44

Chairs: Hideyuki Ujiie, John Common

### C01-01 [P05-04]

## Three distinct ultrastructural stages of dying epidermal stratum granulosum cells during corneoptosis revealed by high-pressure freezing

○ Takeshi Matsui<sup>1,2,3</sup>, Ai Hirabayashi<sup>4</sup>, Mayuko Sato<sup>5</sup>, Kiminori Toyooka<sup>5</sup>, Hiroyuki Sasaki<sup>6</sup>, Masayuki Amagai<sup>2,3</sup>

<sup>1</sup>School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, <sup>2</sup>RIKEN Center for Integrative Medical Sciences, Yokohama, <sup>3</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>4</sup>Institute for Life and Medical Sciences, Kyoto University, Kyoto, <sup>5</sup>RIKEN Center for Sustainable Resource Science, Yokohama, <sup>6</sup>Department of Occupational Therapy, School of Rehabilitation, Tokyo Professional University of Health Sciences, Tokyo

## C01-02 Protective role of catestatin in a mouse model of atopic dermatitis via Notch1/PKC pathway

[P05-05] OGE Peng<sup>1,2,3</sup>, Wanchen Zhao<sup>1</sup>, Alafate Abudouwanli<sup>1</sup>, Quan Sun<sup>1</sup>, Mengyao Yang<sup>1,2</sup>, Shan Wang<sup>1,3</sup>, Shigaku Ikeda<sup>1</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>1</sup>, François Niyonsaba<sup>1,4</sup>

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, the First Affiliated Hospital of China Medical University, Shenyang, <sup>3</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, Beijing, <sup>4</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

## C01-03 Sweating disturbance negatively affects skin barrier function and increases the risk of food allergy

[**P05-06**] O Hironobu Ishimaru<sup>1,2</sup>, Yasuo Okamoto<sup>1</sup>, Yumi Aoyama<sup>3</sup>

<sup>1</sup>Department of Pharmacology, Kawasaki Medical School, Okayama, <sup>2</sup>Kyoto R&D Center, Maruho Co., Ltd., Kyoto, <sup>3</sup>Department of Dermatology, Kawasaki Medical School, Okayama

## C01-04 Deep learning-based automatic topographical image assessment of skin barrier dysfunction and a cluster analysis [P05-07] of atopic dermatitis

O Kenta Nakamoto<sup>1</sup>, Hironobu Ishimaru<sup>1</sup>, Tatsuki Ohta<sup>2</sup>, Tetsushi Koide<sup>2</sup>, Yumi Aoyama<sup>1</sup>

<sup>1</sup>Dermatology, Kawasaki Medical School, Kurashiki, <sup>2</sup>Research Institute for Nanodevices, Hiroshima University, Higashihiroshima

## C01-05 How an epidermal barrier abnormality develops in diabetes mellitus: the roles of inflammation and ceramide metabolic abnormality

Kyong-Oh Shin¹², Hahyn Ann¹, Yerim Choi¹², Karin Goto¹, Eung Ho Choi³, ○ Yoshikazu Uchida¹, Kyungho Park¹¹Hallym University, Chuncheon, ²LaSS Inc, Chuncheon, ³Yonsei University Wonju College of Medicine, Seoul

### C01-06 Overexpression of acid ceramidase in the epidermis of mice provokes atopic dry skin-like symptoms

[P05-09] O Mariko Takada¹, Miho Sashikawa-Kimura², Hossain Razib², Xiaonan Xie¹, Mayumi Komine², Mamitaro Ohtsuki², Genji Imokawa¹¹ Utsunomiya University, Utsunomiya, ²Jichi Medical University, Shimotsuke

## C01-07 Novel insights from changes in skin surface lipidomics profile and phenotype in various age groups [P05-10] O Kyung Fun Lee<sup>1</sup> Kyong Oh Shin<sup>2</sup> Hyayayan Kim<sup>1</sup> Hoa Yoon Cho<sup>1</sup> Minii Kim<sup>1</sup> Kyungho Park<sup>3</sup> Sounghyan Kang<sup>1</sup>

○ Kyung Eun Lee¹, Kyong-Oh Shin², Hyeyoun Kim¹, Hee Yeon Cho¹, Minji Kim¹, Kyungho Park³, Seunghyun Kang¹¹COSMAX BTI, Seongnam, ²LaSS Inc, Chuncheon, ³Hallym University, Chuncheon

## Luncheon Seminar 1

11:55-12:55 Chair: Takashi Inozume

LS1 Potential roles of anti-PD-1 antibody for the treatment of melanoma: how to use the anti-PD-1 antibody for advanced melanoma?

O Taku Fujimura

Department of Dermatology, Tohoku University, Graduate School of Medicine

Co-sponsored by MSD K.K.

## Sun Pharma RISING SUN AWARD 2024

13:00-14:00 Chairs: Manabu Ohyama, Hiroyuki Murota

### SRA1 Loricrin and Structural Imprinting: Regulating T Cell Activity and Epidermal Immunity

O Yosuke Ishitsuka

Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine

## SRA2 Challenges in understanding the pathogenesis of bullous pemphigoid

○ Hideyuki Ujiie

Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University

## SRA3 Pathological and translational research for intractable immune and connective tissue diseases: from our study on systemic sclerosis and psoriasis

O Yukie Yamaguchi

Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine

Co-sponsored by Medical Affairs, Sun Pharma Japan Limited

## LEO Foundation Awards 2024

14:05-14:25 Chair: Manabu Ohyama

Presenter: Manabu Ohyama

Presenter: Kiyoshi Sato

## **Award Ceremony**

14:25-15:00

## Young JSID Award

YJA-1 Yuki Honda Keith, Garvan Institute of Medical Research

YJA-2 Shota Takashima, Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University

YJA-3 Hitoshi Terui, University of California, San Francisco

## JSID's Fellowship Shiseido Research Grant

## 2023 JSID's Fellowship Shiseido Research Grant

SE-3 Analysis of homologous recombination in skin using genetically engineered mouse models

O Gyohei Egawa

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

SE-4 Elucidating Sex Differences in Immune Response and the Molecular Mechanisms in Dermal Fibroblasts

O Takehiro Takahashi

Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai

## 2024 JSID's Fellowship Shiseido Research Grant

Unveiling the spatiotemporal wound memory in stem cells by epidermal injury

O Mika Watanabe

Hokkaido University Graduate School of Medicine, Department of Dermatology

Prevention strategies for tumor development arising from aging alteration of the skin microenvironment

O Hanako Koguchi-Yoshioka

Department of Neurocutaneous Medicine, Division of Health Science, Graduate School of Medicine, Osaka University

## Diploma of Dermatological Scientist

Tuba Musarrat Ansary, Department of Dermatology, Jichi Medical University

Cheng Hui Mei, Dr Priya Sen Skin and Laser Centre

Bayarmaa Taivanbat, Department of Dermatology, Gunma University Graduate School of Medicine

## JDS Best Paper Award 2023

Updated skin transcriptomic atlas depicted by reciprocal contribution of single-nucleus RNA sequencing and single-cell RNA sequencing

Ronghui Zhu and Xiaoyu Pan

Department of Dermatology, Huashan Hospital, Fudan University, Shanghai Institute of Dermatology, Shanghai

## JSID Honorary Membership

## SID/JSID Young Fellow Collegiality Awards

Khalid Garman, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health Kala Mahen. Cleveland Clinic Lerner Research Institute

## ASDR/JSID Exchange Program

Laura Sormani, The University of Queensland, Frazer Institute

Presenter: Johannes S Kern

Presenter: Manabu Ohyama

Presenter: Shigetoshi Sano

Presenter: Manabu Ohyama

Presenter: Paul Nghiem

## TSID/JSID Young Fellow Collegiality Awards

Chia Bao Chu, National Cheng Kung University Leon Tsung-Ju Lee, Taipei Medical University

## KSID/JSID Young Fellow Collegiality Awards

Taemin Lee, Department of Dermatology, Samsung Medical Center, Sungkyunkwan University, Seoul So Hee Park, Department of Dermatology, Eunpyeong St. Mary's Hospital, Seoul

## Symposium 1

## "The good and the bad from light"

15:05-17:05 Chairs: Peter Wolf, Akimichi Morita, Yukie Yamaguchi

### SY1-1 Ultraviolet B exposure controls skin homeostasis by dendritic cell-regulatory T cell crosstalk

O Sayuri Yamazaki

Department of Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya

## SY1-2 Hair regeneration: how hair follicle stem cells sense and respond to external light signals

O Sung-Jan Lin<sup>1,2</sup>

<sup>1</sup>Departments of Biomedical Engineering and Dermatology, National Taiwan University, Taipei, <sup>2</sup>Departments of Medical Research and Dermatology, National Taiwan University Hospital, Taipei

## SY1-3 The effect of UV-induced Cdkn2a/p16 promoter mutations on the binding of ETS transcription factors

O Masaoki Kawasumi

Department of Dermatology, University of Washington, Seattle

### SY1-4 Analysis of the interaction of different wavelengths present in natural sunlight: Enhancement of UVB radiationinduced photocarcinogenesis by low, *per se* non-carcinogenic doses of UVA radiation

○ Jean Krutmann, Katharina Maria Rolfes, Kevin Sondenheimer, Thomas Haarmann-Stemmann IUF - Leibniz Research Institute for Environmental Medicine, Düsseldorf

## The role of the skin's microbiome in immune response to UV radiation

O Peter Wolf

Department of Dermatology, Medical University of Graz, Graz

## **Evening Seminar 1**

**SY1-5** 

## "Recent findings in the pathogenesis of atopic dermatitis and psoriasis"

17:15-18:15 Chairs: Norito Katoh, Makoto Sugaya

### **ES1-1** Recent Advances in the Pathogenesis and Treatment of Atopic Dermatitis

O Gvohei Egawa

Department of Dermatology, Kagoshima University, Kagoshima

### ES1-2 Metabolic reprogramming of keratinocytes in psoriasis

○ Tetsuya Honda

Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu

Co-sponsored by Torii Pharmaceutical Co., Ltd.

Presenter: Chih-Hung Lee

Presenter: Dongyoun Lee

## December 6, 2024, Room B

# Concurrent Oral Session 2 (Adaptive Immunity/Epidermal Structure and Barrier Function)

10:20-11:44 Chairs: François Niyonsaba, Chien-Hui Hong

C02-01 [P01-03] Maintenance of dermal CD4+ tissue-resident memory T cells via lymphatic endothelial cells-derived interleukin-7

O Ryota Asahina<sup>1,2</sup>, Fuuka Minami<sup>2</sup>, Kenji Kabashima<sup>2</sup>

<sup>1</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, <sup>2</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

C02-02 [P01-04] Innovations in Allergen-Specific Immunotherapy for Atopic Dermatitis: The Critical Function of a Peripheral-induced Specific Treg Lineage

○ Kelun Zhang¹², Su Min Kim¹², Hye Li Kim¹², Wanjin Kim¹, Yeon Woo Jung¹, Kwang Hoon Lee¹, Chang Ook Park¹²

<sup>1</sup>Department of Dermatology and Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul, <sup>2</sup>Brain Korea 21 PLUS Project for Medical Sciences, Yonsei University College of Medicine, Seoul

C02-03 [P01-05] Cytotoxic CD4+ T cells eliminate senescent dermal fibroblasts by targeting cytomegalovirus antigen

O Tatsuya Hasegawa<sup>1,2,3</sup>, Tomonori Oka<sup>2,3</sup>, Heehwa G. Son<sup>2,3</sup>, Valeria S. Oliver-Garcia<sup>2,3</sup>, Marjan Azin<sup>2,3</sup>, Thomas M. Eisenhaure<sup>4</sup>, David J Lieb<sup>4</sup>, Nir Hacohen<sup>2,4</sup>, Shadmehr Demehri<sup>2,3</sup>

<sup>1</sup>MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, <sup>2</sup>Center for Cancer Research, Massachusetts General Hospital and Harvard Medical School, Boston, <sup>3</sup>Department of Dermatology, Massachusetts General Hospital and Harvard Medical School, Boston, <sup>4</sup>Broad Institute of MIT and Harvard, Boston

C02-04 [P01-06]

The expression of fatty-acid binding protein 5 in T cells of resident memory T cell-mediated skin diseases

O Shoichi Matsuda<sup>1,4</sup>, Shuichi Nakai<sup>2,4</sup>, Toshihiro Masuda<sup>3</sup>, Rei Watanabe<sup>4,5</sup>, Manabu Fujimoto<sup>4</sup>

<sup>1</sup>Drug Development Research Laboratories, Maruho Co., Ltd., Kyoto, <sup>2</sup>Strategic research planning & management Dept., Maruho Co., Ltd., Kyoto, <sup>3</sup>Translational Research Dept., Maruho Co., Ltd., Kyoto, <sup>4</sup>Department of Dermatology, Osaka University, Osaka, <sup>5</sup>Department of Dermatology, Juntendo University, Tokyo

C02-05 [P05-11] Importance of integrin  $\alpha 6\beta 4$ -plectin interaction in the physical strength of the epithelial sheet structure sustained by keratin network

O Yoshiaki Hirako, Kou Hashimoto, Ryosuke Asakura Graduated School of Science, Nagoya University, Nagoya

C02-06 [P05-20] The impact of exposome on skin barrier integrity and cellular senescence

© Eun Jung Lee<sup>1</sup>, Jong Ho Park<sup>2</sup>, Hye-Won Na<sup>3</sup>, Ji Young Kim<sup>1</sup>, Seohyun Park<sup>1</sup>, Yu Jeong Bae<sup>1</sup>, Shinwon Hwang<sup>1</sup>, Il Joo Kwon<sup>1</sup>, Hyoung-June Kim<sup>3</sup>, Hae Kwang Lee<sup>2</sup>, Sang Ho Oh<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Yonsei University College of Medicine, Seoul, <sup>2</sup>P&K Skin Research Center, Seoul, <sup>3</sup>AMOREPACIFIC Research and Innovation Center, Yongin

C02-07 [P15-06] Air pollution: The Hidden Connection to Microbiome Imbalance and Barrier Dysfunction

O Suphagan Boonpethkaew<sup>1,2</sup>, Jitlada Meephansan<sup>1,3</sup>, Sasin Charoensuksira<sup>1</sup>, Punyaphat Sirithanabadeekul<sup>1,3</sup>, Chutinan Chueachavalit<sup>1</sup>, Sunchai Payungporn<sup>4</sup>

<sup>1</sup>Division of Dermatology, Chulabhorn International College of Medicine, Thammasat University, Pathum Thani, <sup>2</sup>Thammasat University, Pattaya Campus, Chonburi, <sup>3</sup>BDMS Health Research Center, Bangkok Dusit Medical Services PLC., Bangkok, <sup>4</sup>Research Unit of Systems Microbiology, Department of Biochemistry, Faculty of Medicine, Chulalongkorn University, Bangkok

## Luncheon Seminar 2

## "Exploring the Role of IL-4 and IL-13 in Type 2 Inflammation"

11:55-12:55

LS2-1 The role of the skin in immune and allergic diseases and the pathogenesis of atopic dermatitis

O Savaka Shibata

Department of Dermatology, Graduate School of Medicine, The University of Tokyo, Tokyo

LS2-2 Antimicrobial peptides restore interleukin-4- and interleukin-13-mediated skin barrier disruption via activation of keratinocyte autophagy

○ François Niyonsaba<sup>1,2</sup>

<sup>1</sup>Atopy Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

Co-sponsored by Sanofi K.K./Regeneron Japan KK

Chairs: Yoshiki Tokura, Masayuki Amagai

# 2-minute presentation 1 (Adaptive Immunity/Auto-Immunity)

15:05-15:55 Chairs: Takashi Matsushita, Mari Kishibe

### O01-01 [P01-08]

## Transient Receptor Potential Vanilloid 4 (TRPV4) regulates type 2 inflammation and pruritus in MC903-induced atopic dermatitis mouse model

O Keiji Kosaka, Akihiko Uchiyama, Syahla Nisaa Amalia, Yuta Inoue, Mai Ishikawa, Yoko Yokoyama, Sachiko Ogino, Yuki Watanuki, Ryoko Torii, Sei-ichiro Motegi

The Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi

## O01-02 [P01-09]

## Modulation of psoriatic inflammation through autophagy activation: the role of keratinocyte-specific Rubicon inhibition in a murine model

O Yoichiro Urata<sup>1</sup>, Toshiya Miyake<sup>1</sup>, Satoshi Nakamizo<sup>1</sup>, Rintaro Shibuya<sup>1</sup>, Tamotsu Yoshimori<sup>2</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, <sup>2</sup>Health Promotion System Science, Graduate School of Medicine, Osaka University, Suita

### O01-03

### Atopic dermatitis from the perspective of B cell function

[P01-10]

O Akitaka Hata, Toshiaki Kogame, Takayoshi Komatsu-Fujii, Hiroaki Takishima, Kenji Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

### O01-04 [P01-11]

## Cell Death Mediated by Intracellular Free Iron Enhances Efficacy of Tumor Immunotherapy with TCR-T cells

O Daisuke Ehara<sup>1,2</sup>, Kiyoshi Yasui<sup>2</sup>, Mitsuhiro Yoneda<sup>2</sup>, Sachiko Okamoto<sup>3</sup>, Yasunori Amaishi<sup>3</sup>, Daisuke Muraoka<sup>4</sup>, Hiroaki Ikeda<sup>2</sup>, Hiroyuki Murota<sup>1</sup>

<sup>1</sup>Department of Dermatology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, <sup>2</sup>Department of Oncology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, <sup>3</sup>Tech. Development Ctr, Takara Bio Inc., Kusatsu, <sup>4</sup>Aichi Cancer Ctr. Res. Inst., Div. of Translational Oncoimmunology, Nagoya

### O01-05

### [P01-12]

Spatial transcriptomic analysis of epidermal keratinocytes of the fistula lesions in hidradenitis suppurativa

O Ken-Ichi Hasui<sup>1</sup>, Yoshio Kawakami<sup>1</sup>, Yoshihiro Matsuda<sup>1</sup>, Yohei Yasutomi<sup>1</sup>, Himino Ashida<sup>1</sup>, Shuta Tomida<sup>2</sup>, Shin Morizane<sup>1</sup> Department of Dermatology, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama University, Okayama, Department of Biobank, Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama University, Okayama

### O01-06 [P01-13]

## CXCR6 regulates localization of CD8\* tissue-resident memory T cells to the epidermis in a murine contact hypersensitivity

O Takahide Iioka<sup>1</sup>, Ryota Asahina<sup>1,2</sup>, Toshiya Miyake<sup>1</sup>, Fuuka Minami<sup>1</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu

### O01-07

## Psychological stress enhances itch behavior in atopic dermatitis by increasing sensitivity of sensory nerves

[P01-14]

O Kei Nagao<sup>1,2</sup>, Soichiro Yoshikawa<sup>1</sup>, Ryota Hashimoto<sup>3</sup>, Toshiro Takai<sup>4</sup>, Sumika Toyama<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,5</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, <sup>2</sup>Department of Cellular Physiology Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>3</sup>Laboratory of Cell Biology, Biomedical Research Core Facilities, Juntendo University Graduate School of Medicine, Tokyo, <sup>4</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>5</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Chiba

### O01-08

### Prevention of atopic dermatitis by skin and intestinal tract microbiota using DOHaD model

[P01-15]

○ Yukihiko Kato¹, Chiho Yanai¹, Ryo Muko², Yosuke Amagai², Yoshihiro Umebayashi¹, Rina Kurokawa³, Wataru Suda³, Hiroshi Matsuda², Akane Tanaka²

<sup>1</sup>Tokyo Medical University Hachioji Medical Center, Tokyo, <sup>2</sup>Tokyo University of Agriculture and Technology, Tokyo, <sup>3</sup>RIKEN Center for Integrative Medical Sciences, Yokohama

### O01-09

## Gene expression analysis of reactive lymphoid follicle-like structures in the skin of Kimura's disease

[P01-16]

Toshiaki Kogame, Takayoshi Komatsu-Fujii, Hiroaki Takishima, Akitaka Hata, Kenji Kabashima
 Department of Dermatology, Kyoto University, Kyoto

### O01-10 [P01-17]

### Cold exposure and its impact on local skin immune responses in murine models of contact hypersensitivity

○ Tomoya Takegami¹, Satoru Yonekura¹, Saeko Nakajima¹², Shuto Kanameishi¹, Koki Kataoka¹, Kenji Kabashima¹³,

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Department of Drug Discovery for Inflammatory Skin Diseases, Kyoto University Graduate School of Medicine, Kyoto, <sup>3</sup>A\*STAR Skin Research Labs (A\*SRL), Agency for Science, Technology and Research (A\*STAR), Singapore, <sup>4</sup>Singapore Immunology Network (SlgN), Agency for Science, Technology and Research (A\*STAR), Singapore

### O01-11 Persistent anti-inflammatory effects of voluntary exercise in a mouse model of atopic dermatitis

[P01-18]

○ Wanchen Zhao¹, Ge Peng¹, Alafate Abudouwanli¹, Arisa Ikeda¹², Quan Sun¹, Mengyao Yang¹³, Shan Wang¹⁴, Hideoki Ogawa¹, Ko Okumura¹, François Niyonsaba¹⁵

'Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, 'Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, 'Department of Dermatology, the First Affiliated Hospital of China Medical University, Liaoning, 'Department of Dermatology, Beijing Children's Hospital, Capital Medical University, Beijing, 'Faculty of International Liberal Arts, Juntendo University, Tokyo

### O01-12 Regulatory function of B cells in contact hypersensitivity re-stimulation

[P01-19]

O Yutaka Matsumura<sup>1</sup>, Hanako Koguchi-Yoshioka<sup>1</sup>, Rei Watanabe<sup>2</sup>, Manabu Fujimoto<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Osaka University, Suita, <sup>2</sup>The Department of Dermatology, Juntendo University, Tokyo

### O01-13 An investigation into Immune Cell Reactivity upon wounding

[P01-21]

Aashal B Shah

Department of Pharmacology, GMERS Medical College and Civil Hospital, Valsad, Gujarat

### O01-14 Withdrawn

### O01-15 Anti-Survival Motor Neuron (SMN) Complex Antibodies as Biomarkers for MCTD-associated ILD and PAH

[P02-11]

O Haruka Koizumi, Yoshinao Muro, Satoshi Kamiya, Norika Akashi, Yuta Yamashita, Mariko Momohara, Takuya Takeichi, Masashi Akiyama

The Department of Dermatology, Nagoya University, Nagoya

### O01-16 Circulating extracellular vesicles reflect clinical phenotypes of anti-centromere antibody-positive patients

[P02-12]

O Mariko Ogawa-Momohara¹, Yoshinao Muro¹, Kentaro Taki², Yoshihisa Nakano³, Takashi Yokoyama¹, Takuya Takeichi¹,
 Masashi Akiyama¹

<sup>1</sup>The Department of Dermatology, Nagoya University, Nagoya, <sup>2</sup>Division for Medical Research Engineering, Nagoya University, Nagoya, <sup>3</sup>Public Health and Health Systems, Nagoya University, Nagoya

### O01-17 IgM autoantibody against the basement membrane zone spontaneously generated in mice

[P02-13]

O Chihiro Shiiya¹, Ken Muramatsu¹, Norihiro Yoshimoto¹, Sho Katayama¹, Takuya Kawamura¹, Shoko Mai¹, Yosuke Mai¹, Hiroyuki Kitahata², Yoichiro Fujioka³, Ken Natsuga¹, Hiroaki Iwata¹⁴, Kentaro Izumi¹, Hideyuki Ujiie¹

<sup>1</sup>The Department of Dermatology, Hokkaido University, Sapporo, <sup>2</sup>Department of Physics, Graduate School of Science, Chiba University, Chiba, <sup>3</sup>Department of Cell Physiology, Faculty of Medicine, Hokkaido University, Sapporo, <sup>4</sup>Department of Dermatology, Graduate School of Medicine, Gifu University, Gifu

## O01-18 Potential Explanation for High Sensitivity of C3 in Direct Immunofluorescence for Bullous Pemphigoid

[P02-14]

O Dongjun Im, Kayoko Tanaka, Hiroaki Iwata

 $Department\ of\ Dermatology,\ Gifu\ university,\ Gifu$ 

## O01-19 Increased Levels of Common $\gamma$ -Chain Correlate with Disease Severity in Stevens-Johnson Syndrome and Toxic

[P02-15]

**Epidermal Necrolysis** 

Ayane Sakamoto, Yuko Watanabe, Izumi Moteki, Noriko Ikeda, Yukie Yamaguchi
 Department of Environmental Immuno-Dermatology, Yokohama City University, Yokohama

## O01-20 Role of MZB1 positive cells in the lesions of alopecia areata

[P02-17]

O Takayoshi Komatsu-Fujii, Toshiaki Kogame, Keigo Takase, Akitaka Hata, Kenji Kabashima Department of Dermatology, Kyoto University, Kyoto

## O01-21 Mitochonic acid-5 ameliorates fibrosis and vasculopathy in a mouse model of systemic sclerosis

[P02-18]

O Yuichiro Segawa<sup>1</sup>, Takehiro Takahashi<sup>1</sup>, Takehiro Suzuki<sup>2</sup>, Chitose Suzuki<sup>2</sup>, Takaaki Abe<sup>2</sup>, Yoshihide Asano<sup>1</sup>

<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>2</sup>Department of Nephrology, Endocrinology and Vascular Medicine, Tohoku University Graduate School of Medicine, Sendai

## O01-22 Fibroblast focused single cell transcriptome analysis of the lung in bleomycin-induced systemic sclerosis mouse model

○ Aya Maekawa¹, Sho Yamazaki³, Yuya Ouchi³, Tomomi Kitayama³, Takashi Shimbo⁴, Ikuko Ueda¹, Manabu Fujimoto¹, Katsuto Tamai²

<sup>1</sup>Department of Dermatology, Integrated Medicine, Graduate School of Medicine, Osaka University, Suita, <sup>2</sup>Department of Stem Cell Therapy Science, Graduate School of Medicine, Osaka University, Suita, <sup>3</sup>StemRIM Inc, Ibaraki, <sup>4</sup>Division of Gene Therapy Science, Graduate School of Medicine, Osaka University, Suita

## O01-23 The anti-IgE autoantibodies are biomarkers of early omalizumab response in patients with chronic spontaneous [P02-21] urticaria

O Yusuke Niwa<sup>1,2</sup>, Koremasa Hayama<sup>1,2</sup>, Shota Toyoshima<sup>3</sup>, Keisuke Shimizu<sup>1,2</sup>, Maho Tagui<sup>1,2</sup>, Mana Ito<sup>1,2</sup>, Tomomi Sakamoto<sup>2</sup>, Tadashi Terui<sup>1,2</sup>, Hideki Fujita<sup>1,2</sup>, Yoshimichi Okayama<sup>2,4,5,6,7</sup>

<sup>1</sup>Division of Cutaneous Science, Department of Dermatology, Nihon University School of Medicine, Tokyo, <sup>2</sup>Center for Allergy, Nihon University School of Medicine, Tokyo, <sup>3</sup>Department of Biochemistry & Molecular Biology, Nippon Medical School, Tokyo, <sup>4</sup>Department of Allergy, Internal Medicine, Misato Kenwa Hospital, Misato, <sup>5</sup>Department of Medicine, Division of Respiratory Medicine, Nihon University School of Medicine, Tokyo, <sup>6</sup>Department of Internal Medicine, Division of Respiratory Medicine and Allergology, Showa University School of Medicine, Tokyo, <sup>7</sup>Advanced Medical Science Research Center, Gunma Paz University, Graduate School of Health Sciences, Takasaki

## O01-24 Establishing minimal clinically important differences (MCIDs) for the pemphigus disease area index (PDAI)

[P02-22]

 $\circ$  Henry Tseng<sup>1,2</sup>, Corey Stone<sup>1,2</sup>, Boaz Shulruf<sup>2</sup>, Dedee F. Murrell<sup>1,2</sup>

Department of Dermatology, St George Hospital, Sydney, Faculty of Medicine, University of New South Wales, Sydney

## O01-25 Correlation of BP180, BP230, and type VII collagen antibody titers in serum, blister fluid, erosion, and saliva in pemphigoid diseases

O Hiroshi Koga<sup>1</sup>, Norito Ishii<sup>1</sup>, Masahiro Tsutsumi<sup>1</sup>, Kwesi Teye<sup>2</sup>, Mieko Kosaka<sup>3</sup>, Takekuni Nakama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kurume University School of Medicine, Kurume, <sup>2</sup>Kurume University Institute of Cutaneous Cell Biology, Kurume, <sup>3</sup>Maruho Co., Ltd., Osaka

## 2-minute presentation 4

## (Auto-Immunity/Carcinogenesis and Cancer/Cell-Cell Interactions in the Skin)

16:05-16:55 Chairs: Toshifumi Nomura, Keitaro Fukuda

## O04-01 Basophil Histamine Release Assay in Chronic Spontaneous Urticaria: Clinical and Laboratory Insights from a Vietnamese Population

OMy Nguyen Thi Tra<sup>1,2</sup>, Minh Vu Nguyet<sup>2,3</sup>, Katrine Baumann<sup>4</sup>, My Le Huyen<sup>3</sup>, Per Stahl Skov<sup>4</sup>, Doanh Le Huu<sup>2,3</sup>

<sup>1</sup>Hue University of Medicine and Pharmacy, Hue, <sup>2</sup>Hanoi Medical University, Hanoi, <sup>3</sup>Vietnam National Dermatology and Venereology Hospital, Hanoi, <sup>4</sup>Reblab, Copenhagen

### O04-02 A new murine model of human eosinophilic fasciitis: role IL-17

[P02-26]

O Takashi Ito, Toshiyuki Yamamoto

Fukushima Medical University, The Department of Dermatology, Fukushima

## O04-03 The role of RANKL in osteoporosis of IMQ-induced psoriasis mouse model

[P02-28]

O Natsuko Saito-Sasaki, Yu Sawada

The Department of Dermatology, University of Occupational and Environmental health, Kitakyusyu

### O04-04 Siblings with neonatal lupus erythematosus

[P02-29]

O Pengyue Tang

The Department of Dermatology, Shenzhen children's hospital, Shenzhen

## O04-05 Basophils drive tumor progression and metastasis through Th2-polarization with IL-4 in primary cutaneous melanoma

○ Aki Tajima¹, Naotomo Kambe², Izumi Kishimoto¹, Noriko Kume¹, Fumikazu Yamazaki³, Hideaki Tanizaki¹

<sup>1</sup>Department of Dermatology, Kansai Medical University, Hirakata, <sup>2</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>3</sup>Department of Dermatology, Tokai University, Isehara

## O04-06 Tertiary lymphoid structures inhibit invasive progression and provide a better prognosis in advanced [P03-10] extramammary Paget's disease

 $\circ$  Tetsuya Magara, Motoki Nakamura, Maki Yoshimitsu, Shinji Kano, Hiroshi Kato, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

## O04-07 High-glucose environment altered keratinocyte response to UVB irradiation: insights on photocarcinogenic resistance of diabetic skin

○ Yang-Yi Chen¹.², Shu-Mei Huang³, Cheng-Che E. Lan².³

<sup>1</sup>Graduate Institute of Clinical Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung City, <sup>2</sup>Department of Dermatology, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung City, <sup>3</sup>Department of Dermatology, College of Medicine, Kaohsiung Medical University, Kaohsiung City

## O04-08 Spatial Assessment of Ki67 to Stratify for MITF Phenotypes in Primary and Metastatic Melanoma

[P03-13] O Jordan D. Kumar¹, Satoru Sugihara¹, Sachit Seth², Gency Gunasingh¹, Loredana Spoerri¹, Cassandra Rowe¹, Helmut Schaider¹, Kiarash Khosrotehrani¹, Rupert Ecker², Nikolas K. Haass¹

<sup>1</sup>Frazer Institute, University of Queensland, Brisbane, <sup>2</sup>TissueGnostics, Vienna

#### O04-09 The dual function of antimicrobial peptides in melanoma: Perspectives from experimental and clinical research

[P03-14]

OQuan Sun¹, Ge Peng¹, Wanchen Zhao¹, Alafate Abudouwanli¹, Mengyao Yang¹², Shan Wang¹³, Hideoki Ogawa¹, Ko Okumura¹, François Niyonsaba1,

Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Department of Dermatology, The First Hospital of China Medical University, Shenyang, 3Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, <sup>4</sup>Faculty of International Liberal Arts, Tokyo

#### O04-10 Body Composition, Clinical Characteristics, and Treatment Modalities as Prognostic Factors in Cutaneous [P03-15] Angiosarcoma

O Satoru Yonekura, Yuichiro Endo, Saeko Nakajima, Kenji Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

#### O04-11 Comprehensive analysis of the chemokine/cytokine profiles in advanced mycosis fungoides

[P03-16]

O Manami Takahashi-Watanabe, Taku Fujimura, Emi Yamazaki, Ryo Amagai, Yumi Kambayashi, Mayuko Amagai, Toshiya Takahashi, Yoshihide Asano

The Department of Dermatology, University of Tohoku, Sendai

#### O04-12 Prognostic Significance of STING Expression in Extramammary Paget's Disease

[P03-17]

O Yoko Amagata, Natsuko Sasaki, Yu Sawada

Department of Dermatology, University of Occupational and Environmental Health, Kitakyushu

#### O04-13 The accuracy of Giemsa, and methylene blue stains in Mohs surgery for basal cell carcinoma: A pilot study

[P03-19]

 Phanitchanat Phusuphitchayanan<sup>1</sup>, Apasee Sooksamran<sup>1</sup>, Poonnawis Sudtikoonaseth<sup>1</sup>, Titaporn Nopmaneepaisarn<sup>2</sup>, Nutpacha Chotikawichean<sup>2</sup>

<sup>1</sup>Institute of Dermatology, Bangkok, <sup>2</sup>Department of Dermatology, Rajavithi Hospital, Bangkok

#### O04-14 Possible Association Between Melanoma from Congenital Nevus and Estrogen or Progesterone Receptor [P03-21]

**Expression: Clinicopathological Analysis** 

O Takako Tsukamoto<sup>1</sup>, Yohei Iwata<sup>1</sup>, Chiho Sumitomo<sup>1,2</sup>, Kazumitsu Sugiura<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Fujita Health University, Toyoake, <sup>2</sup>SUMITOMO SKIN CLINIC, Nagakute

#### O04-15 Co-existence of oligoclonal and polyclonal HTLV-1-positive T cells successfully treated by ultraviolet B [P03-25] phototherapy and etretinate

O Kosei Nishitani<sup>1</sup>, Satoshi Nakamizo<sup>1</sup>, Takero Shindo<sup>2</sup>, Yo Kaku<sup>1</sup>, Masakazu Fujimoto<sup>3</sup>, Masahiro Hirata<sup>3</sup>, Kai Mizoguchi<sup>3</sup>, Kazuhiro Kawai⁴, Kenji Kabashima¹

<sup>1</sup>Department of Dermatology, Kyoto University, Kyoto, <sup>2</sup>Department of Hematology and Oncology, Kyoto University, Kyoto,

<sup>3</sup>Department of Diagnostic Pathology, Kyoto University, Kyoto, <sup>4</sup>Department of Dermatology, Kido Hospital, Niigata

#### O04-16 A clinicopathological analysis of forkhead box A1 (FOXA1) and estrogen receptor alpha expression in [P03-26] extramammary Paget's disease

O Yuna Yamada<sup>1</sup>, Yohei Iwata<sup>1</sup>, Chiho Sumitomo<sup>1,2</sup>, Kazumitsu Sugiura<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Fujita Health University, Toyoake, <sup>2</sup>SUMITOMO SKIN CLINIC, Nagakute

#### O04-17 Effectiveness of 5-Fluorouracil in Comparison to Other Treatments in the Reduction of Actinic Keratosis Lesions

[P03-27]

 $\circ$  Jessica Zhuang<sup>2,3</sup>, Valerie Yii $^1$ , Bowen Xia $^4$ , ZF Liu $^{5,6}$ , Lawrence Lin $^5$ , Christopher Chew $^{5,6,7,8}$ 

Sinclair Dermatology Investigational Research Education and Clinical Trials (DIRECT), Melbourne, Faculty of Medicine, University of Melbourne, Melbourne, <sup>3</sup>Department of Dermatology, Royal Melbourne Hospital, Melbourne, <sup>4</sup>Monash Health, Melbourne, <sup>5</sup>Faculty of Medicine, Monash University, Melbourne, 'Department of Dermatology, Alfred Health, Melbourne, 'Victorian Melanoma Service, Alfred Health, Melbourne, 8Skin Health Institute, Melbourne

#### O04-18 Sensory re-innervation triggers ECM remodelling through the cross-talk with mast cells

[P04-07]

O Moe Tsutsumi<sup>1,2,3,4</sup>, Marta Silva e Sousa<sup>2</sup>, Sofoklis Koudounas<sup>2</sup>, Onur Egriboz<sup>2</sup>, Wolfgang Funk<sup>3</sup>, Maximilian Kueckelhaus<sup>4</sup>, Ilaria Piccini<sup>2</sup>, Marta Bertolini<sup>2</sup>, Kentaro Kajiya<sup>1</sup>

<sup>1</sup>MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, <sup>2</sup>Monasterium Laboratory Skin & Hair Research Solutions GmbH, Muenster, <sup>3</sup>Schoenheitsklinik Dr Funk, Muenchen, <sup>4</sup>Clinic Fachklinik Hornheide, Muenster

#### O04-19 Serum MIF is a disease-specific marker of acquired idiopathic generalized anhidrosis

[P04-08]

O Manon Okamura, Ryota Hayashi, Shingo Takei, Tatsuya Katsumi, Riichiro Abe

Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

#### O04-20 Bead aggregation assays with desmoglein and desmocollin for evaluation of the disease activity in pemphigus

[P04-09]

○ Miki Hamanaka¹, Ken Ishii¹², Mari Urushibata¹, Kenji Yoshida¹, Akira Ishiko¹

<sup>1</sup>The Department of Dermatology, Toho University School of Medicine, Tokyo, <sup>2</sup>The Department of Dermatology, Tokyo Dental College Ichikawa General Hospital, Ichikawa

#### O04-21 Functional analysis of miR-4497 contained in extracellular vesicles derived from environmental stimulus-[P04-11] responsive keratinocytes

O Christopher T. Knight, Ayami Iijima, Misato Sugahara, Makiko Goto, Katsuyuki Maeno, Akira Motoyama, Masashi Miyai Shiseido Co., Ltd., MIRAI Technology Institute, Yokohama

### O04-22 Secreted Phosphoprotein 1-CD44 Deficiency Promotes Melanocyte Senescence Through ROS Production

[P04-12] • Yul Hee Kim², So Yeon Myeong¹, Yeongeun Kim¹, Jin Cheol Kim¹, Tae Jun Park², Hee Young Kang¹

<sup>1</sup>Department of Dermatology, Ajou University School of Medicine, Suwon, <sup>2</sup>Department of Biochemistry and Molecular Biology, Ajou University School of Medicine, Suwon

## O04-23 Proteases that activate pro-IL-36s in sterile neutrophillic pustular dermatitis

[P04-14]

 $\circ$  Lisa Minai, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura

Department of Dermatology, University of Yamanashi, Chuo

## O04-24 Transfection of dsDNA induces cell senescence via ATR signaling pathway in human keratinocytes

[P04-15]

O Akihiro Aioi<sup>1</sup>, Tomozumi Imamichi<sup>2</sup>, Jun-ichi Kashiwakura<sup>3</sup>, Emiko Okuda-Ashitaka<sup>4</sup>

<sup>1</sup>Basic Research, Septem-Soken, Osaka, <sup>2</sup>Frederick National Laboratory for Cancer Research, Applied and Developmental Research Directorate, Frederick, <sup>3</sup>Department of Life Science, Faculty of Pharmaceutical Sciences, Hokkaido University of Science, Sapporo, <sup>4</sup>Department of Biomedical Engineering, Osaka Institute of Technology, Osaka

### O04-25 The interplay of autophagy and oxidative stress in the senescence melanocytes

[P04-16]

○ Jin Cheol Kim<sup>1,4</sup>, Yeongeun Kim<sup>1,4</sup>, Sang Hyun Kim<sup>2</sup>, Tae Jun Park<sup>3,4</sup>, Hee Young Kang<sup>1,4</sup>

<sup>1</sup>Department of Dermatology, Ajou University School of Medicine, Suwon, <sup>2</sup>Department of Biomedical Science, The Graduate School, Ajou University, Suwon, <sup>3</sup>Department of Biochemistry and Molecular Biology, Ajou University School of Medicine, Suwon, <sup>4</sup>Inflamm-Aging Translational Research Center, Ajou University School of Medicine, Suwon

## **Evening Seminar 2**

## "New findings on IL-36 in inflammatory diseases"

17:15-18:15 Chairs: Shin Morizane, Nobuo Kanazawa

## **ES2-1** Roles of IL-36γ in generalized pustular psoriasis (GPP)

○ Emi Sato

Department of Dermatology, Faculty of Medicine, Fukuoka University

### ES2-2 Proteases that activate pro-IL-36s in sterile neutrophilic pustular dermatitis

O Youichi Ogawa

Department of Dermatology, Faculty of Medicine, University of Yamanashi

Co-sponsored by Nippon Boehringer Ingelheim Co., Ltd. Medicine Division

## December 6, 2024, Room C

# Concurrent Oral Session 3 (Skin, Appendages, and Stem Cell Biology/Pigmentation and Melanoma)

10:20-11:44 Chairs: Tetsuya Honda, Dong-Youn Lee

C03-01 NKG2D activity in the course of alopecia areata is influenced by soluble MICA

[P13-03] O Taisuke Ito, Reiko Kageyama, Takahiro Suzuki, Toshiharu Fujiyama, Tetsuya Honda

Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu

C03-02 Discovery of human dermal papilla cell surface markers for living cell isolation using a novel culture condition with WNT and FGF activation

○ Reina Hayakawa¹, Ryo Takahashi², Masahiro Fukuyama¹, Aki Tsukashima¹, Momoko Kimishima¹, Yoshimi Yamazaki¹, Manabu Ohyama¹²

<sup>1</sup>Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, <sup>2</sup>Flow Cytometry Core Facility, Kyorin University Graduate School of Medicine, Tokyo

C03-03 Induction of tissue-specific premature stem cell aging promotes senescence-like phenotypes in remote multiple organs

○ Yasuaki Ikuno¹², Yukie Kande², Ayano Narumoto², Dai Ihara², Noriki Fujimoto¹, Hayato Naka-Kaneda²

<sup>1</sup>Department of Dermatology, Shiga University of Medical Science, Otsu, <sup>2</sup>Department of Anatomy, Shiga University of Medical Science, Otsu

C03-04 A Multi-Omics Approach to create a Human Hair Atlas for healthy and AGA models

[P13-06] O Carlos Clavel
A\*STAR Skin Research Labs, Singapore

C03-05 Unveiling molecular secrets: a comparative genetic study of the nail unit, skin, hair follicle and

[P13-07] onychomatricoma

○ Taemin Lee, Joonho Shim, Ji Hye Park, Jong Hee Lee, Dongyoun Lee Department of Dermatology, Samsung Medical Center, Sungkyunkwan University, Seoul

C03-06 Ribosomal protein RPS10 plays a crucial role in melanin transportation and skin pigmentation
[P12-06] OMOVIJKA Wada-Irimada 123.44.56 Kenshi Yamasaki 12 Kosuke Shido Kaname Kojima 1 Ikuko N. Motojka Kenso

○ Moyuka Wada-Irimada<sup>1,2,3,4,5,6</sup>, Kenshi Yamasaki<sup>1,2</sup>, Kosuke Shido¹, Kaname Kojima³, Ikuko N. Motoike³, Kengo Kinoshita<sup>3,4,5,6</sup>, Yoshihide Asano¹

<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>2</sup>Aloop Clinic & Lab, Tokyo, <sup>3</sup>Department of Integrative Genomics, Tohoku Medical Megabank Organization, Tohoku University, Sendai, <sup>4</sup>Graduate School of Information Sciences, Tohoku University, Sendai, <sup>5</sup>Advanced Research Center for Innovations in Next-Generation Medicine, Tohoku University, Sendai, <sup>6</sup>Institute of Development, Aging and Cancer, Tohoku University, Sendai

C03-07 SIRT7 Protects Melanocytes Against Ferroptosis via the SMAD3-ATF3-GPX4 Axis in Vitiligo

[P12-09] O Xiu L. Yi, Li L. Wu, Weinan Guo, Yu Q. Yang, Hao Wang, Jia X. Chen, Heng X. Zhang Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an

# Luncheon Seminar 3 "Cutaneous T-Cell Lymphoma"

11:55-12:55 Chair: Hiroyuki Murota

LS3-1 A randomized, open-label, multicenter, 2-dose parallel-group, phase II study of bexarotene in patients with ATL (B-1801 study)

O Kentaro Yonekura

Department of Dermatology, Imamura General Hospital, Kagoshima

LS3-2 An update on the selecting therapeutic options for Japanese patients with advanced-stage mycosis fungoides

O Toshihisa Hamada

International University of Health and Welfare, Narita

Co-sponsored by Minophagen Pharmaceutical Co., Ltd.

## 2-minute presentation 2

# (Epidermal Structure and Barrier Function/Genetic Disease, Gene Regulation and Gene Therapy/Innate Immunity, Microbiology, Microbiome)

15:05-15:55 Chairs: Takuya Takeichi, Ken Natsuga O02-01 Skin changes due to changes in enzyme-inhibitor balance induced by atopic dermatitis, aging, and environment [P05-12] in stratum corneum maturation O Masashi Miyai¹, Akira Motoyama¹, Junichiro Hiruma², Mami Yamamoto², Ryoji Tsuboi², Toshihiko Hibino¹² Shiseido Co., Ltd., MIRAI Technology Institute, Yokohama, 2Department of Dermatology, Tokyo Medical University, Tokyo O02-02 High resolution imaging of intra-dermal distributions of cosmetic ingredients using NanoSIMS [P05-13] Keishi Kihara¹, Akira Motoyama¹, ○ Kazuhiro Matsuda² <sup>1</sup>MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, <sup>2</sup>Surface Science Laboratories, Toray Research Center, Inc., Shiga O02-03 Loricrin regulates hair follicle regeneration [P05-14] O Yosuke Ishitsuka, Xinyi Wang, Jun Akome, Manabu Fujimoto Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine, Suita 002-04GPNMB is related to differentiation and cellular senescence in normal human epidermal keratinocytes [P05-15] O Yukiko Mizutani, Rico Shimada, Kasumi Matsumoto, Miyu Gunji, Mariko Otsu, Shintaro Inoue Department of Cosmetic Health Science, Gifu Pharmaceutical University, Gifu O02-05Hyperosmotic stress is a cause of dry skin resulting from low humidity [P05-16] O Hitoshi Masaki, Yukiko Izutsu-Matsumoto, Yuri Okano CIEL Co.Ltd., Kanagawa O02-06 Effect of TNF-α, IL-17 and IL-22 on the expression of filaggerin-2 and hornerin: Analysis of a three-dimensional [P05-17] psoriatic skin model O Teruhiko Makino<sup>1</sup>, Megumi Mizawa<sup>1</sup>, Keita Takemoto<sup>1</sup>, Seiji Yamamoto<sup>2</sup>, Tadamichi Shimizu<sup>1</sup> <sup>1</sup>Department of Dermatology, University of Toyama, Toyama, <sup>2</sup>Department of Pathology, University of Toyama, Toyama O02-07 Betacellulin, a member of the EGF family, attenuates atopic dermatitis-like symptoms through EGFR signaling [P05-18] and autophagy activation O Alafate Abudouwanli<sup>1</sup>, Ge Peng<sup>1</sup>, Wanchen Zhao<sup>1</sup>, Arisa Ikeda<sup>12</sup>, Quan Sun<sup>1</sup>, Mengyao Yang<sup>13</sup>, Shan Wang<sup>14</sup>, Ko Okumura<sup>1</sup>, Hideoki Ogawa<sup>1</sup>, François Niyonsaba<sup>1</sup> <sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, 3Department of Dermatology, The First Affiliated Hospital of China Medical University, Shenyang, Liaoning, <sup>4</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, <sup>5</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo O02-08 Loricrin modulates neonatal immunity to prevent atopic march [P05-19] O Jun Akome, Yosuke Ishitsuka, Xinyi Wang, Manabu Fujimoto Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine, Suita O02-09 Soothing benefits of Centella asiatica extract [P05-21] ○ Yan Wu<sup>1,2</sup>, Binwei Deng², Jian (Richard) Cao², Nadine Pernodet³ Dr. Jart+, Asia Advanced Technology Pioneering, Shanghai, <sup>2</sup>Estée Lauder Companies R&D, Asia Innovation Center, Shanghai, <sup>3</sup>R&D, The Estée Lauder Companies, NY Analyses of genes related to epidermal hyperplasia O02-10 [P05-25] ○ Tomohiro Tobita¹, Mitsutoshi Tominaga¹, Kenji Takamori¹,² <sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo Univ. Graduate school of Medicine, Urayasu, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu O02-11 Nonsense variant in CYP4F22 causes loss of the corneocyte lipid envelope in lamellar ichthyosis [P05-34] O Ryo Fukaura, Kana Tanahashi, Michiya Omi, Takuya Takeichi, Masashi Akiyama Nagoya University Graduate School of Medical Sciences, Department of Dermatology, Nagoya O02-12 Withdrawn 002 - 13MEFV variants are a predisposing factor for generalized pustular psoriasis [P06-08] O Takenori Yoshikawa¹, Takuya Takeichi¹, Kazuki Nishida², Yumiko Kobayashi², Kazumitsu Sugiura³, Yoshinao Muro¹, Masashi Akiyama<sup>1</sup>

University Hospital, Nagoya, 3Department of Dermatology, Fujita Health University School of Medicine, Toyoake

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Department of Advanced Medicine, Nagoya

## O02-14 mTORC1 activation of somatostatin-expressing neurons in cortical layer 5 contribute epileptogenesis in tuberous sclerosis complex

○ Fumiki Yamashita¹, Makiko Koike-Kumagai¹, Manabu Fujimoto², Mari Wataya-Kaneda¹.²

<sup>1</sup>Department of Neurocutaneous Medicine, Division of Health Sciences, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup> Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka

## O02-15 Mechanism behind farnesyltransferase inhibitor mediated amelioration of Hutchinson-Gilford progeria is applicable to other laminopathies

 ${}^{\bigcirc}$  Mattheus Xing Rong Foo, Peh Fern Ong, Oliver Dreesen

Cell Aging, A\*STAR Skin Research Labs, Skin Research Institute of Singapore, A\*STAR, Singapore

## O02-16 Identification and characterization of a novel 3.96 kb deletion spanning exons 3 and 4 of *ATP2C1* in a patient with Hailey-Hailey disease

O Kwesi Teye<sup>1</sup>, Hiroshi Koga<sup>2</sup>, Masahiro Tsutsumi<sup>2</sup>, Norito Ishii<sup>2</sup>, Takahiro Hamada<sup>2</sup>, Takekuni Nakama<sup>2</sup>

<sup>1</sup>Kurume University Institute of Cutaneous Cell Biology, Kurume, <sup>2</sup>Department of Dermatology, Kurume University School of Medicine, Kurume

### O02-17 The integration of phenotype, genotype, and epigenetic analysis in tuberous sclerosis complex

[P06-12]

○ Emi Kaneda¹, Hanako Koguchi-Yoshioka¹², Satoshi Hattori³, Keisuke Nimura⁴, Saki Ishino⁵, Manabu Fujimoto¹, Mari Wataya-Kaneda¹²

<sup>1</sup>The Department of Dermatology, Osaka University, Suita, <sup>2</sup>The Department of Neurocutaneous Medicine, Osaka University, Suita, <sup>3</sup>The Department of Biomedical Statistics, Osaka University, Suita, <sup>4</sup>The Division of Gene Therapy Science, Osaka University, Suita, <sup>5</sup>The CoMIT Omics Center, Osaka University, Suita

## O02-18 Three cases of non-hereditary solitary porokeratosis of Mibelli exhibiting lesion-specific biallelic somatic defects in *FDFT1*

O Ai Yoshioka¹, Sonoko Saito², Satomi Aoki², Hiroaki Hanafusa³, Takashi Seo⁴, Ken Natsuga⁴, Kazuhiko Nakabayashi⁵, Masayuki Amagai², Takeshi Fukumoto¹, Akiko Kubo¹, Akiharu Kubo¹²

<sup>1</sup>Division of Dermatology, Department of Internal Related, Graduate School of Medicine, Kobe University, Kobe, <sup>2</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>3</sup>Department of Pediatrics, Kobe University Graduate School of Medicine, Kobe, <sup>4</sup>Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, <sup>5</sup>Department of Maternal-Fetal Biology, National Research Institute for Child Health and Development, Tokyo

## O02-19 Two cases of Hailey-Hailey disease with novel pathogenic ATP2C1 variants suggesting possible genotype/ phenotype correlations

O Michiya Omi¹, Takuya Takeichi¹², Yasutoshi Ito¹³, Takenori Yoshikawa¹, Yuki Mizutani⁴⁵, Miki Nagai⁴, Mariko Seishima⁶⁷, Tomoo Ogi⁵⁵, Yoshinao Muro¹, Masashi Akiyama¹

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Nagoya University Institute for Advanced Research, Nagoya, <sup>3</sup>Department of Dermatology, National Hospital Organization, Nagoya Medical Center, Nagoya, <sup>4</sup>Gifu Prefectural General Medical Center, Gifu, <sup>5</sup>Department of Dermatology, Mie University, Graduate School of Medicine, Tsu, <sup>6</sup>Department of Dermatology, Asahi University Hospital, Gifu, <sup>7</sup>Department of Dermatology, Gifu University Graduate School of Medicine, Gifu, <sup>8</sup>Department of Genetics, Research Institute of Environmental Medicine (RIeM), Nagoya University, Nagoya, <sup>9</sup>Department of Human Genetics and Molecular Biology, Nagoya University Graduate School of Medicine, Nagoya

### O02-20 Methotrexate Reduces Pruritus in Patients with Recessive Dystrophic Epidermolysis Bullosa

[P06-16]

O Hsin Yu Huang<sup>1,5</sup>, Wilson Jr F. Aala<sup>2</sup>, Yi-Kai Hong<sup>1,4</sup>, Alexandros Onoufriadis<sup>3</sup>, John A. McGrath<sup>1,3</sup>, Chao-Kai Hsu<sup>1,2,4</sup>

<sup>1</sup>Department of Dermatology, National Chun Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, <sup>3</sup>St Johns Institute of Dermatology, School of Basic and Medical Biosciences, Kings College London, London, <sup>4</sup>International Center for Wound Repair and Regeneration, National Cheng Kung University, Tainan, <sup>5</sup>Tainan Hospital, Ministry of Health and Welfare, Tainan

## O02-21 Genetic association between palmoplantar pustulosis and HLA polymorphisms

[P06-17]

Nobuhiro Takahashi¹², Tomomichi Shimizu¹, Akio Kondoh¹, Fumikazu Yamazaki¹, Shingo Suzuki², Takahi Shiina²,
 Tomotaka Mabuchi¹

<sup>1</sup>Tokai University School of Medicine, Isehara, <sup>2</sup>Department of Basic Medical Science and Molecular Medicine, Tokai University School of Medicine, Isehara

### O02-22 Withdrawn

[P06-21]

### Comprehensive metagenomic analysis of axillary microbiota in Japanese male subjects with axillary osmidrosis

O02-23 [P07-10]

O Miki Watanabe<sup>1,2</sup>, Miho Uematsu<sup>2</sup>, Kosuke Fujimoto<sup>2</sup>, Daisuke Tsuruta<sup>1</sup>, Satoshi Uematsu<sup>2</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Osaka Metropolitan University, Osaka, <sup>2</sup>Department of Immunology and Genomics, Graduate School of Medicine, Osaka Metropolitan University, Osaka

## O02-24 Investigation into the inflammatory cascade of secondary disease in dystrophic epidermolysis bullosa using spatial transcriptomics

O Yoshio Kawakami¹, Ken-Ichi Hasui¹, Yoshihiro Matsuda¹, Yohei Yasutomi¹, Himino Ashida¹, Ai Kajita¹, Yoji Hirai¹, Keiji Iwatsuki¹, Shuta Tomida², Shin Morizane¹

Department of Dermatology, Okayama University, Okayama, Department of Biobank, Okayama University, Okayama

## O02-25 Skin keratinocytes expressing mutation in the Cx26 gene cause susceptibility to chronic cutaneous candidiasis

[P07-12] O Alshimaa Mostafa¹, Teruasa Murata¹², Akihiko Kitoh¹, Hiromi Doi¹, Gyohei Egawa¹³, Kenji Kabashima¹

 $^{1} The \ Department \ of \ Dermatology, \ Kyoto \ University, \ Kyoto, \ ^{2} Department \ of \ Dermatology, \ Hyogo \ Medical \ University, \ Hyogo, \ Property \ Property$ 

<sup>3</sup>Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima

## 2-minute presentation 5

# (Innate Immunity, Microbiology, Microbiome/Patient Population Research/Patient-Targeted Research/Pharmacology and Drug Development)

16:05-16:55 Chairs: Akiko Arakawa, Takashi Sakai

## O05-01 Synergistic Effects of Western Diet and Blue LED Light on Itch and Neural Inflammation in Mice

[P07-13]

○ Wei-Tai Yu<sup>1,2,3,4</sup>, Hsin-Su Yu<sup>5,6</sup>

<sup>1</sup>Department of Dermatology, College of Medicine, Kaohsiung Medical University, Kaohsiung, <sup>2</sup>Department of Dermatology, Kaohsiung University Gangshan Hospital, Kaohsiung, <sup>3</sup>Department of Dermatology, Kaohsiung Medical University Hospital, Kaohsiung, <sup>4</sup>Master of Public Health Degree Program, College of Public Health, National Taiwan University, Taipei, <sup>5</sup>National Institute of Environmental Health Sciences, National Health Research Institutes, Miaoli, <sup>6</sup>Graduate Institute of Clinical Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung

## O05-02 Enhanced Antioxidant Activity in Multinucleated Giant Cells within Granulomas

[P07-14]

O Satoshi Nakamizo<sup>1,2</sup>, Kenji Kabashima

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Alliance Laboratory for Advanced Medical Research, Kyoto University Graduate School of Medicine, Kyoto

## O05-03 Characteristics of gene expression and microbiota in tonsils of patients with palmoplantar pustulosis and pustulotic arthro-osteitis

O Satomi Kobayashi1, Hideki Nakagawa2, Masato Komai3

<sup>1</sup>Department of Dermatology, Seibo International Catholic Hospital, Tokyo, <sup>2</sup>Department of Otolaryngology, Seibo International Catholic Hospital, Tokyo, <sup>3</sup>Research Unit, R&D division, Kyowa Kirin Co., Ltd., Shizuoka

## O05-04 Regnase-1 3'UTR mutant mice develop psoriasis like dermatitis with Köbner phenomenon

[P07-16]

○ Hiroyuki Morisaka¹, Kazuhiko Maeda²³, Manabu Fujimoto⁴, Shizuo Akira²³

<sup>1</sup>Department of Stem Cell Gene Therapy Science, Graduate School of Medicine, Osaka University, Suita, <sup>2</sup>Laboratory of Host Defense, World Premier Institute-Immunology Frontier Research Center (WPI-IFReC), Osaka University, Suita, <sup>3</sup>Department of Host Defense, Research Institute for Microbial Diseases (RIMD), Osaka University, Suita, <sup>4</sup>Department of Dermatology, Integrated Medicine, Graduate School of Medicine, Osaka University, Suita

## O05-05 Squaric acid dibutylester promotes innate immune-driven hair growth with CD206\* macrophage accumulation

[P07-17]

O Koichi Tomii<sup>1,2</sup>, Tomoya Katakai<sup>2</sup>, Riichiro Abe<sup>1</sup>

<sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>Department of Immunology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

## O05-06 Purinergic molecules in murine bone marrow-derived mast cells

[P07-18]

O Takuya Sato, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura Department of Dermatology, University of Yamanashi, Chuo

## O05-07 Microbiome Disruptions, Inflammation, and JAK/STAT Signaling in Southeast Asian Ichthyosis Patients: [P07-19] Implications for Antibiotic Treatment

Ngan K Nguyen¹, Minh Ho³, ○ Bao C Bui²

<sup>1</sup>Department of Omics, International University, Ho Chi Minh, <sup>2</sup>University of Health Sciences, Vietnam National University, Ho Chi Minh, <sup>3</sup>Department of Dermatology, Yale School of medicine, New Haven

## O05-08 Papain protease activity on SDS-treated skin is essential to skin inflammation and Th17/Th22 induction but dispensable to Th2 induction

O Sakiko Maruyama<sup>1,2</sup>, Keiko Takada<sup>1,2</sup>, Tomoko Yoshimura<sup>1,2</sup>, Shuntaro Ishihara<sup>1,2</sup>, Mengnan Chen<sup>2</sup>, Seiji Kamijo<sup>2</sup>, Saya Shimizu<sup>2</sup>, Mitsutoshi Tominaga<sup>3</sup>, Kenji Takamori<sup>3</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>2</sup>, Shigaku Ikeda<sup>1</sup>, Rei Watanabe<sup>1</sup>, Toshiro Takai<sup>2</sup>

<sup>1</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>3</sup>Juntendo Itch Research Center (JIRC), Juntendo University Graduate School of Medicine, Chiba

## O05-09 Epicutaneous papain application on intact or tape-stripped skin induces protease activity-dependent acute itch and Th sensitization

O Shuntaro Ishihara<sup>1,2</sup>, Toru Kimitsu<sup>1,2</sup>, Seiji Kamijo<sup>2</sup>, Yurie Masutani<sup>1,2</sup>, Tomoko Yoshimura<sup>1,2</sup>, Saya Shuimizu<sup>2</sup>, Keiko Takada<sup>1,2</sup>, Mengnan Chen<sup>2</sup>, Sakiko Maruyama<sup>1,2</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>2</sup>, Rei Watanabe<sup>1</sup>, Shigaku Ikeda<sup>1</sup>, Toshiro Takai<sup>2</sup>

Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo

### O05-10 Withdrawn

## O05-11 Exploring the Synergy of big data in bridging digital health and cosmetics industries for advanced hair loss research

○ Seoyeon Kyung¹, Dongeol Lee¹, Seunghyun Kang¹, Dong Keon Yon²⁵, Selin Woo², Minji Kim², Hayeon Lee², Jiseung Kang³, Masoud Rahmati⁴, Yujun Park⁵, Seyoung Mun⁵

<sup>1</sup>COSMAX BTI, Seongnamsi, <sup>2</sup>Center of Digital Health, Kyung Hee University Medical Center, Seoul, <sup>3</sup>Department of Anesthesia, Massachusetts General Hospital, Boston, <sup>4</sup>Department of Physical Education and Sport Sciences, Lorestan University, Khoramabad, <sup>5</sup>Department of Pediatrics, Kyung Hee University Medical Center, Seoul, <sup>6</sup>Department of Nanobiomedical Science, Dankook University, Cheonan

### O05-12 Utilizing SERPINB7 Immunostaining for Enhanced Diagnosis of Hereditary Palmoplantar Keratoderma

[P08-08]

O Mari Kishibe, Mai Komatsu, Hiroyoshi Nozaki, Satomi Igawa, Akemi Ishida-Yamamoto

Department of Dermatology/Asahikawa Medical University, Asahikawa

### O05-13 The association of IL-31 with pruritis in eruptive pruritic papular porokeratosis (EPPP)

[P08-09]

O Satomi Igawa<sup>1</sup>, Akemi Ishida-Yamamoto<sup>1</sup>, Noriaki Toyota<sup>2</sup>, Mari Kishibe<sup>1</sup>

<sup>1</sup>Department of Dermatology, Asahikawa Medical University, Asahikawa, <sup>2</sup>Minami 6 Dermatological Clinic, Asahikawa

### O05-14 Withdrawn

[P08-11]

### O05-15 MicroRNA as a disease marker of psoriasis

[P09-07]

 ${}^{\circ} Yuko\ Higashi^{12}, Munekazu\ Yamakuchi^3, Tomoko\ Fukushige^1, Takuro\ Kanekura^1, Teruto\ Hashiguchi^3, Gyohei\ Egawa^1$ 

<sup>1</sup>Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima, <sup>2</sup>Department of Dermatology, Kagoshima City Hospital, Kagoshima, <sup>3</sup>Department of Laboratory and Vascular Medicine, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

## O05-16 Could Mechanical Stress Serve as a Predisposing Factor for the Malignant Transformation of Seborrheic [P09-08] Keratosis?

O Hiroyoshi Nozaki<sup>1</sup>, Tomoe Nakagawa<sup>1</sup>, Kaori Umekage<sup>1</sup>, Kyoko Kanno<sup>1</sup>, Mari Kishibe<sup>1</sup>, Masaru Honma<sup>2</sup>, Akemi Ishida-Yamamoto<sup>1</sup> Department of Dermatology, Asahikawa Medical University, Asahikawa, <sup>2</sup>International Medical Support Center, Asahikawa Medical University, Asahikawa

## O05-17 Development of a digital image analysis system to objectively evaluate the treatment response in cellulitis

[P09-10]

O Kazunori Miyata<sup>1</sup>, Jun Yamagami<sup>2</sup>, Yuko Takenaka<sup>2</sup>, Mai Onuki<sup>2</sup>, Tomoaki Sawayanagi<sup>3</sup>, Naoko Ishiguro<sup>2</sup>

<sup>1</sup>Department of Dermatology, Tokyo Women's Medical University Yachiyo Medical Center, Chiba, <sup>2</sup>Department of Dermatology, Tokyo Women's Medical University, Tokyo, <sup>3</sup>Realinite Co., Ltd., Tokyo

### O05-18 Comparison between Local Anesthetic Minimal-Invasive Liposuction (LAMS) using normal saline and half saline

[P09-13]

 ${}^{\bigcirc}\, Kyungho\, Paik^{^{1}},\, Nam\, Chul\, Kim^{^{2}},\, Jeong\, Eun\, Kim^{^{2}},\, Jinmook\, Jeong^{^{2}},\, Chang-Hun\, Huh^{^{1}}$ 

<sup>1</sup>Seoul National University Bundang Hospital, Seongnam, <sup>2</sup>365mc Hospital Network, Seoul

## O05-19 The in-vivo exfoliation and 3h anti-acne efficacy of a clearing gel containing 2% salicylic acid

[P09-15]

O Shuyan Yang², Liwei Wang¹, Chao Yuan¹, Rachel Zhao², Yan Zhong², Lucas Kruger³, Kristine Schmalenberg³

<sup>1</sup>Department of Skin and Cosmetic Research, Shanghai Skin Disease Hospital, School of Medicine, Tongji University, Shanghai, <sup>2</sup>APAC Innovation Center, the Estée Lauder Companies, Shanghai, <sup>3</sup>Global Clinical and Consumer Sciences, The Estée Lauder Companies, NY

### O05-20 Deep Venous Thrombosis Risk in Elderly Patients with Lower Leg Cellulitis

[P09-17]

O Romane Teshima, Yu Sawada, Natsuko Sasaki

University of Occupational and Environmental Health, Kitakyushu

## O05-21 Anti-acne efficacy of a botanic gel containing 1% salicylic acid: double-blinded, randomized controlled 3-day study

Chao Yuan¹, Liwei Wang¹, Yunyun Zheng², Xiaomin Zhao², Yan Zhong², Lucas Kruger³, Kristine Schmalenberg³, Hao Ouyang³
 Department of Skin and Cosmetic Research, Shanghai Skin Disease Hospital, School of Medicine, Tongji University, Shanghai, ²APAC Innovation Center, the Estée Lauder Companies, Shanghai, ³Global Clinical and Consumer Sciences, The Estée Lauder Companies, NY

### O05-22 A 3-Step product Regimen Efficacy on Acne Vulgaris for both Female and Male

[P09-21]

O Liwei Wang<sup>1</sup>, Chao Yuan<sup>1</sup>, Shuyan Yang<sup>2</sup>, Xiaomin Zhao<sup>2</sup>, Yan Zhong<sup>2</sup>, Lucas Kruger<sup>3</sup>, Kristine Schmalenberg<sup>3</sup>

<sup>1</sup>Shanghai Skin Disease Hospital, Shanghai, <sup>2</sup>APAC Innovation Center, the Estée Lauder Companies, Shanghai, <sup>3</sup>Global Clinical and Consumer Sciences, The Estée Lauder Companies, NY

### O05-23 Cytoprotection mechanisms of keratinocyte cytoprotectants against sorafenib toxicity

[P10-07]

O Yayoi Kamata<sup>1</sup>, Rui Kato<sup>2</sup>, Mitsutoshi Tominaga<sup>1</sup>, Sumika Toyama<sup>1</sup>, Eriko Komiya<sup>1</sup>, Jun Utsumi<sup>1</sup>, Takahide Kaneko<sup>2</sup>, Yasushi Suga<sup>2</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

### O05-24 Serum cytokine and chemokine profiling in drug-induced hypersensitivity syndrome

[P10-08]

O Elena Borzova, Ryota Hayashi, Osamu Ansai, Shingo Takei, Riichiro Abe

Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

## O05-25 Bexarotene-induced upregulation of Siglec-7 and Siglec-9 on peripheral blood T cells: a potential therapeutic target

Miki Kume<sup>1</sup>, Rei Watanabe<sup>2</sup>, Manabu Fujimoto<sup>1</sup>, OEiji Kiyohara<sup>1</sup>

<sup>1</sup>Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup>Department of Medicine for Cutaneous Immunological Diseases, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka

# Evening Seminar 3 "Future of Psoriasis Treatment"

17:15-18:15 Chairs: Satoshi Fukushima, Masashi Akiyama

## **ES3-1** Potential and Prospects of Deucravacitinib in the Treatment of Psoriasis

○ Tomoya Watanabe

Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama

## ES3-2 The Logic Behind Early Interventions for Psoriasis: An Epidermal Perspective

○ Ken Natsuga

Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo

Co-sponsored by Bristol-Myers Squibb K.K.

## December 6, 2024, Room D

# Concurrent Oral Session 4 (Tissue Regeneration and Wound Healing/Translational Study)

10:20-11:44 Chairs: Akiharu Kubo, Yoshihide Asano

## C04-01 Comprehensive analyses of single cell-transcriptomic transition disclose precise mesenchymal activation for regenerating necrotic skingraft

O Yoshikazu Hirose¹, Asaka Miura¹, Yuki Kobayashi², Yuya Ouchi², Tomomi Kitayama², Takashi Shimbo¹, Akio Tanaka³, Manabu Fujimoto⁴, Katsuto Tamai¹²

<sup>1</sup>Department of Stem Cell Therapy Science, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup>StemRIM Inc., Osaka, <sup>3</sup>Department of Dermatology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, <sup>4</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka

## C04-02 Collective cell migration dynamics of stratified epithelia under spatial confinement

[P14-03]

O Takuma Nohara<sup>1</sup>, Ken Natsuga<sup>1</sup>, Yosuke Mai<sup>1</sup>, Junichi Kumamoto<sup>2</sup>, Masaharu Nagayama<sup>2</sup>, Tsukasa Oikawa<sup>3</sup>, Hideyuki Ujiie<sup>1</sup> Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, <sup>2</sup>Research Institute for Electronic Science, Hokkaido University, Sapporo, <sup>3</sup>Department of Molecular Biology, Graduate School of Medicine, Sapporo

## C04-03 Trehalose promotes wound healing *in vitro* by enhancing the migration of human keratinocytes and VEGF [P14-04] secretion

O Keigo Taneda¹, Xiuju Dai¹, Kenji Watanabe², Teruko Tsuda¹, Hideki Mori¹, Ken Shiraishi¹, Yoichi Mizukami², Yasuhiro Fujisawa¹, Jun Muto¹

<sup>1</sup>Department of Dermatology, Ehime University Graduate School of Medicine, Toon, <sup>2</sup>Institute of Gene Research, Yamaguchi University Science Research Center, Yamaguchi

### C04-04 Rapid Re-Epithelialization and Delayed Collagen Production in Adult Skin Micro-Wounds

[P14-05]

Chen H Kuan, ○Sung-Jan Lin

Division of Plastic Surgery, Department of Surgery, National Taiwan University Hospital, Taipei

## C04-05 TRPV4 promotes cutaneous wound healing by regulating keratinocytes and fibroblasts migration and collagen production in fibroblasts in mice

O Bayarmaa Taivanbat, Sahori Yamazaki, Akihiko Uchiyama, Syahla Nisaa Amalia, Yuta Inoue, Mai Ishikawa, Keiji Kosaka, Yoko Yokoyama, Sachiko Ogino, Ryoko Torii, Sei-ichiro Motegi

The Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi

## C04-06 Key mediators of the IL-6 subfamily in hidradenitis suppurativa

[P15-03]

O Chia Bao Chu<sup>1,2</sup>, Chao Chun Yang<sup>1</sup>, Shaw Jenq Tsai<sup>3</sup>

<sup>1</sup>Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, <sup>3</sup>National Chung Cheng University, Chiayi

## C04-07 Blocking IL-17A, not IL-17F, Ameliorates Systemic Amyloidosis, and Both IL-17A and IL-17F Reduce Arteriosclerosis in Inflammatory Skin Mouse

O Takehisa Nakanishi¹, Shohei Iida¹, Masako Ichishi², Makoto Kondo¹, Mai Nishimura¹, Ayaka Ichikawa¹, Yoshiaki Matsushima¹, Yoichiro Iwakura³, Masatoshi Watanabe³, Keiichi Yamanaka¹

<sup>1</sup>Department of Dermatology, Mie University Graduate School of Medicine, Tsu, <sup>2</sup>Department of Oncologic Pathology, Mie University Graduate School of Medicine, Tsu, <sup>3</sup>Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo

# Luncheon Seminar 4 "Initiatives to Promote the Use of Biosimilar"

11:55-12:55 Chairs: Shinji Shimada, Riichiro Abe

## LS4-1 What kind of patients are suitable for ustekinumab BS?

O Maiko Inami

Department of Dermatology, NTT Medical Center Tokyo

### LS4-2 Cooperation with other departments in the treatment of psoriatic disease

○ Tomotaka Mabuchi

Department of Dermatology, Tokai University School of Medicine

Co-sponsored by Fuji Pharma Co., Ltd.

# 2-minute presentation 3 (Pharmacology and Drug Development/Photobiology/Pigmentation and Melanoma)

15:05-15:55 Chairs: Emi Nishida, Yuan-Hsin Lo

## O03-01

## Low-temperature plasma-activated Ringer's lactate solution induces cell death on malignant melanoma cells

[P10-11] O Akira Miyazaki¹, Tomoki Taki¹, Kae Nakamura², Hiromasa Tanaka², Masaru Hori², Katsumi Ebisawa³, Masashi Akiyama¹
¹Department of Dermatology, Nagoya University, Nagoya, ²Center for Low-Temperature Plasma Sciences, Nagoya University, Nagoya, ³Department of Plastic and Reconstructive Surgery, Nagoya University, Nagoya

### O03-02

### An extract of Arctium lappa L. may mitigate psoriatic inflammation by targeting EGFR

[P10-12] O Mengyao Yang<sup>1,2</sup>, Ge Peng<sup>1</sup>, Quan Sun<sup>1</sup>, Wanchen Zhao<sup>1</sup>, Alafate Abudouwanli<sup>1</sup>, Arisa Ikeda<sup>3</sup>, Shan Wang<sup>4</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>1</sup>, François Niyonsaba<sup>1,5</sup>

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, The First Hospital of China Medical University, Shenyang, <sup>3</sup>Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, <sup>4</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, <sup>5</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

## O03-03 [P10-14]

## Risk factors for liver enzyme abnormalities after oral terbinafine for onychomycosis: a multicenter study

Hua-Ching Chang<sup>1,2,3</sup>, Kai-Wen Chuang<sup>1</sup>

<sup>1</sup>Department of Dermatology, Taipei Medical University Hospital, Taipei, <sup>2</sup>Department of Dermatology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, <sup>3</sup>Department of Pharmacology, College of Medicine, National Taiwan University, Taipei

## O03-04 [P11-03]

### Ultraviolet-B irradiation expands skin-resident CD81\*Foxp3\* regulatory T cells with a highly activated phenotype

O Hiroaki Shime<sup>1</sup>, Mizuyu Odanaka<sup>1</sup>, Masaki Imai<sup>2</sup>, Akimichi Morita<sup>3</sup>, Sayuri Yamazaki<sup>1</sup>

<sup>1</sup>Department of Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya, <sup>2</sup>Department of Medical Technology and Sciences, Faculty of Health Sciences, Kyoto Tachibana University, Kyoto, <sup>3</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

## O03-05

### UVB radiation-induced skin carcinogenesis and the impact of low dose UVA irradiation

[P11-04]

O Katharina Maria Rolfes, Jean Krutmann, Thomas Haarmann-Stemmann IUF-Leibniz Research Institute for Environmental Medicine, Duesseldorf

### O03-06

### Possible usefulness of Raman microscopy in the treatment of extramammary Paget's disease

[P11-05]

O Toshiki Kubo<sup>1,2</sup>, Rei Watanabe<sup>1</sup>, Takamichi Ito<sup>3</sup>, Takeshi Nakahara<sup>3</sup>, Manabu Fujimoto<sup>1</sup>, Katsumasa Fujita<sup>2,4</sup>, Atsushi Tanemura<sup>1</sup> Department of Dermatology, Osaka University, Suita, <sup>2</sup>Department of Applied Physics, Osaka University, Suita, <sup>3</sup>Department of Dermatology, Kyushu University, Fukuoka, <sup>4</sup>Institute for Open and Transdisciplinary Research Initiatives, Osaka University, Suita

### O03-07

### Induction of Treg and genetic change of CD4 T cells by UVC irradiation

[P11-06]

O Yoshifumi Kanayama, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate school of Medical Sciences, Nagoya

## O03-08 [P11-07]

## Drug-induced phototoxicity: Disruption of 6-formylindolo[3,2-b]carbazole metabolism sensitizes keratinocytes to UVA-induced apoptosis

○ Frederick Hartung, Katharina Maria Rolfes, Thomas Haarmann-Stemmann IUF - Leibniz Research Institute for Environmental Medicine, Düsseldorf

## O03-09

## Effects of Phototherapy on Antinuclear Antibody Titers in Patients with Various Skin Diseases: A Longitudinal

### [P11-08]

Oki Watanabe, Mai Sakurai, Yuki Enomoto, Aya Yamamoto, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

### O03-10

### Withdrawn

[P12-10] O03-11

[P12-11]

## Immune cell therapy utilizing iPS cell-derived proliferative myeloid cells for subcutaneous tumor models of melanoma

O Yuki Ichigozaki<sup>1</sup>, Toshihiro Kimura<sup>1</sup>, Haruka Kuriyama<sup>1</sup>, Hisashi Kanemaru<sup>1</sup>, Azusa Miyashita<sup>1</sup>, Rong Zhang<sup>2</sup>, Yasushi Uemura<sup>2</sup>, Satoshi Fukushima<sup>1</sup>

<sup>1</sup>Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, <sup>2</sup>Division of Cancer Immunotherapy, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center (NCC), Chiba

### O03-12

## The MITF-Rho-ROCK-ECM axis regulates MAPKi effect in three-dimensional melanoma spheroids

[P12-12]

O Satoru Sugihara¹, Kota Tachibana¹, Jordan Kumar¹, Gency Gunasingh¹, Glen M Boyle², Nikolas K. Haass¹

<sup>1</sup>Frazer Institute, the University of Queensland, Brisbane, <sup>2</sup>QIMR Berghofer Medical Reserch Institute, Brisbane

#### O03-13 Impact of the tumour microenvironment on melanoma proliferation, invasion and therapy

[P12-13] Robert J. Ju, Kota Tachibana, Satoru Sugihara, Jordan Kumar, Yimeng Guan, Gisella Edny, Shahla Asgharzadeh Kangachar,

Samantha J. Stehbens, O Nikolas K. Haass

Frazer Institute, University of Queensland, Brisbane

#### O03-14 Withdrawn

#### O03-15 Precision diagnostics for early melanoma detection using spatial biology and Al-guided image analysis

[P12-15] O Yung-Ching Kao<sup>1</sup>, Andrew Causer<sup>2</sup>, Chenhao Zhou<sup>1</sup>, Xiao Tan<sup>2</sup>, Darren Smit<sup>1</sup>, Katie J. Lee<sup>1</sup>, Blake O'Brien<sup>3</sup>, Angus Collins<sup>3</sup>,

Kiarash Khosrotehrani<sup>1,4</sup>, H. Peter Soyer<sup>1,4</sup>, Quan Nguyen<sup>2,5</sup>, Mitchell S. Stark<sup>1</sup>

<sup>1</sup>Frazer Institute, The University of Queensland, Dermatology Research Centre, Brisbane, <sup>2</sup>QIMR Medical Research Institute, Brisbane, <sup>3</sup>Sullivan Nicolaides Pathology, Brisbane, <sup>4</sup>Department of Dermatology, Princess Alexandra Hospital, Brisbane, <sup>5</sup>Institute for Molecular Bioscience, the University of Queensland, Brisbane

#### O03-16 Generation of immortalized keratinocyte lines from different ethnic backgrounds for skin biology applications

[P12-16] Oliver Dreesen, Mattheus XR Foo

A\*STAR Skin Research Labs, Singapore

#### O03-17 A role of CXCL14 in melanoma progression

[P12-17] O Mengyan Li<sup>1</sup>, Sanjay Lietzau<sup>1,2</sup>, Jenny Chung<sup>1,3</sup>, Akinori Kawakami<sup>1</sup>, Kenji Kabashima<sup>1</sup>

> <sup>1</sup>The Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Hannover Medical School, Hannover, <sup>3</sup>CUNY School of Medicine, New York

#### 003-18Investigation of the effect of TRPV1 inhibitor on skin damage caused by heat

[P12-18] O Yu Gabe<sup>1</sup>, Keigo Kawabata<sup>1</sup>, Miyuki Sudo<sup>2</sup>, Keigo Kajiwara<sup>2</sup>, Shingo Tooi<sup>2</sup>, Yoshito Takahashi<sup>1</sup>

<sup>1</sup>Biological Science Research, Kao Corporation, Odawara, <sup>2</sup>Skin Care Research, Kao Corporation, Tokyo

#### 003-19Cryosurgery Reduces Lung Melanoma Metastasis in a Mouse Model: Renewed Potential in Melanoma [P12-21] Management

O Shih-han Wang<sup>1</sup>, Ting-Ting Chen<sup>2</sup>, Cheng-Lin Wu<sup>3</sup>, Wei-Ting Liu<sup>4</sup>, Yi-Hsuan Huang<sup>5</sup>, Tak-Wah Wong<sup>2,4,6</sup>

<sup>1</sup>Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>Department of Biochemistry and Molecular Biology, College of Medicine, National Cheng Kung University, Tainan, <sup>3</sup>Department of Pathology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>4</sup>Department of Dermatology, National Cheng Kung University Hospital, Tainan, 5Department of Oncology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>6</sup>Center of Applied Nanomedicine, National Cheng Kung University, Tainan

#### 003-20A Modified Autologous Non-cultured Epidermal Cellular Suspension Protocol - An Australian First

[P12-22] O Raaisa R Islam, Monisha Gupta

The Skin Hospital, Darlinghurst

#### 003-21A novel skin chromophore lipofuscin contributing to skin sallowness

[P12-23] O Binwei Deng<sup>1</sup>, Xi Yang<sup>1</sup>, Kelly Dong<sup>2</sup>, Jian (Richard) Cao<sup>1</sup>, Nadine Pernodet<sup>2</sup>

<sup>1</sup>Estée Lauder Companies Research and Development, Shanghai, <sup>2</sup>Research and Development, The Estée Lauder Companies, NY

#### O03-22 An ex vivo skin explant based scientific model testing photoprotection efficacy of cosmetic sunscreen products [P12-24] under controlled UV exposure

O Mukta Sachdev, Aahan Sachdev, Ritambhara KR MSCR, Bangalore

#### O03-23 A novel method for evaluating melanocyte cytotoxicity using human ex vivo skin tissue culture model

[P12-25] O Saaya Koike<sup>1</sup>, Takako Shibata<sup>1</sup>, Kiyotaka Hasegawa<sup>1</sup>, Tamio Suzuki<sup>2</sup>

Shiseido Co., Ltd., MIRAI Technology Institute, Yokohama, Department of Dermatology, Yamagata University Faculty of Medicine,

#### O03-24 A potent reagent against UV-induced carbonylation and skin yellowness

[P12-26] O Xi Yang<sup>1</sup>, Jian (Richard) Cao<sup>1</sup>, Nadine Pernodet<sup>2</sup>

<sup>1</sup>Estée Lauder Companies Research and Development, Shanghai, <sup>2</sup>Research and Development, The Estée Lauder Companies, NY

#### Anti-glycation and anti-skin sallowness effects of Siegesbekia Orientalis extract on skin models O03-25

[P12-29] O Jian (Richard) Cao1, Xi Yang1, Binwei Deng1, Nadine Pernodet2

<sup>1</sup>Estée Lauder Companies R&D, Shanghai, <sup>2</sup>R&D, The Estée Lauder Companies, NY

## 2-minute presentation 6

# (Pigmentation and Melanoma/Skin, Appendages, and Stem Cell Biology/Tissue Regeneration and Wound Healing/Translational Studies)

16:05-16:55 Chairs: Hiroaki Iwata, Hanako Yoshioka

## O06-01

## Unravelling the effects of protein glycation on skin sallowness: an experimental and simulation approach

[P12-31]

○ Zhen Li¹, Yuping Su², Xi Yang¹, Yu Lin³, Senping Fan², Huanjun Zhou¹, Hao Long², Jian (Richard) Cao¹, Tom Mammone³, Nadine Pernodet³

<sup>1</sup>The Estée Lauder Companies Innovation (China), Shanghai, <sup>2</sup>School of Electronic Science and Engineering (National Model Microelectronics College) Xiamen University, Xiamen, <sup>3</sup>R&D, The Estée Lauder Companies, NY

### O06-02

### Chemical Modulation of mitochondria-ER contacts: Effects in Melanogenesis

[P13-12]

○ Federica Dal Bello¹, Natasha Kaar¹, Sara Schiavon¹, Emad Norouzi Esfahani¹, Tomas Knedlik¹, Alessio Gianelle², Florine Grudet¹, Paula Rebelo¹, Giovanni Marzaro³, Adriana Chilin³, Marta Giacomello¹.⁴

<sup>1</sup>Department of Biology, University of Padova, Padova, <sup>2</sup>Sezione INFN di Padova, Padova, <sup>3</sup>Department of Pharmaceutical and Pharmacological Sciences, University of Padova, Padova, <sup>4</sup>Department of Biomedical Sciences, University of Padova, Padova

### O06-03 [P13-13]

## Histological characterization and transcriptomic analysis of acquired idiopathic generalized anhidrosis post corticosteroid pulse therapy

O Reiko Kageyama<sup>1</sup>, Keiko Sakamoto<sup>1,2</sup>, Satoshi Nakamizo<sup>3</sup>, Kenji Kabashima<sup>3</sup>, Keisuke Nagao<sup>2</sup>, Tetsuya Honda<sup>1</sup>

<sup>1</sup>Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, <sup>2</sup>Cutaneous Leukocyte Biology Section, Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, <sup>3</sup>Department of Dermatology, Kyoto University, Kyoto

### O06-04

### Carbonylated proteins elevate ROS levels in fibroblasts through RAGE

[P13-14]

O Yumiko Yamawaki, Yuri Okano, Hitoshi Masaki

CIEL CO., LTD., Sagamihara

### O06-05 [P13-15]

## Three-dimensional ultra-high frequency ultrasound non-invasively visualizes pathological changes predicting the prognosis of alopecia areata

O Tatsuro Iwasaki<sup>1,2</sup>, Misaki Kinoshita-Ise<sup>1</sup>, Taiichiro Ida<sup>3</sup>, Masayuki Amagai<sup>2</sup>, Manabu Ohyama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>3</sup>Advantest Corporation, Saitama

## O06-06

### Possible role of spinal semaphorin 3A in itch and pain perceptions

[P13-16]

○ Motoki Morita¹, Mitsutoshi Tominaga¹, Yayoi Kamata¹, Kenji Takamori¹²

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Chiba

### O06-07

## High-throughput workflow to study Melanosome morphology

[P13-17]

○ Emad Norouzi Esfahani, Marta Giacomello

The Department of Biology, University of Padova, Padova

## O06-08

### A statistical model of the succession character of the scratching bouts evoked by itch sensation in mice

[P13-18]

O Kotaro Honda<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

### O06-09

## Mechanism of histamine production and secretion by sweat gland cells

[P13-19]

O Hayato Mizuno<sup>1</sup>, Shunsuke Takahagi<sup>1,2</sup>, Kazue Uchida<sup>1</sup>, Kaori Ishii<sup>1</sup>, Akio Tanaka<sup>1</sup>

<sup>1</sup>Department of Dermatology, Institute of Biomedical & Health Sciences, Hiroshima University, Hiroshima, <sup>2</sup>Division of Dermatology, JA Hiroshima General Hospital, Hiroshima

## O06-10

### Mitophagy regulation restores mitochondrial function in the dermal fibroblasts and preserves skin youthfulness

[P13-20]

○ Tingyan Mi¹, Binwei Deng¹, Jian (Richard) Cao¹, Nadine Pernodet²

<sup>1</sup>Research and Development, The Estée Lauder Companies, Shanghai, <sup>2</sup>Research and Development, The Estée Lauder Companies, NY

### O06-11 [P13-21]

### Uncover the critical environmental risk factors to pore visibility with an AI approach

○ Hang Xie¹, Huanjun Zhou¹, Jin Yan Song², Zitao Ma³, Tianhao Li³, Xiao Long³, Danning Zeng¹, Xiaodi Wang¹, Su Shi⁴, Yulan Qu¹, Yajun Luo¹, Haidong Kan⁴, Jian (Richard) Cao¹, Nadine Pernodet⁵

<sup>1</sup>Estée Lauder Companies Innovation R&D (China) Co., Ltd, Shanghai, <sup>2</sup>Hangzhou C2H4 Internet Technology Co., Ltd., Hangzhou, <sup>3</sup>Department of Plastic and Reconstructive Surgery, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, <sup>4</sup>School of Public Health, Key Lab of Public Health Safety of the Ministry of Education and NHC Key Lab of Health Technology Assessment, Fudan University, Shanghai, <sup>5</sup>R&D, The Estée Lauder Companies, Melville, NY

### O06-12 Role of Cutaneous Neuroinflammation and Potential Dorsal Root Ganglion in Rosacea

[P13-22]

○ Sang Gyu Lee<sup>1,2</sup>, Dawoon Han<sup>1</sup>, Jihee Kim<sup>2</sup>

<sup>1</sup>Department of Dermatology, Yonsei University college of Medicine, Seoul, <sup>2</sup>Department of Dermatology, Yonsei University college of Medicine, Yongin

### O06-13 Age-dependent effects of psychological stress on itch sensitivity in mice: improvement by serotonin

[P13-24]

O Qiaofeng Zhao<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Sumika Toyama<sup>1</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center, Institute for Environmental and Gender-Specific Medicine, Juntendo University, Tokyo, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

## O06-14 Involvement of Macrophage in the Pathogenesis of Acquired Idiopathic Generalized Anhidrosis

[P13-26]

O Chie Uchida, Tadatsune Iida, Takeshi Namiki, Naoko Okiyama

Department of Dermatology, Institute of Science Tokyo, Tokyo

## O06-15 Apoptotic and necroptotic keratinocytes contribute to fibrosis in chronic graft-versus-host disease via the production of TGF-β

O Karin Endo¹, Yuki Ichimura¹², Takashi Matsui¹, Risa Konishi¹³, Tadatsune Iida¹, Takeshi Namiki¹, Naoko Okiyama¹

<sup>1</sup>Department of Dermatology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo, Tokyo, <sup>2</sup>Division of Rheumatology, Department of Internal Medicine, Tokyo Women's Medical University, Tokyo, <sup>3</sup>Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba

## O06-16 Effects of antimicrobial peptide human B-defensin-3 on the production of intercellular adhesion molecule-1 in human dermal fibroblasts

O Ying Zhangwei<sup>1</sup>, Yoshie Umehara<sup>1</sup>, Ko Okumura<sup>1</sup>, Hideoki Ogawa<sup>1</sup>, François Niyonsaba<sup>1,2</sup>

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University School of Medicine, Tokyo, <sup>2</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

### O06-17 A deep learning for estimation of DESIGN-R 2020 grading score in patients with pressure ulcer

[P14-08]

O Takatoshi Shimauchi¹, Tomoo Inubushi², Shinsuke Nakazawa¹, Etsuji Yoshikawa², Taisuke Ito¹, Yoshiki Tokura¹, Tetsuya Honda¹ ¹Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, ²Central Research Laboratory, Hamamatsu Photonics K.K., Hamamatsu

## O06-18 Exosomes Combined with Polymer Dots Dressings and 755 nm picosecond laser accelerate wound Healing in

[P14-11] Nude Mice

 $\circ$  Yen-Jen Wang $^{\scriptscriptstyle 1}$ , Chang-Cheng Chang $^{\scriptscriptstyle 2}$ 

<sup>1</sup>Department of dermatology, MacKay Memorial Hospital, Taipei, <sup>2</sup>Division of plastic and reconstructive surgery, China Medical University Hospital, Taipei

### O06-19 A Split-Face Pilot Study of Hybrid (CO2 and 1570nm) Laser versus CO2 Laser in Acne Scars

[P14-15]

○ Manoj K Pawar

Department of Dermatology, Chic Clinic, Muscat

## O06-20 Randomized trial of a pilot study to evaluate Spincare for wound healing in Recessive Dystrophic Epidermolysis Bullosa patients

O Yuri Ikeda, Ricardo Villanueva Gaona, Jenny Deng, Pirunthan Pathmarajah, Jean Y Tang

The Department of Dermatology, Stanford University, Palo Alto, California

## O06-21 A role of spinal cholecystokinin-2 receptor in mechanical alloknesis

[P15-09]

O Mitsutoshi Tominaga¹, Kotaro Honda¹, Tomohiro Tobita¹, Eriko Komiya¹², Masafumi Yokota¹, Motoki Morita¹, Masaru Kurosawa¹, Sumika Toyama¹, Qiaofeng Zhao¹, Ying Zuo¹, Mao Hotta¹, Nanami Tanemoto¹, Miho Shiratori-Hayashi¹³, Atsuko Kamo⁴, Kenii Takamori¹⁵

'Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Functional Morphology, Faculty of Pharmacy, Juntendo University, Urayasu, <sup>3</sup>Department of Molecular and Systems Pharmacology, Faculty of Pharmacy, Juntendo University, Urayasu, <sup>4</sup>Laboratory of Clinical Pathophysiology, Juntendo University Graduate School of Health Care and Nursing, Urayasu, <sup>5</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

### O06-22 Increased CXCL10 and CXCR3 expression in pain and itch cutaneous neurofibroma

[P15-10]

○ Trang Q. T. Pham<sup>1</sup>, Hao J. Weng<sup>1,3,4,5</sup>, Chung P. Liao<sup>1,2</sup>

'International Ph.D. Program in Cell Therapy and Regenerative Medicine, College of Medicine, Taipei Medical University, Taipei,

2 Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taipei,

3 Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei,

4 Department of Dermatology, Taipei Medical University-Shuang

Ho Hospital, New Taipei,

5 Department of Dermatology, School of Medicine, College of Medicine, Taipei Medical University, Taipei

### O06-23 EGF suppresses eczema in the NC/Tnd mouse model

[P15-11]

© Ryo Muko¹, Helen Williams², Gurdeep Singh², Hiroshi Matsuda³, Joanne L Pennock², Peter D Arkwright², Akane Tanake¹.³
¹Institute of Global Innovation Research, Tokyo University of Agriculture & Technology, Tokyo, ²Lydia Becker Institute of Immunology and Inflammation, University of Manchester, Manchester, ³Laboratories of Comparative Animal Medicine, Tokyo University of Agriculture & Technology, Tokyo

## O06-24 Characterization of 2 distinct biomarker-defined endotypes in Japanese adult atopic dermatitis patients with moderate to severe disease

O Victoria Serelli-Lee<sup>1</sup>, Akichika Ozeki<sup>1</sup>, Christoph Preuss<sup>2</sup>, Robert J. Benschop<sup>2</sup>, Hitoe Torisu-Itakura<sup>1</sup>, Takashi Matsuo<sup>1</sup>, Jonathan T. Sims<sup>2</sup>

<sup>1</sup>Eli Lilly Japan K.K., Kobe, <sup>2</sup>Eli Lilly and Company, Indianapolis

## **Evening Seminar 4**

## "The Science of Night: Impact of circadian rhythms on skin health"

17:15-18:15 Chairs: Mariko Moriyama, Hayato Takahashi

## ES4-1 Linking the circadian clock to skin aging: the role of melatonin

○ Yung Hou Wong

Hong Kong University of Science and Technology, Hong Kong

## ES4-2 Importance of Night for Skin Recovery

O Jian (Richard) Cao

Advanced Technology Pioneering, Innovation R&D China, The Estée Lauder Companies, Shanghai

**Co-sponsored by The Estee Lauder Companies** 

## December 7, 2024, Room A

## 2-minute late breaking abstract presentation (President's Special Initiative Session)

8:20-9:00 Chairs: Tom Chan, Chang Ook Park

## LO-01 OX40/OX40L axis associates with atopic skin inflammation through impairing IL-10 production in regulatory T [L-01] cells

O Kazuhiko Yamamura<sup>1,2</sup>, Mika Murai-Yamamura<sup>1</sup>, Sandra Garcet<sup>3</sup>, Dante Dahabreh<sup>4</sup>, Juana Gonzalez<sup>3</sup>, Shunsuke Miura<sup>5</sup>, Hong Beom Hur<sup>3</sup>, Xuan Li<sup>3</sup>, Yael Renert-Yuval<sup>3</sup>, Yeriel Estrada<sup>4</sup>, Tali Czarnowicki<sup>3</sup>, Takeshi Nakahara<sup>1,2</sup>, James G. Krueger<sup>3</sup>, Emma Guttman-Yassky<sup>4</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, <sup>2</sup>Research and Clinical Center for Yusho and Dioxin, Kyushu University, Fukuoka, <sup>3</sup>Laboratory of Investigative Dermatology, The Rockefeller University, New York, <sup>4</sup>Department of Dermatology, Icahn School of Medicine at the Mount Sinai Medical Center, New York, <sup>5</sup>Department of Dermatology, The University of Tokyo, Tokyo

## LO-02 Associations of Different Inflammatory Factors with Atherosclerosis Among Patients with Psoriasis Vulgaris

[L-04]

 $\ \, {}^{\textstyle \bigcirc}\, \mathsf{Nguyen}\, \mathsf{Thi}\, \mathsf{Kim}\, \mathsf{Huong^{\scriptscriptstyle 1}}, \mathsf{Le}\, \mathsf{Huu}\, \mathsf{Doanh^{\scriptscriptstyle 2}}, \mathsf{Bui}\, \mathsf{Long^{\scriptscriptstyle 1}}$ 

<sup>1</sup>Friendship Hospital, Hanoi, <sup>2</sup>Hanoi Medical University, Hanoi

### LO-03 SERUM MRGPRX2 LEVELS IN CHRONIC SPONTANEOUS URTICARIA IN VIETNAMESE PATIENTS

[L-05]

○ Cuc Nguyen Thi Kim<sup>1,2</sup>, Minh Vu Nguyet<sup>1,2</sup>, Lan Pham Thi<sup>1,2</sup>, My Le Huyen<sup>1</sup>, Doanh Le Huu<sup>1,2</sup>

<sup>1</sup>National Hospital of Dermatology and Venereology, Hanoi, <sup>2</sup>Ha Noi Medical University, Hanoi

## LO-04 "Black-Red Dot Sign" under Dermoscopy: Significance in Screening and Antifungal Efficacy Tracking in [L-06] Subcutaneous Fungal Infection lesion

O Yuping Ran

Dermatology, West China Hospital, Sichuan University, Chengdu

### LO-05 The skin-specific long non-coding RNA TEDAR regulates epidermal differentiation

[L-08]

Kunal Das Mahapatra<sup>12</sup>, Özge Arslan<sup>13</sup>, Jonathan Elton<sup>12</sup>, Evelyn Kelemen<sup>13</sup>, Longlong Lou<sup>13</sup>, Markus Kretz<sup>4</sup>, Enikö Sonkoly<sup>13</sup>, O Andor Pivarcsi<sup>123</sup>

<sup>1</sup>Department of Medical Biochemistry and Microbiology, Uppsala University, Uppsala, <sup>2</sup>Department of Medicine Solna, Karolinska Institute, Stockholm, <sup>3</sup>Dermatology and Venereology, Department of Medical Sciences, Uppsala University, Uppsala, <sup>4</sup>Institute of Biochemistry, Genetics and Microbiology, University of Regensburg, Regensburg

### LO-06 Biofabrication of 3D shaped skin equivalents for mechanobiology and robotic applications

[L-09]

 ${}^{\bigcirc}$  Minghao Nie, Michio Kawai, Yuto Matsushima, Haruka Oda, Shoji Takeuchi

The University of Tokyo, Graduate School of Information Science and Technology, Tokyo

### LO-07 Proteasome inhibitors as potential anticancer agents for angiosarcoma cells

[L-10]

o Che-Yuan Hsu<sup>1,2</sup>, Teruki Yanagi<sup>1,2</sup>, Kodai Miyamoto<sup>1,2</sup>, Satoko Otsuguro<sup>3</sup>, Katsumi Maenaka<sup>3,4,5,6,7</sup>, Hiroshi Nishihara<sup>8</sup>, Hideki Nakamura<sup>9</sup>, Kenzo Takahashi<sup>2</sup>, Hideyuki Ujiie<sup>1</sup>

<sup>1</sup>Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, University of the Ryukyus, Okinawa, <sup>3</sup>Center for Research and Education on Drug Discovery, Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, <sup>4</sup>Laboratory of Biomolecular Science, Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, <sup>5</sup>Division of Pathogen, Structure, International Institute for Zoonosis Control, Hokkaido University, Sapporo, <sup>6</sup>Institute for Vaccine Research & Development, Hokkaido University, Sapporo, <sup>7</sup>Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka, <sup>8</sup>Genomics Unit, Keio Cancer Center, Keio University School of Medicine, Tokyo, <sup>9</sup>Central Research Institute, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo

## LO-08 The Therapeutic potential of Artemisia Naphta on Seborrhoeic Dermatitis

[L-11]

 $^{\rm O}$  Ziyan Qin  $^{\rm 1.2}$  , Huailong Chang  $^{\rm 1.2}$  , Kan Tao  $^{\rm 1.2}$  , Shengnan Tang  $^{\rm 1.2}$ 

<sup>1</sup>Shanghai Chicmax Cosmetic Co., Ltd., Global R&D Center, Shanghai, <sup>2</sup>Shanghai KPC Biotechnology Co., Ltd., Shanghai

## LO-09 A Comprehensive Meta-analysis of the Association Between Lipid profile and Hidradenitis Suppurativa

[L-13]

○ Yan-Han Li¹, Shu-Han Chuang¹, Hui-Ju Yang²,

<sup>1</sup>Division of General Practice, Department of Medical Education, Changhua Christian Hospital, Changhua, <sup>2</sup>Department of Dermatology, Changhua Christian Hospital, Changhua, <sup>3</sup>Department of Post-Baccalaureate Medicine, College of Medicine, National Chung Hsing University, Taichung City

### LO-10 Indonesian brown algae Sargassum cristaefolium lipid extract activity against bacterial skin infection

[L-14]

Anggit Sunarwidhi¹², Sri Widyastuti³, Kukuh Waseso Jati Pangestu², Farreh Alan Maulana¹², Ervina Handayani¹²,
 Mila Mayanti Kabir¹, Eka S. Prasedya²⁴

<sup>1</sup>Department of Pharmacy, Faculty of Medicine and Health Sciences, Universitas Mataram, Mataram, <sup>2</sup>Bioscience and Biotechnology Research Centre, Universitas Mataram, Mataram, <sup>3</sup>Faculty of Food Technology and Agroindustry, Universitas Mataram, Mataram, <sup>4</sup>Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Mataram, Mataram

#### LO-11 Therapeutic Potential of Topical Cannabigerol (CBG) in the Treatment of Inflammation and Erythema in Rosacea

[L-15] ○ Suji Kim¹, Eun Hee Yoo², JI hyun Lee¹,²

> Department of Medical Sciences, Graduate School of The Catholic University of Korea, Seoul, Department of Dermatology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul

#### LO-12 Microbiome-implanted in vitro 3D skin models to evaluate skin-microbiome interactions

[L-18]

○ Hai Vin Kim¹, Young Su Jang¹, Dahye Seo¹, ARam Kim², Suji Son², Jae-Sang Ryu², Dong Hyun Kim², Jung U Shin²

Department of Biomedical Science, CHA University, Seongnam, Department of Dermatology, CHA Bundang Medical Center, CHA University School of Medicine, Seongnam

#### LO-13 Inhibitory Effects of Minocycline on Neutrophil Extracellular Trap Formation in Human Neutrophils and a Mouse [L-19] **Model of Hidradenitis Suppurativa**

O DaHye Seo¹, JaeSang Ryu², YoungSu Jang¹, HaiVin Kim¹, HeeJung Lee², DongHyun Kim², Yunkyung Jang², JungU Shin²

Department of Biomedical Science, CHA University, Seongnam, Department of Dermatology, CHA Bundang Medical Center, CHA University School of Medicine, Seongnam

#### LO-14 CXCR3/CXCL10 axis mediated memory T cell activations in DRESS patients and abated by JAK inhibitors

[L-23]

OChuang-Wei Wang<sup>1,2,3</sup>, Wen-Hung Chung<sup>1,2,3</sup>

Department of Dermatology, Drug Hypersensitivity Clinical and Research Center, Chang Gung Memorial Hospital, Linkou, 2 Cancer Vaccine and Immune Cell Therapy Core Laboratory, Department of Medical Research, Chang Gung Memorial Hospital, Linkou, <sup>3</sup>Chang Gung Immunology Consortium, Chang Gung Memorial Hospital and Chang Gung University, Taouan

#### LO-15 Efficacy of Non-cultured Epidermal Cell Suspension and Excimer Lamps Combination Therapy in Vitiligo: Results [L-24]of 18 Months Follow-up

O Tam Hoang Van<sup>12</sup>, Davinder Parsad³, Thuong Nguyen Van<sup>12</sup>, Phuong Hoang Thi², Son Nguyen Hong², Hien Do Thi Thu², Tan Nguyen Manh<sup>1,2</sup>, Hien Le Thanh<sup>2</sup>, Hien Tran Thi Thu<sup>1</sup>, Doanh Le Huu<sup>1,2</sup>

<sup>1</sup>Hanoi Medical University, Hanoi, <sup>2</sup>National Hospital of Dermatology and Venereology, Hanoi, <sup>3</sup>Department of Dermatology, Venereology and Leprology, Postgraduate Institute of Medical Education and Research, Chandigarh

## Plenary Session II

9:10-10:40

Chairs: Manabu Ohyama, Ohsang Kwon, Eniko Sonkoly

#### II-1 Breakthrough drug in Stevens-Johnson syndrome/toxic epidermal necrolysis: Drug discovery to prevent cell [P10-01] death via formyl peptide receptor-1

O Haruna Kimura<sup>1</sup>, Akito Hasegawa<sup>1</sup>, Tomoki Nishiguchi<sup>1,2</sup>, Hong Ha Nguyen<sup>1</sup>, Masatoshi Eguchi<sup>1</sup>, Takeaki Ozawa<sup>2</sup>, Riichiro Abe<sup>1</sup> <sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>Department of Chemistry, School of Science, The University of Tokyo, Tokyo

#### 11-2 Natural IgE production requires cognate interaction between invariant NKT cells and B cells via CD1d [P01-01]

O Akihiko Kitoh<sup>1</sup>, Rintaro Shibuya<sup>2</sup>, Sho Hanakawa<sup>3</sup>, Kenji Kabashima<sup>1,3</sup>

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>3</sup>Kimberly and Eric J. Waldman Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, <sup>3</sup>Skin Research Labs, Agency for Science, Technology and Research (A\*STAR), Singapore

#### **II-3** CD301b\* cDC2 facilitate cytotoxic T lymphocytes activation within inducible skin-associated lymphoid tissue in [P01-02] contact dermatitis

O Fuuka Minami<sup>1</sup>, Ryota Asahina<sup>1,2</sup>, Sachiko Ono<sup>1</sup>, Tetsuya Honda<sup>3</sup>, Gyohei Egawa<sup>4</sup>, Satoshi Nakamizo<sup>1</sup>, Kenji Kabashima<sup>1</sup> <sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, 3Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, <sup>4</sup>Department of Dermatology, Kagoshima University, Kagoshima

#### 11-4 Epigenetic memory in healed psoriatic keratinocytes

[P09-01]

O Sayaka Shibata, Kentaro Awaji, Asumi Koyama, Yukiko Ito, Haruka Taira, Shinichi Sato Department of Dermatology, Graduate School of Medicine, The University of Tokyo, Tokyo

#### 11-5 Increased LL37 in psoriasis and rosacea promotes the uptake of low-density lipoprotein and development of [P04-01] atherosclerosis

 $\circ$  Yoshiyuki Nakamura<sup>1,3</sup>, Nikhil Kulkarni<sup>1</sup>, Tatsuya Dokoshi<sup>1</sup>, Toshiya Takahashi<sup>1</sup>, Elizabeth Luo<sup>2</sup>, Haleh Alimohamadi<sup>2</sup>, Tomofumi Numata<sup>1</sup>, Gerard Wong<sup>2</sup>, Richard Gallo<sup>1</sup>

<sup>1</sup>The Department of Dermatology, UC San Diego, San Diego, <sup>2</sup>The Department of Bioengineering, UC Los Angeles, Los Angeles, <sup>3</sup>The Department of Dermatology, University of Tsukuba, Tsukuba

#### **II-6** Constipation-Induced Gut Dysbiosis Aggravates Acne: Insights from a Novel Mouse Model Revealing [P07-01] Mechanisms of the Gut-Skin Axis

O Masakazu Tamai<sup>1</sup>, Takashi Sugihira<sup>1</sup>, Seitaro Nakagawa<sup>1</sup>, Shuo Li<sup>2</sup>, Manabu Fujimoto<sup>1</sup>, Yumi Matsuoka-Nakamura<sup>1,2</sup> <sup>1</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Suita, <sup>2</sup>Cutaneous Allergy and Host Defense, Immunology Frontier Research Center, Osaka University, Suita

## Tanioku Kihei Memorial Lecture

10:45-11:15 Chair: Akimichi Morita

TML Healthy Skin, Healthy Brain

OJin Ho Chung

Department of Dermatology, Seoul National University College of Medicine, Seoul

## JSID Award Lecture

11:15-11:45 Chair: Manabu Fujimoto

JAL Deciphering Epidermal Behaviors to Understand Skin Diseases

○ Ken Natsuga

Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo

## JSID Kisaragi Award

11:45-11:50 Chair: Manabu Fujimoto

JKA Keratinocytes of the Upper Epidermis and Isthmus of Hair Follicles Express Hemoglobin mRNA and Protein

O Umi Tahara

Department of Dermatology, Keio University School of Medicine, Tokyo

## Commemorative Photo

11:50-11:55

Please come along if you would like to participate in the photo shoot.

## Luncheon Seminar 5

# "New discoveries and treatment technologies for the control of skin hyperpigmentation"

12:00-13:00 Chairs: Dongyoun Lee, Akimichi Morita

LS5-1 Molecular and cellular mechanism of hyperpigmentation, and treatment strategies

○ Kenshi Yamasaki

ALOOP CLINIC & LAB, Tokyo, Japan

LS5-2 Exploratory study of novel pigment-related genes based on Japanese skin type genome-wide analysis

○ Movuka Irimada

Department of Dermatology, Tohoku University Graduate School of Medicine

LS5-3 Management of hyperpigmentation and uneven skin tone using a multi-prong approach and a newtyrosinase inhibitor, UP-302

○ Tom Mammone

Clinique Laboratories Vice President and Estée Lauder Companies Fellow, Advanced Technology Pioneering, Global R&D, The Estée Lauder Companies

Co-sponsored by Clinique

## The 25th Maruho Research Award Presentations by award winners and award ceremony

13:10-14:10

Chairs: Masayuki Amagai, Shinichi Sato, Kenji Kabashima

#### MRA1 Infiltration and local differentiation of bone marrow-derived integrin β7-positive mast cell progenitors in atopic dermatitis-like skin

O Yuki Honda Keith<sup>1,2</sup>, Tetsuya Honda<sup>1,3</sup>, Sachiko Ono¹, Bernett Lee<sup>4,5</sup>, Rintaro Shibuya¹, Sho Hanakawa<sup>6</sup>, Yoshihiro Ishida¹, Satoshi Nakamizo<sup>1</sup>, Kenji Kabashima<sup>1,4,6</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Precision Immunology, Garvan Institute of Medical Research, Sydney, <sup>3</sup>Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, <sup>4</sup>Singapore Immunology Network (SIgN), Agency for Science, Technology and Research (A\*STAR), Biopolis, <sup>5</sup>Lee Kong Chian School of Medicine, Nanyang Technological University, Biopolis, 'Skin Research Institute of Singapore (SRIS), Agency for Science, Technology and Research (A\*STAR), Biopolis

#### MRA2 Eribulin mesylate exerts antitumor effects via CD103

O Kazumasa Oya<sup>1,2</sup>, Yoshiyuki Nakamura<sup>1</sup>, Toshifumi Nomura<sup>1</sup>, Yasuhiro Fujisawa<sup>3</sup>

<sup>1</sup>Department of Dermatology, University of Tsukuba, Tsukuba, <sup>2</sup>UMass Chan Medical School, Worcester, <sup>3</sup>Department of Dermatology, Ehime University Graduate School of Medicine, Ehime

#### MRA3 Keratinocytes of the Upper Epidermis and Isthmus of Hair Follicles Express Hemoglobin mRNA and Protein

O Umi Tahara¹², Takeshi Matsui¹²³, Toru Atsugi¹, Keitaro Fukuda¹², Tommy W Terooatea⁴, Aki Minoda⁴⁵, Akiharu Kubo¹⁶,

Department of Dermatology, Keio University School of Medicine, Tokyo, Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences, Yokohama, 3Laboratory for Evolutionary Cell Biology of the Skin, School of Bioscience and Biotechnology, Tokyo University of Technology, Hachioji, <sup>4</sup>Laboratory for Cellular Epigenomics, RIKEN Center for Integrative Medical Sciences, Yokohama, <sup>5</sup>Department of Cell Biology, Faculty of Science, Radboud Institute for Molecular Life Sciences, Radboud University, Nijmegen, 6Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe

#### MRA4 Utility of nailfold capillary assessment for predicting pustulotic arthro-osteitis in palmoplantar pustulosis based on a prospective cohort study

O Takemichi Fukasawa<sup>1</sup>, Takashi Yamashita<sup>2</sup>, Atsushi Enomoto<sup>3</sup>, Satoshi Toyama<sup>2</sup>, Asako Yoshizaki-Ogawa<sup>2</sup>, Shoko Tateishi<sup>4</sup>, Hiroko Kanda<sup>4</sup>, Kiyoshi Miyagawa<sup>3</sup>, Shinichi Sato<sup>2</sup>, Ayumi Yoshizaki<sup>1</sup>

Department of Clinical Cannabinoid Research, The University of Tokyo Graduate School of Medicine, Tokyo, 2Department of Dermatology, The University of Tokyo Graduate School of Medicine, Tokyo, 3Laboratory of Molecular Radiology, Center of Disease Biology and Integrative Medicine, The University of Tokyo Graduate School of Medicine, Tokyo, 4Immune-Mediated Diseases Therapy Center, The University of Tokyo Graduate School of Medicine, Tokyo

Co-sponsored by Maruho Co., Ltd.

## Concurrent Oral Session 5 (Auto-Immunity)

14:20-15:44 Chairs: Naoko Okiyama, Hayato Takahashi

#### C05-01 Dermal adipogenesis protects against psoriatic skin inflammation

[P02-03]

O Wenlu Zhang, Tian Xia, Rundong Wu, Xiao Hu, Rongshuang Xia, Ling-juan Zhang

State Key Laboratory of Cellular Stress Biology, School of Pharmaceutical Sciences, Xiamen University, Xiamen

#### C05-02 Mathematical dermatology based on visual skin eruption linked to pathophysiological states in chronic [P02-04]

Michihiro Hide3,

spontaneous urticaria O Sungrim Seirin-Lee<sup>12</sup>, Yuhki Yanase<sup>3</sup>, Daiki Matsubara<sup>4</sup>, Takahiro Hiraga<sup>1</sup>, Hiroshi Ishii<sup>5</sup>, Ryo Saito<sup>3</sup>, Shunsuke Takahagi<sup>36</sup>,

<sup>1</sup>Kyoto University Institute for Advanced Study, Kyoto University, Kyoto, <sup>2</sup>Graduate School of Medicine, Kyoto University, Kyoto, <sup>3</sup>Department of Pharmacotherapy, Hiroshima University, Hiroshima, <sup>4</sup>Department of Dermatology, Hiroshima University, Hiroshima, FRIES, Hokkaido University, Sapporo, "Department of Dermatology, JA Hiroshima General Hospital, Hiroshima, "Department of Dermatology, Hiroshima City Hiroshima Citizens Hospital, Hiroshima

#### C05-03 Immunological skew in thymoma-associated multi-organ autoimmunity

[P02-05]

O Manao Kinoshita, Youichi Ogawa, Takuya Sato, Shinji Shimada, Tatsuyoshi Kawamura

Department of Dermatology, University of Yamanashi, Yamanashi

### C05-04 [P02-06]

## Granzyme K Contributes to PAR-2 Mediated Itch Pathway of Imiquimod-Induced Psoriasis Model

Aoi Hiroyasu¹, Beni Amatya¹, Daisuke Tsuruta¹, David J. Granville<sup>2,3,4,5</sup>, ○ Sho Hiroyasu<sup>1,2,3,4</sup>

<sup>1</sup>The Department of Dermatology, Osaka Metropolitan University, Osaka, <sup>2</sup>International Collaboration on Repair Discoveries (ICORD) Centre, Vancouver, <sup>3</sup>Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, <sup>4</sup>British Columbia Professional Firefighters' Burn and Wound Healing Group, Vancouver Coastal Health Research Institute, Vancouver, 5 Centre for Heart Lung Innovation, Providence Research, University of British Columbia, Vancouver

## C05-05 The Role of TLR7 and TLR9 in the Pathogenesis of Systemic Sclerosis

[P02-07] Ochenyang Wang

The department of Dermatology, Kanazawa university, Kanazawa

## C05-06 Immune Shift to Enhanced Cytotoxicity of Peripheral NKG2D+ CD8 T Cells in Active Alopecia Areata

[P02-08]

O Doyoung Kim, Kyung Bae Chung, Ji-Hye Hwang, Eun Hye Kim

Department of Dermatology, Yonsei University College of Medicine, Seoul

## C05-07 The selective S1P1 receptor modulator Cenerimod ameliorates murine IMQ induced psoriasis-like skin [P02-09] inflammation model

O Xibei Jia, Yasuhito Hamaguchi, Takashi Matsushita

Department of Dermatology, Faculty of Medicine, Institute of Medical Pharmaceutical and Health Science, Kanazawa University, Kanazawa

## Symposium 2

## "New Standards for Skin Research Methods and Techniques"

15:55-17:55 Chairs: Paul Nghiem, Motoki Nakamura, Hironobu Fujiwara

## SY2-1 Immune microenvironment analysis by single cell spatial proteomics with highly multiplexed immunofluorescent imaging

O Motoki Nakamura

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

## SY2-2 Characterization of inflammatory skin disease-specific cell populations using Visium HD

O Manami Toriyama

Graduate School of Pharmaceutical Science, Osaka University, Suita

### SY2-3 Spatial Transcriptomics using Xenium: An Exciting New Frontier

O Tomas Bencomo

University of Washington and Fred Hutchinson Cancer Center, Seattle

## SY2-4 Fate induction of engineered T cells through asymmetric cell division is modulated by chimeric antigen receptor co-stimulatory domains

O Corbett Berry<sup>1,2</sup>, Casey Lee<sup>1,2</sup>, Caitlin Frazee<sup>1,2</sup>, Sisi Chen<sup>1,2</sup>, Patrick Herman<sup>1,2</sup>, Anna Chen<sup>1,2</sup>, Andre Kelly<sup>2</sup>, Roderick O'Connor<sup>2</sup>, Christoph Ellebrecht<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, University of Pennsylvania, Philadelphia, <sup>2</sup>Center for Cellular Immunotherapy, University of Pennsylvania, Philadelphia

### SY2-5 The impact of current non-melanoma skin cancer (NMSC) therapeutics on the cutaneous microbiome

Kala K. Mahen<sup>1,2,3</sup>, Malia Valder<sup>4,5</sup>, William Massey<sup>2,4</sup>, Isabel Johnston<sup>4</sup>, Gioia Pacella<sup>4</sup>, Naseer Sangwan<sup>2,6</sup>, Vijay Krishna<sup>1,7</sup>,
 J. Mark Brown<sup>1,2,3</sup>, Edward Maytin<sup>7,8</sup>, Nicole Ward<sup>9</sup>, George Stark<sup>1,3</sup>, Christine McDonald<sup>3,4</sup>

<sup>1</sup>Department of Cancer Biology, Lerner Research Institute, Cleveland Clinic, Cleveland, <sup>2</sup>Center for Microbiome and Human Health, Lerner Research Institute, Cleveland Clinic, Cleveland, <sup>3</sup>Department of Molecular Medicine, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Cleveland, <sup>4</sup>Department of Inflammation and Immunity, Lerner Research Institute, Cleveland Clinic, Cleveland, <sup>5</sup>Cleveland Clinic Lerner College of Medicine, Case Western Reserve University, Cleveland, <sup>6</sup>Department of Cardiovascular and Metabolic Sciences, Lerner Research Institute, Cleveland Clinic, Cleveland, <sup>7</sup>Department of Biomedical Engineering, Lerner Research Institute, Cleveland Clinic, Cleveland, <sup>8</sup>Department of Dermatology, Dermatology & Plastic Surgery Institute, Cleveland Clinic, Cleveland, <sup>9</sup>Department of Dermatology, Vanderbilt University Medical Center, Nashville

## December 7, 2024, Room B

## Morning Seminar 1

## "Significance of early intervention with guselkumab"

8:00-9:00 Chairs: Ryuhei Okuyama, Mayumi Komine

MS1-1 Management of Psoriatic Disease with Guselkumab

O Yosuke Ishitsuka

Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine, Suita

MS1-2 Importance of IL-23 in psoriatic arthritis and IL-23 inhibition as a disease-modifying therapy

O Yukie Yamaguchi

Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama

Co-sponsored by TAIHO PHARMACEUTICAL CO., LTD./Janssen Pharmaceutical K.K.

# Luncheon Seminar 6 "Sun Dermatology Seminar"

12:00-13:00 Chairs: Hideyuki Ujiie, Takeshi Nakahara

LS6-1 Understanding the pathophysiology of inflammatory skin diseases from paradoxical reactions associated with targeted biologic agents

O Fumi Miyagawa

Department of Dermatology, Nara Medical University School of Medicine, Nara

LS6-2 Pathogenesis of pustule formation: Insights from the fungal infection and pustular psoriasis

O Yoshio Kawakami

Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences

Co-sponsored by Sun Pharma Japan, Limited.

# Concurrent Oral Session 6 (Pigmentation and Melanoma)

14:20-15:44 Chairs: Satoshi Fukushima, Takashi Inozume

C06-01 CXCL13 and CCL21 induce tertiary lymphoid structures and enhance the efficacy of immune checkpoint inhibitors in malignant melanoma

O Maki Yoshimitsu¹, Motoki Nakamura¹, Shinji Kano¹, Tetsuya Magara¹, Hiroshi Kato¹, Aiko Sakai², Masaya Sugiyama², Masashi Mizokami³, Akimichi Morita¹

<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, 
<sup>2</sup>Department of Viral Pathogenesis and Controls, National Center for Global Health and Medicine, Ichikawa, 
<sup>3</sup>Genome Medical Sciences Project, National Center for Global Health and Medicine, Ichikawa

C06-02 Nucleo-cytosolic acetyl-CoA drives tumor immune evasion by epigenetically regulating PD-L1 in melanoma

[P12-04] O Huina Wang, Weinan Guo, Xiuli Yi, Chunying Li

Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an

C06-03 Decreased serum levels of IL-4 correlate with the efficacy of the PAI-1 inhibitor in patients with anti-PD-1 antibody-refractory melanoma

 $\circ$  Emi Yamazaki, Taku Fujimura, Manami Takahashi-Watanabe, Ryo Amagai, Yumi Kambayashi, Yoshihide Asano The Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai

C06-04 Endothelial progenitors: Unlocking Tumor Vessel Normalization to Overcome Therapeutic Challenges in Melanoma

O Laura Sormani<sup>1</sup>, Ghazaleh Hashemi<sup>1</sup>, Haiming Li<sup>1</sup>, Chenhao Zhou<sup>1</sup>, Kwong Ching Li<sup>1</sup>, Siu Hang Chan<sup>1</sup>, Samuel Tan<sup>1</sup>, Quan Nguyen<sup>2</sup>, Edwige Roy<sup>1</sup>, Kiarash Khosrotehrani<sup>1</sup>

<sup>1</sup>The University of Queensland, Frazer Institute, Brisbane, <sup>2</sup>The University of Queensland, Institute for Molecular Biology, Brisbane

C06-05 Single-cell Spatial Profiling: A Bridge Between Clinical Dermatopathology And Melanoma Prognostic Modeling
[P12-08]

The Department of Dermatology, University of California at Davis, Sacramento

C06-06 Targeting NEDD8-mediated neddylation: a new approach to improve melanoma treatment

[P03-07] O Leon Tsung-Ju Lee<sup>1,2,3</sup>, Yuan-Feng Lin<sup>1,4</sup>

<sup>1</sup>Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, <sup>2</sup>Department of Dermatology, School of Medicine, Taipei Medical University, Taipei, <sup>3</sup>Department of Dermatology, Taipei Medical University Hospital, Taipei, <sup>4</sup>Cell

Physiology and Molecular Image Research Center, Wan Fang Hospital, Taipei Medical University, Taipei

C06-07

Lipid Profiles and TyG Index as Predictors of Melanoma Incidence: Insights from the UK Biobank

[P08-05] O Javad Alizargar

Kashan Medical University, Isfahan

## Sponsored Symposium 1

## "A new treatment strategy for remission of atopic dermatitis"

15:55-17:55 Chairs: Chih-Hung Lee, Hidehisa Saeki

**SSY1-1** O Thomas Bieber<sup>1,2</sup>

<sup>1</sup>Medicine Programs at the Kühne-Foundation, Medicine Campus Davos, <sup>2</sup>Bieber Dermatology Consulting, Bonn

SSY1-2 O Naoko Okiyama

Department of Dermatology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo

**SSY1-3** O Toshifumi Nomura

Department of Dermatology, Institute of Medicine, University of Tsukuba

SSY1-4 O Saeko Nakajima

Department of Drug Discovery for Inflammatory Skin Diseases, Kyoto University Graduate School of Medicine

Co-sponsored by Eli Lilly Japan K.K

## December 7, 2024, Room C

## Morning Seminar 2

## "IL-4 and IL-13 in Antigen Sensitization and Antibody Production Mechanisms"

8:00-9:00 Chair: Kazunari Sugita

## MS2-1 Allergen-specific IgE and IgG4 in the regulation of type 2 inflammation in atopic dermatitis

Takuva Takeichi<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Nagoya University Institute for Advanced Research, Nagoya

### MS2-2 CD4+T cell subsets associated with IgE-mediated allergic diseases

O Hideki Ueno<sup>1,2,3</sup>

<sup>1</sup>Department of Immunology, Graduate School of Medicine, Kyoto University, Kyoto, <sup>2</sup>ASHBi Institute for the Advanced Study of Human Biology, Kyoto University, Kyoto, <sup>3</sup>Kyoto University Immunomonitoring Center (KIC), Kyoto University, Kyoto

Co-sponsored by Sanofi K.K. Specialty Care Medical

## Luncheon Seminar 7

## "Immunity and Skin Disease: Effects of IL-17 Signaling"

12:00-13:00 Chairs: Akiharu Kubo, Yoshihide Asano

### LS7-1 Power of Intravital Imaging to Understand Stratum Corneum Biology in Healthy and Pathological Condition

O Keitaro Fukuda<sup>1,2</sup>

Laboratory for Skin Homeostasis, RIKEN-IMS, Yokohama, <sup>2</sup>Department of Dermatology, Keio University School of Medicine, Tokyo

## LS7-2 Regulation of IL-17 and its therapeutic effect in palmoplantar pustulosis and psoriasis vulgaris

O Sei-ichiro Motegi

Department of Dermatology, Gunma University Graduate school of Medicine, Maebashi

Co-sponsored by Kyowa Kirin Co., Ltd.

# Concurrent Oral Session 7 (Patient-Targeted Research/Patient Population Research)

14:20-15:44 Chairs: Yuumi Matsuoka, Carlos Clavel

## C07-01 [P08-03]

## Nemolizumab Improves Pruritus in Patients with Intrinsic Atopic Dermatitis Lacking Atopic Predisposition

○ Emi Sato¹, Keita Tsutsui¹,², Hiroki Shimizu¹, Kotaro Ito¹,³

<sup>1</sup>Department of Dermatology, Fukuoka University Faculty of Medicine, Fukuoka, <sup>2</sup>Fukuoka Central Hospital, Fukuoka, <sup>3</sup>Ito Dermatology Clinic, Kitsuki

### C07-02 [P09-03]

## Spatially Transcriptomic Analysis Reveals Alopecia Areata-Specific Gene Expression Signatures Compared to Seborrheic Dermatitis

○ SoHee Park

 $Department \ of \ Dermatology, \ Eunpyeong \ St. \ Marys \ Hospital, \ Seoul$ 

### C07-03 [P09-04]

## Consistent PD-1 decrease in cytotoxic T cell subsets suggests treatment-resistency in rapidly progressive alopecia areata

O Ryo Takahashi¹, Misaki Kinoshita-Ise², Yoshimi Yamazaki², Masahiro Fukuyama², Manabu Ohyama¹,

<sup>1</sup>Flow Cytometry Core Facility, Kyorin University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo

### C07-04 [P09-05]

## Validation of a closed-loop AI and haptic-enabled wearable device for nocturnal scratching in mild atopic dermatitis

O Albert F. Yang¹, Soham Patel²³, Keum San Chun⁴, Dylan Richards⁴, Jessica R. Walter⁵, Kazuaki Okamoto⁶, Amy S. Paller³¬¬¬, Akihiko Ikoma⁶, Shuai Xu³¬¬¬, Shuai Xu³¬¬¬, Shuai Xu³¬¬¬, Shuai Xu¬¬¬, Shuai

<sup>1</sup>Department of Dermatology, University of Michigan, Ann Arbor, <sup>2</sup>University of Kansas School of Medicine, Kansas City, <sup>3</sup>Department of Dermatology, Northwestern University Feinberg School of Medicine, Chicago, <sup>4</sup>Sibel Health, Niles, <sup>5</sup>Department of Obstetrics and Gynecology, Northwestern University Feinberg School of Medicine, Chicago, <sup>6</sup>Maruho Co., Ltd., Osaka, <sup>7</sup>Department of Pediatrics (Dermatology), Northwestern University Feinberg School of Medicine, Chicago, <sup>8</sup>Querrey Simpson Institute for Bioelectronics, Northwestern University, Chicago, <sup>9</sup>Department of Biomedical Engineering, Northwestern University, Evanston

## C07-05 Decoding the Immune Mechanisms in Papuloerythroderma of Ofuji: Clinical and Molecular Insights

[P09-06]

O Koki Kataoka<sup>1</sup>, Fuuka Minami<sup>1</sup>, Ryota Asahina<sup>1,2</sup>, Satoru Yonekura<sup>1</sup>, Saeko Nakajima<sup>1,3</sup>, Kenji Kabashima<sup>1,4,5</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, <sup>3</sup>Department of Drug Discovery for Inflammatory Skin Diseases, Kyoto University Graduate School of Medicine, Kyoto, <sup>4</sup>A\*STAR Skin Research Labs (A\*SRL), Agency for Science, Technology and Research (A\*STAR), 8A Biomedical Grove, #06-06 Immunos, Singapore, <sup>5</sup>Singapore Immunology Network (SIgN), Agency for Science, Technology and Research (A\*STAR), 8A Biomedical Grove, Level 3 Immunos, Singapore

### C07-06 [P08-01]

## Prediction of disease progression in Early Severe Systemic Sclerosis: a multicenter, prospective cohort analysis

O Saori Uesugi-Uchida¹, Manabu Fujimoto², Yoshihide Asano³, Masatoshi Jinnin⁴, Takashi Matsushita⁵, Sei-ichiro Motegi⁶, Shinichi Sato², Minoru Hasegawa¹

<sup>1</sup>Departments of Dermatology, University of Fukui, Fukui, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, <sup>3</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>4</sup>Department of Dermatology, Wakayama Medical University Graduate School of Medicine, Wakayama, <sup>5</sup>Department of Dermatology, Faculty of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, <sup>6</sup>Department of Dermatology, Gunma University Graduate School of Medicine, Gunma, <sup>7</sup>Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo

## C07-07 [P08-04]

## Impact of Environmental Factors on Skin Irritation Severity: Comparative Analysis of Demographics and Health Outcomes in Vietnam

○ Bao C Bui¹, Huy Nguyen¹, Ngan K Nguyen²

<sup>1</sup>Department of Medical Science, University of Health Sciences, Ho Chi Minh City, <sup>2</sup>Department of Biotechnology, International University, Ho Chi Minh City

# Sponsored Lecture 1 "New solution for leaving the limitation behind"

15:55-16:55 Chairs: Atsushi Otsuka, Yuichiro Tsunemi

## SL1-1 Importance of early intervention in the treatment of psoriasis and the potential of bimekizumab

O Masahiro Kamata

Department of Dermatology, Teikyo University School of Medicine, Tokyo

### SL1-2 New Advanced Treatment Strategies in Autoinflammatory Keratinization Diseases

O Ichiro Kurokawa<sup>1,2</sup>

<sup>1</sup>Department of Dermatology Acne Clinical and Research Center, Meiwa Medical Research Institute Meiwa Hospital, <sup>2</sup>Hyogo College of Medicine

Co-sponsored by UCB Japan Co. Ltd.

# Symposium 3 "Skin aging"

17:00-18:20 Chairs: Emi Nishimura, Takeshi Matsui

## SY3-1 Combustion-derived air pollutants and their impact on skin aging: Mechanistic insights

O Thomas Haarmann-Stemmann

IUF- Leibniz Research Institute for Environmental Medicine, Düsseldorf

### SY3-2 Role of ER Stress in Age-Related Pigmentary Disorders: Insights into IRE1α Signaling

○ Sang Ho Oh

Department of Dermatology, Severance Hospital, Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul

### SY3-3 Mitigating Melanocyte Aging: The Role of Metabolic and Autophagy Regulation

O Hee Young Kang

Department of Dermatology, Ajou University School of Medicine, Suwon

## December 7, 2024, Room D

## Morning Seminar 3

8:00-9:00 Chair: Shinichi Sato

### MS3 Treatment Strategies for Psoriasis Based on the Complexity Landscape in the Modern Era

O Akimichi Morita

Professor and Chairman, Department of Geriatric and Environmental Dermatology Nagoya City University Graduate School of Medical Sciences, Nagoya

Co-sponsored by Celltrion Healthcare Japan K.K.

## Luncheon Seminar 8

## "The significance of PDE4 inhibitors in psoriasis treatment"

12:00-13:00 Chairs: Kazumitsu Sugiura, Steven Thng Tien Guan

LS8-1 Novel drug selection and treatment strategies for psoriasis as revealed by an ultra-low quantity cytokine analysis system

O Ayumi Yoshizaki

The University of Tokyo, Tokyo

LS8-2 Rethinking Novel Insights and Treatment Options for Psoriasis

O Kejichi Yamanaka

Mie University Graduate School of Medicine, Mie

Co-sponsored by Amgen K.K.

# Concurrent Oral Session 8 (Cell-Cell Interactions in the Skin/Pharmacology and Drug Development)

14:20-15:44 Chairs: Rei Watanabe, Mitsutoshi Tominaga

C08-01 A potential contribution of S100A11 to skin fibrosis and pulmonary involvement in systemic sclerosis

[P02-10] O Takuya Takahashi¹, Takahashi¹, Tetsuya Ikawa¹, Hitoshi Terui¹, Toshiya Takahashi¹, Yuichiro Segawa¹, Hayakazu Sumida², Ayumi Yoshizaki²², Shinichi Sato², Yoshihide Asano¹

<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>2</sup>Department of Dermatology, The University of Tokyo Graduate School of Medicine, Tokyo, <sup>3</sup>Department of Clinical Cannabinoid Research, University of Tokyo Graduate School of Medicine, Tokyo

C08-02 Single-cell RNA-seq of human dermis reveals age-associated fibroblasts and defines loss of fibroblastic identity as a hallmark of aging skin

Mika Sawane¹, Tsukasa Kouno², Yoshinari Ando², Miki Kojima², Makiko Komata¹, Jay W. Shin²³, Kentaro Kajiya¹
 MIRAI Technology Institute, Shiseido Co., Ltd, Yokohama, ²IMS, RIKEN, Yokohama, ³Genome Institute of Singapore, A\*STAR,

Singapore

C08-03 HAS3-Derived Hyaluronic Acid Modulates Immune Responses in Atopic Dermatitis

[P04-04] O Mayuko Amagai, Takehiro Takahashi, Hitoshi Terui, Toshiki Okazaki, Tomoko Chiba, Saaya Akai, Toshiya Takahashi, Maki Ozawa, Yoshihide Asano

The Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai

C08-04 Mucopolysaccharide polysulfate increases local skin blood volume through nitric oxide production

[P04-05] O Tam Kurachi, Hironobu Ishimaru, Ryo Tadakuma, Akira Koda, Yuhki Ueda, Takaaki Doi Drug Development Research Laboratories, Kyoto R&D Center, Maruho Co., Ltd., Kyoto

C08-05 IL-33 and TNF $\alpha$  as causes of purpura formation associated with the severity of DIHS/DRESS

[P04-06] Shingo Takei, Ryota Hayashi, Natsumi Hama, Riichiro Abe

Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

C08-06 Role of MrgprA3-expressing primary sensory neurons in itch responses in atopic dermatitis model mice

[P10-02] 

Masanori Fujii¹², Kyoko Fujii², Ryosuke Miyagawa², Taisei Enomoto², Takato Ohtsuka², Yuma Yasui²

<sup>1</sup>Department of Analytical Pharmacology, Faculty of Pharmacy, Meijo University, Aichi, <sup>2</sup>Laboratory of Pharmacology, Division of Pathological Sciences, Kyoto Pharmaceutical University, Kyoto

## C08-07 [P10-03]

Advancements in Stevens-Johnson syndrome/toxic epidermal necrolysis treatment: targeting cell death pathways via Fas-Fas ligand inhibition

O Yuki Saito<sup>1</sup>, Roberta Lotti<sup>2,3</sup>, Haruna Kimura<sup>1</sup>, Akito Hasegawa<sup>1</sup>, Brydon Bennett<sup>2</sup>, Antonino Amato<sup>2</sup>, Carlo Pincell<sup>2</sup>, Riichiro Abe<sup>1</sup> Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>PinCell s.r.l., Milano, <sup>3</sup>DermoLab, University of Modena and Reggio Emilia, Modena

## Social Gathering

19:20-21:00

## December 8, 2024, Room A

## Morning Seminar 4

## "The Importance of Early Intervention For Psoriasis Treatment"

8:00-9:00 Chairs: Hideaki Tanizaki, Yukari Okubo

## MS4-1 Significance of Targeting Resident Memory T Cells and IL-23 in Psoriasis Treatment

∩ Vu Sawada

Department of Dermatology, University of Occupational and Environmental Health

### MS4-2 Early intervention in Psoriatic Disease

O Emi Nishida

Nagoya City University West Medical Center, Aichi

Co-sponsored by Janssen Pharmaceutical K.K./TAIHO PHARMACEUTICAL CO., LTD.

## Plenary Session III

9:10-10:40 Chairs: Yayoi Tada, Paul Nghiem, Nikolas Haass

## III-1 Impact of SASPase Deficiency on Skin Barrier Integrity: Altered Desquamation and Acidification in the Stratum [P05-01] Corneum

O Keitaro Fukuda<sup>1,2</sup>, Sawa Okada<sup>1,3</sup>, Yoshihiro Ito<sup>2</sup>, Yuki Furuichi<sup>2</sup>, Takeshi Matsui<sup>4</sup>, Masayuki Amagai<sup>1,2</sup>

<sup>1</sup>Skin Homeostasis, RIKEN-IMS, Yokohama, <sup>2</sup>Dermatology, Keio University School of Medicine, Tokyo, <sup>3</sup>Pharmaceutical Science, Keio University, Tokyo, <sup>4</sup>Evolutionary Cell Biology of the Skin, Tokyo University of Technology, Hachioji

## III-2 Identification of epigenetic *FDFT1*-associated porokeratosis and (epi-)genotype-phenotype correlation of porokeratosis in $\sim$ 100 individuals

O Sonoko Saito¹, Yuki Saito²³, Showbu Sato¹, Satomi Aoki¹, Noriko Ono¹, Yoshihiro Ito¹, Ai Yoshioka⁴, Hisato Suzuki⁵, Takashi Sasaki⁶, Tomoko Kawaiˀ, Kenichiro Hata²⁵, Kenjiro Kosaki⁵, Masayuki Amagai¹, Kazuhiko Nakabayashiˀ, Akiharu Kubo¹⁴

<sup>1</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>2</sup>Department of Gastroenterology, Keio University School of Medicine, Tokyo, <sup>3</sup>Division of Molecular Oncology, National Cancer Center Research Institute, Tokyo, <sup>4</sup>Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe, <sup>5</sup>Center for Medical Genetics, Keio University School of Medicine, Tokyo, <sup>6</sup>Center for Supercentenarian Medical Research, Keio University School of Medicine, Tokyo, <sup>7</sup>Department of Maternal-Fetal Biology, National Center for Child Health and Development, Tokyo, <sup>8</sup>Department of Human Molecular Genetics, Gunma University Graduate School of Medicine, Maebashi

## III-3 Deciphering the immune mechanism of autoreactive B cells in Pemphigus Vulgaris

[P02-01]

O Baptiste Janela<sup>1</sup>, Gerome Bohelay<sup>2,3</sup>, Gokce Oguz<sup>4</sup>, Vipin Narang<sup>5</sup>, Bernett Lee<sup>1</sup>, Adaikalavan Ramasamy<sup>4</sup>, Anne Marie Cardine<sup>6</sup>, Vivien Hebert<sup>7</sup>, Florent Ginhoux<sup>5</sup>, Evan Newell<sup>5</sup>, Pascal Joly<sup>7</sup>, Frederic Caux<sup>2,3</sup>, Philippe Musette<sup>2,3</sup>

<sup>1</sup>Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore, <sup>2</sup>Department of Dermatology and Referral Centre for Autoimmune Bullous Diseases, Avicenne Hospital, Paris, <sup>3</sup>Inserm UMR 1125, University Sorbonne, Paris, <sup>4</sup>Genome Institute of Singapore, Singapore, <sup>5</sup>Singapore Immunology Network, Singapore, <sup>6</sup>INSERM UMRS 976, Paris, <sup>7</sup>Inserm U1234, CHU Rouen, Rouen

## III-4 Transforming growth factor-β signaling-mediated wound healing is required hair follicle neogenesis

[P14-01]

 $\circ$  Tatsuya Ogawa, Chae Ho Lim, Olivia Yeroushalmi, Priya Marella, Soung Hoon Lee, Annette Kaminaka, Mayumi Ito The Ronald O. Perelman Department of Dermatology, NYU Grossman School of Medicine, New York

## III-5 Linking Intracellular Bulk Water Increase to Elevated Calcium Levels During Corneoptosis in Stratum [P05-02] Granulosum Cells

O Shota Kawanami<sup>1</sup>, Keiichiro Shiraga<sup>2</sup>, Yuichi Ogawa<sup>2</sup>, Keitaro Fukuda<sup>3,4</sup>, Masayuki Amagai<sup>3,4</sup>, Takeshi Matsui<sup>1,3,4</sup>
<sup>1</sup>Bionics Program, Graduate School of Bionics, Computer and Media Science, Tokyo University of technology, Tokyo, <sup>2</sup>Graduate School of Agriculture, Kyoto University, Kyoto, <sup>3</sup>Center for Integrative Medical Scieces, RIKEN, Yokohama, <sup>4</sup>Depertment of Dermatology, Keio University School of Medicine, Tokyo

## III-6 Co-blockade for CD276 and PD-1 signal enhances anti-melanoma T cell response [P12-01] O Kazuhiro Aovama¹ Shusuke Kawashima¹ Vuka Saeki¹ Vu Kawashara¹ Takamitsu Matsuzawa¹

O Kazuhiro Aoyama<sup>1</sup>, Shusuke Kawashima<sup>1</sup>, Yuka Saeki<sup>1</sup>, Yu Kawahara<sup>1</sup>, Takamitsu Matsuzawa<sup>1</sup>, Noriko Saito<sup>1</sup>, Ayako Oikawa<sup>1</sup>, Masahito Kawazu<sup>2</sup>, Yosuke Togashi<sup>3</sup>, Yasuhiro Nakamura<sup>4</sup>, Tatsuyoshi Kawamura<sup>5</sup>, Yukiko Kiniwa<sup>6</sup>, Osamu Yamasaki<sup>7</sup>, Satoshi Fukushima<sup>8</sup>, Takashi Inozume<sup>1</sup>

<sup>1</sup>Department of Dermatology, Chiba University Graduate School of Medicine, Chiba, <sup>2</sup>Division of Cell Therapy, Chiba Cancer Center Research Institute, Chiba, <sup>3</sup>Department of Tumor Microenvironment, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, <sup>4</sup>Department of Skin Oncology/Dermatology, Saitama Medical University International Medical Center, Saitama, <sup>5</sup>Department of Dermatology, University of Yamanashi, <sup>4</sup>Department of Dermatology, Shinshu University, Matsumoto, <sup>7</sup>Department of Dermatology, Shimane University Faculty of Medicine, Izumo, <sup>8</sup>Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto

## Concurrent Oral Session 9 (Innate Immunity, Microbiology, Microbiome)

10:50-12:26 Chairs: Hiroyuki Murota, Dong Hun Lee

## C09-01

### Ccl2+ Fibroblasts orchestrate epithelial barrier function against S.aureus

[P07-02]

O Tatsuya Dokoshi, Michelle Bagood, Marcus Chan, Richard L Gallo

The department of dermatology, university of California San Diego, San Diego

### C09-02 [P07-03]

## Stress-experienced monocytes/macrophages lose their anti-inflammatory function via $\beta$ 2-adrenergic receptor in skin allergic inflammation

O Soichiro Yoshikawa<sup>1,2</sup>, Hitoshi Urakami<sup>2,3</sup>, Kei Nagao<sup>1,2</sup>, Kensuke Miyake<sup>4</sup>, Shuhei Sano<sup>5</sup>, Zheyu Hu<sup>5</sup>, Emi Nishii<sup>5</sup>, Atsushi Fujimura<sup>2</sup>, Takeshi Y. Hiyama<sup>6</sup>, Keiji Naruse<sup>7</sup>, Hajime Karasuyama<sup>4</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,8</sup>, Shin Morizane<sup>3</sup>, Sachiko Miyake<sup>5</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Cellular Physiology, Okayama University Academic Field of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>3</sup>Department of Dermatology, Okayama University Academic Field of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>4</sup>Inflammation, Infection & Immunity Laboratory, Advanced Research Institute, Tokyo Medical and Dental University (TMDU), Tokyo, <sup>5</sup>Department of Immunology, Juntendo University Graduate School of Medicine, Tokyo, <sup>6</sup>Department of Integrative Physiology, Tottori University Graduate School and Faculty of Medicine, Yonago, <sup>7</sup>Department of Cardiovascular Physiology, Okayama University Academic Field of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>8</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

### C09-03 [P07-04]

## Genetic barrier dysfunction drives skin inflammation during atopy and cutaneous pathogenic colonization

O Ying Shiang Lim<sup>1</sup>, Belle Yap<sup>1</sup>, Lifang Koh<sup>1</sup>, Jasrie Muhammad<sup>2</sup>, Franklin Zhong<sup>2</sup>, John Common<sup>1</sup>

<sup>1</sup>A\*STAR Skin Research Labs, Singapore, <sup>2</sup>Nanyang Technological University, Singapore

### C09-04 [P07-05]

## Cutaneous palmitic acid with some involvement from the microbiome drives acne formation through $Lrig1^{hi}$ sebocytes in the hair follicle

O Takashi Sugihira<sup>1,2</sup>, Seitaro Nakagawa<sup>1,3</sup>, Manabu Fujimoto<sup>3</sup>, Yumi Matsuoka-Nakamura<sup>1,3,4</sup>

<sup>1</sup>Cutaneous Immunology and Microbiology, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup>Basic Research Development Division, Rohto Pharmaceutical Co., Ltd., Kizugawa, <sup>3</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, <sup>4</sup>Cutaneous Allergy and Host Defense, Immunology Frontier Research Center, Osaka University, Osaka

### C09-05 [P07-06]

### Bacteria-derived lipopeptides inhibit the release of IL-33 in models of Atopic Dermatitis

 $\circ$  Helen Williams<sup>1</sup>, Ryo Muko<sup>2</sup>, Emily Wright<sup>1</sup>, Hiroshi Matsuda<sup>3</sup>, Akane Tanaka<sup>2,3</sup>, Peter D Arkwright<sup>1</sup>, Joanne L Pennock<sup>1</sup>

<sup>1</sup>Lydia Becker Institute of Immunology and Inflammation, University of Manchester, Manchester, <sup>2</sup>Institute of Global Innovation Research, Tokyo University of Agriculture & Technology, Tokyo, <sup>3</sup>Laboratories of Comparative Animal Medicine, Tokyo University of Agriculture & Technology, Tokyo

### C09-06 [P07-07]

## Proteomics analysis of skin microbiome: the skin flora affects the immune status via serum extracellular vesicles in atopic dermatitis

○ Toru Kawai¹, Satoshi Muraoka², Masatoshi Eguchi¹, Hong Ha Nguyen¹, Shingo Takei¹, Haruna Kimura¹, Tatsuya Katsumi¹, Kouichi Tomii¹, Elena Borzova¹, Akito Hasegawa¹, Ryota Hayashi¹, Jun Adachi², Riichiro Abe¹

<sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>Laboratory of Proteomics for Drug Discovery, Center for Drug Design Research, National Institute of Biomedical Innovation, Health and Nutrition, Osaka

## C09-07

## Identification of natural killer cells and innate lymphoid cells in human epidermis

[P07-08]

O Youichi Ogawa, Takuya Sato, Shinji Shimada, Tatsuyoshi Kawamura

Department of Dermatology, University of Yamanashi, Yamanashi

### C09-08 [P07-09]

## $\mathsf{TNF}\text{-}\alpha$ induction via linear ubiquitination in keratinocytes is associated with the pathogenesis of the imiquimod-induced psoriasis model

 ${}^{\circ}\, Ken \, I. \, Kosaka^{\scriptscriptstyle 1}, \, Satoshi \, Nakamizo^{\scriptscriptstyle 1}, \, Gyohei \, Egawa^{\scriptscriptstyle 2}, \, Kazuhiro \, Iwai^{\scriptscriptstyle 3}, \, Kenji \, Kabashima^{\scriptscriptstyle 1}$ 

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Department of Dermatology, Kagoshima University, Kagoshima, <sup>3</sup>Department of Molecular and Cellular Physiology, Kyoto University Graduate School of Medicine, Kyoto

## Luncheon Seminar 9

12:35-13:35 Chair: Ken Igawa

## LS9 Atopic dermatitis: Pathophysiology and management with Lebrikizumab

○ Thomas Bieber¹,²

<sup>1</sup>Medicine Programs at the Kühne-Foundation, Medicine Campus Davos, <sup>2</sup>Bieber Dermatology Consulting, Bonn

Co-sponsored by Eli Lilly Japan K.K

# JSID-Asia-Oceania-Forum "Cutting-edge and up-to-date research from Asia"

13:45-16:05 Chairs: Yumi Aoyama, Cheng-Che Eric Lan

### JAOF1 Epigenetic regulation of Skin Aging

ODong Hun Lee1,2

<sup>1</sup>Department of Dermatology, Seoul National University Hospital, Seoul National University College of Medicine, Seoul, <sup>2</sup>Institute of Human-Environment Interface Biology, Seoul National University, Seoul

## JAOF2 Unveiling the Chronological Gene Expression in Psoriasis: Insights into Plaque Formation and NB-UVB Therapy

O Jitlada Meephansan

Division of Dermatology at Chulabhorn International College of Medicine, Thammasat University, Pathumthani

## JAOF3 Cutting-edge and up-to-date research of antimicrobial photodynamic therapy in Taiwan

O Tak-Wah Wong

Departments of Dermatology, Biochemistry & Molecular Biology, Center of Applied Nanomedicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan

## JAOF4 New Paradigm in Management of Melasma

O Steven Thng

National Skin Centre, Singapore

### JAOF5 Targeted therapies in inflammatory skin disease, an opportunity to research disease mechanisms'

O Johannes S Kern<sup>1,2</sup>

Dermatology, The School of Translational Medicine, Monash University, Melbourne, Dermatology, Alfred Health, Melbourne

### JAOF6 Dermal Fat, an indispensable component of the skin's immune and regenerative system

O Ling-juan Zhang

State Key Laboratory of Cellular Stress Biology, School of Pharmaceutical Sciences, Xiamen University, Xiamen

### December 8, 2024, Room B

### Morning Seminar 5

8:00-9:00 Chair: Norito Katoh

MS5 Basic knowledge of mast cells and the pathogenesis and treatment of chronic spontaneous urticaria

O Tomonobu Ito

Department of Dermatology, University of Tokyo Medical University, Tokyo

Co-sponsored by Novartis Pharma K.K.

# Concurrent Oral Session 10 (Carcinogenesis and Cancer)

10:50-12:26 Chairs: Masatoshi Jinnin, Motoki Nakamura

### C10-01 Spatial proteomic cell-cell correlation analysis reveals optimal tumor microenvironment for immunotherapy in Merkel cell carcinoma

O Motoki Nakamura<sup>1</sup>, Dai Ogata<sup>2</sup>, Junji Kato<sup>3</sup>, Maki Yoshimitsu<sup>1</sup>, Tetsuya Magara<sup>1</sup>, Hiroto Watanabe<sup>1</sup>, Shinji Kano<sup>1</sup>, Reiko Nakamura<sup>1</sup>, Hiroshi Kato<sup>1</sup>, Akimichi Morita<sup>1</sup>

<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, <sup>2</sup>Department of Dermatologic Oncology, National Cancer Center Hospital, Tokyo, <sup>3</sup>Department of Dermatology, Sapporo Medical University School of Medicine, Sapporo

#### C10-02 CDK inhibitors disrupt mRNA processing and synergize with Bcl-xL inhibitors in Merkel cell carcinoma

[P10-04]

O Khalid A Garman<sup>1</sup>, Tara Gelb<sup>1</sup>, Dimitrios Anastasakis<sup>2</sup>, Madhu Lal Nag<sup>3</sup>, Matthew D Hall<sup>3</sup>, Markus Hafner<sup>2</sup>, Isaac Brownell<sup>1</sup>

Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, Maryland, <sup>2</sup>RNA Molecular Biology Laboratory, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, <sup>3</sup>National Center for Advancing Translational Sciences, National Institutes of Health, Bethesda

#### C10-03 Genetic intratumor heterogeneity and clonal evolution in extramammary Paget's disease

[P03-03]

O Kenichiro Tanaka¹, Ikko Kajihara², Kazuro Shimokawa³, Naotoshi Nakamura³, Yudo Kusaba², Ryoko Sakamoto², Saki Maeda-Otsuka², Saori Yamada-Kanazawa², Soichiro Sawamura², Hisashi Kanemaru², Katsunari Makino², Jun Aoi², Shinichi Masuguchi², Takashi Suzuki³, Satoshi Fukushima²

<sup>1</sup>The Department of Dermatology, Kumamoto Shinto General Hospital, Kumamoto, <sup>2</sup>The Department of Dermatology, Kumamoto University, Kumamoto, <sup>3</sup>Osaka University, Center for Mathematical Modeling and Data Science, Osaka

#### C10-04 Ahed, a spliceosomal protein, has crucial roles in proliferation of normal keratinocytes and tumor cells

[P03-04] O Mikiro Takaishi, Kozo Nakai, Shigetoshi Sano

Department of Dermatology, Kochi Medical School, Kochi University, Nankoku

#### C10-05 Insights into T cell clonality of Mycosis Fungoides via T Cell Receptor Repertoire Analysis

[P03-05] O Takashi Sakaida, Yoshifumi Kanayama, Mai Sakurai, Yuki Enomoto, Aya Yamamoto, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

#### C10-06 Novel detection and clinical utility of serum-derived extracellular vesicle in angiosarcoma

[P03-06] OJing Wang¹, Kazunori Yokoi¹, Yusuke Yoshioka², Rei Watanabe³, Yasuhiro Fujisawa⁴, Takahiro Ochiya², Atsushi Tanemura¹, Manabu Fujimoto¹

<sup>1</sup>Department of Dermatology, Osaka University Graduate School of Medicine, Suita, <sup>2</sup>Department of Molecular and Cellular Medicine, Institute of Medical Science, Tokyo Medical University, Tokyo, <sup>3</sup>Department of Dermatology, Juntendo University School of Medicine, Tokyo, <sup>4</sup>Department of Dermatology, University of Tsukuba, Tsukuba

#### C10-07 Circulating tumor DNA detection during immunotherapy predicts progression in Merkel cell carcinoma

[P15-02] O Tomoko Akaike¹, Daniel S. Hippe², Song Y. Park¹, Paul Nghiem¹², Lisa C. Zaba³

<sup>1</sup>Department of Dermatology, University of Washington School of Medicine, Seattle, <sup>2</sup>Fred Hutch Cancer Center, Seattle, <sup>3</sup>Department of Dermatology, Stanford University School of Medicine, Palo Alto

#### C10-08 Diagnostic scoring system for intravascular large B-cell lymphoma

[P08-02] O Maho Nakashima¹, Motoi Takenaka², Takeharu Kato³, Yasushi Miyazaki⁴, Hiroyuki Murota²

<sup>1</sup>Department of Dermatology, Nagasaki University Hospital, Nagasaki, <sup>2</sup>Department of Dermatology, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, <sup>3</sup>Department of Hematology, Nagasaki University Hospital, Nagasaki, <sup>4</sup>Department of Hematology, Atomic Bomb Disease Institute, Nagasaki University, Nagasaki

### Luncheon Seminar 10

12:35-13:35 Chair: Manabu Fujimoto

LS10 The impact of targeting IL-23 on the disease modification of psoriasis

O Rei Watanabe

Department of Dermatology, Faculty of Medicine, Juntendo University, Tokyo

Co-sponsored by Janssen Pharmaceutical K.K. Medical Affairs Division

# Sponsored Symposium 2 "Psoriatic disease update worldwide"

13:45-15:45 Chairs: Daisuke Tsuruta, Tatsuyoshi Kawamura

SSY2-1 Understanding the Pathogenesis of Psoriasis Based on the Disease Module Hypothesis: An Approach from Network Theory

O Hajime Iizuka

Research Institute of Psoriasis

SSY2-2 Systemic Nature of Psoriatic Disease: Focus on Psoriatic Arthritis and Cardiometabolic Disease

O Seong Jin Jo

Seoul National University College of Medicine

SSY2-3 Understanding of pathophysiology of PsO/PPP - similarity and difference

○ Yayoi Tada

Teikyo University School of Medicine

SSY2-4 Clinical management update and future therapeutics in psoriasis

○ Eingun James Song

Clinical research for Frontier Dermatology

Co-sponsored by Amgen K.K. Medical Affairs Dept.

### December 8, 2024, Room C

### Morning Seminar 6

### "Beyond Itch: The Multifaceted Pathogenic Effects of IL-31"

8:00-9:00 Chairs: Yozo Ishiuji, Dong Hun Lee

#### MS6-1 OSM and IL-31 in Atopic Dermatitis: Their Relationship with Th2 Inflammation

Masataka Suehiro

Department of Dermatology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima

#### MS6-2 The Impact of IL-31 on Skin Diseases: Evolving Insights and Therapeutic Advances

O Kenii Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine

Co-sponsored by Maruho Co., Ltd

# Concurrent Oral Session 11 (Photobiology/Skin, Appendages, and Stem Cell Biology)

10:50-12:14 Chairs: Daisuke Tsuruta, Chao-Chun Yang

#### C11-01 Loricrin and T cell immunity: evidence from photocarcinogenesis

[P05-03]

O Xinyi Wang<sup>1</sup>, Yosuke Ishitsuka<sup>1</sup>, Dennis R. Roop<sup>2</sup>

<sup>1</sup>University of Osaka, Osaka, <sup>2</sup>Department of Dermatology and Charles C. Gates Center for Regenerative Medicine, University of Colorado, Aurora

#### C11-02 Skin Aging through the Regulation of NRIP1 and PRDM1 Associated with DNA Methylation

[P11-01]

O Yidan Cui<sup>1</sup>, Ji Hwan Moon<sup>2</sup>, Hye Sun Shin<sup>3</sup>, Min-Kyoung Kim<sup>1</sup>, Dong Hun Lee<sup>1</sup>

<sup>1</sup>Department of Dermatology, Seoul National University College of Medicine, Seoul, <sup>2</sup>Samsung Genome Institute, Samsung Medical Center, Seoul, <sup>3</sup>AMOREPACIFIC Research and Innovation Center, Yongin

### C11-03 The Pigmentation of Blue Light is Mediated by Both Melanogenesis Activation and Autophagy Inhibition through OPN3-TRPV1

○ Eunbi Yu, Heeseon Shin, Jongsung Lee

Department of Integrative Biotechnology, Sungkyunkwan University, Suwon

# C11-04 Characterization and functional analysis of dermal perivascular adipose tissue (PVAT) using single-nucleus RNA sequencing

O Riko Takimoto-Ito, Satoshi Nakamizo, Kenji Kabashima

The Department of Dermatology, Kyoto University graduate school of Medicine, Kyoto

# C11-05 An immune-adipocyte axis elicits hair regeneration by promoting adipocyte-hair follicle stem cell metabolic communication

○ Kang-Yu Tai¹, Chih-Lung Chen², Wei-Hung Wang², Sabrina Mai-Yi Fan³, Sung-Jan Lin⁴

<sup>1</sup>Genome and Systems Biology Degree Program, Academia Sinica and National Taiwan University, Taipei, <sup>2</sup>Department of Biomedical Engineering, National Taiwan University, Taipei, <sup>3</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>4</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>5</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>6</sup>Department of Medical Research, National Taiwan University Hospital, <sup>6</sup>Department of Medical Research, <sup>6</sup>

<sup>4</sup>Department of Dermatology, National Taiwan University Hospital and College of Medicine, Taipei

#### C11-06 Elucidating the role of anti-aging matrix Fibulin 7 in skin inflammatory disease psoriasis

[P13-10] ○ Erna Raja¹, Jun Tsunezumi², Karolina Edlund³, Aiko Sada⁴, Hiromi Yanagisawa¹

<sup>1</sup>Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance (TARA), University of Tsukuba, Tsukuba, <sup>2</sup>Department of Pharmacy, Kyushu University of Health and Welfare, Miyazaki, <sup>3</sup>Leibniz Research Centre for Working Environment and Human Factors, University of Dortmund, Dortmund, <sup>4</sup>Medical Institute of Bioregulation, Kyushu University, Fukuoka

#### C11-07 Multiple fetal fibroblast subpopulations differently contribute to skin architecture development

[P13-11] o

O Noriko Morioka<sup>1,2</sup>, Clarisse Ganier<sup>2</sup>, Fiona M Watt<sup>2,3</sup>

<sup>1</sup>Frontier Research Center, POLA Chemical Industries, Inc., Yokohama, <sup>2</sup>Centre for Gene Therapy and Regenerative Medicine, King's College London, London, <sup>3</sup>Directors' Unit, EMBL, Heidelberg

### Luncheon Seminar 11

# "Exploring the Immunological Landscape focused on resident memory T cells and the Physical Disease Burden of Psoriasis"

12:35-13:35 Chairs: Sang Ho Oh, Masatoshi Jinnin

LS11-1 The Role of Resident Memory T cells in the Pathogenesis of Psoriatic Disease Burden

O Toshiharu Fujiyama

Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu

LS11-2 Nailfold bleeding as a risk factor for psoriatic diseases and psoriatic arthritis

O Takemichi Fukasawa

Department of Clinical Cannabinoid Research, Graduate School of Medicine, The University of Tokyo, Tokyo

Co-sponsored by AbbVie GK

#### Meet the Editor

13:45-14:45 Chairs: Yutaka Shimomura, Kozo Nakai

MtE1 Meet the Editor of Journal of Dermatological Science

O Shigetoshi Sano

Professor Emeritus, Kochi University, Nankoku

MtE2 The Role of Editors in Shaping Dermatological Research: Insights from a Leading Scholar

O Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

### Symposium 4

### "Skin research innovation"

14:50-16:20 Chairs: Daisuke Nanba, Yukinori Okada

SY4-1 Development of novel gene therapy for patients suffering from dystrophic epidermolysis bullosa by collaboration of academia, industry and government

O Katsuto Tamai

Osaka University Graduate School of Medicine, StemRIM Inc., Suita

SY4-2 Antigen-specific immune suppression by regulatory T cells

O Norihisa Mikami

Department of Experimental Immunology, Immunology Frontier Research Center, Osaka University, Suita

SY4-3 Efficacy of a Cold and Warm Simultaneous Stimulation Device for Itch Relief

O Kenzo Ibano<sup>1,2</sup>, Tohru Sugahara<sup>1,3</sup>, Yuichi Itoh<sup>1,4</sup>, Katsunari Sato<sup>1,5</sup>, Shintaro Izumi<sup>1,6</sup>, Kiyono Yoshikuni<sup>1,6</sup>

<sup>1</sup>Osaka Heat Cool inc., Minoh City, <sup>2</sup>Graduate School of Engineering, Osaka University, Suita, <sup>3</sup>Faculty of Materials Science and Engineering, Kyoto Institute of Technology, Kyoto, <sup>4</sup>College of Science and Engineering, Aoyama Gakuin University, Tokyo, <sup>5</sup>Faculty of Engineering, Nara Women's University, Nara, <sup>6</sup>Graduate School of Science, Technology and Innovation, Kobe University, Kobe

### Closing Remarks

16:20-16:25

### December 8, 2024, Room D

# Concurrent Oral Session 12 (Pharmacology and Drug Development/Genetic Disease, Gene Regulation and Gene Therapy)

10:50-12:26 Chairs: Atsushi Otsuka, Chih-Hung Lee

C12-01 [P10-05] NADPH oxidase inhibitor induces type XVII collagen and inhibits senescence, both In-vitro and In-vivo

○ Tuba Musarrat Ansary, Koji Kamiya, Md Razib Hossain, Mayumi Komine

The department of Dermatology, Jichi Medical University, Shimotsuke

C12-02 [P10-06] Difamilast, a topical phosphodiesterase 4 inhibitor, induced CREB-mediated production of human beta defensin 3 in human keratinocytes

O Gaku Tsuji<sup>1,2</sup>, Ayako Yumine<sup>1,2</sup>, Koji Kawamura<sup>2</sup>, Masaki Takemura<sup>2</sup>, Kazuhiko Yamamura<sup>1,2</sup>, Takamichi Ito<sup>2</sup>, Makiko Kido-Nakahara<sup>2</sup>, Takeshi Nakahara<sup>1,2</sup>

<sup>1</sup>Research and Clinical Center for Yusho and Dioxin, Kyushu University Hospital, Fukuoka, <sup>2</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka

C12-03 [P06-02] Defective extracellular secretion of SERPINB7 protein in Nagashima-type palmoplantar keratosis

O Katsuhito Sasaki<sup>1</sup>, Takato Sugiyama<sup>1</sup>, Keitaro Umezawa<sup>2</sup>, Risa Nobuta<sup>1</sup>, Chika Tsutsumi<sup>3</sup>, Yuri Miura<sup>2</sup>, Ryo Ushioda<sup>3,4</sup>, Toshifumi Nomura<sup>1</sup>

<sup>1</sup>Department of Dermatology, Institute of Medicine, University of Tsukuba, Tsukuba, <sup>2</sup>Research Team for Mechanism of Aging, Tokyo Metropolitan Institute of Gerontology, Tokyo, <sup>3</sup>Department of Molecular Biosciences, Faculty of Life Sciences, Kyoto Sangyo University, Kyoto, <sup>4</sup>Institute for Protein Dynamics, Kyoto Sangyo University, Kyoto

C12-04 [P06-03] Treatment of epidermolytic ichthyosis and ichthyosis with confetti with epidermal autografts cultured from revertant skin

O Kana Tanahashi<sup>1</sup>, Michihiro Kono<sup>1,2</sup>, Takenori Yoshikawa<sup>1</sup>, Yuika Suzuki<sup>1</sup>, Masukazu Inoie<sup>3</sup>, Yachiyo Kuwatsuka<sup>4</sup>, Fumie Kinoshita<sup>4</sup>, Takuya Takeichi<sup>1,5</sup>, Masashi Akiyama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Department of Dermatology and Plastic Surgery, Akita University Graduate School of Medicine, Akita, <sup>3</sup>Japan Tissue Engineering Co., Ltd., Gamagori, <sup>4</sup>Department of Advanced Medicine, Nagoya University Hospital, Nagoya, <sup>5</sup>Nagoya University Institute for Advanced Research, Nagoya

C12-05

Establishment of Porokeratosis Model Cells by Gene Editing Using the CRISPR Cas9 System

[P06-04]

 $\odot$ Shinya Hashimoto, A<br/>i Yoshioka, Takeshi Fukumoto, Akiko Kubo, Akiharu Kubo

Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe

C12-06

ZNF750 regulates epidermal-immune crosstalk and the development of Langerhans cells

[P06-05]

Lotem Adar, Bar Schwartz, Liat Oss-Ronen, Roi Gazit,  $\, \circ \,$ Idan Cohen

Ben-Gurion University of the Negev, Be'er Sheva

C12-07 [P06-06]

Mutant mRNAs resulting from loss-of-function mutations in the gene encoding filaggrin are degraded by

nonsense-mediated mRNA decay

Risa Nobuta, Takato Sugiyama, Toshifumi Nomura
 Department of Dermatology, Institute of Medicine, University of Tsukuba, Tsukuba

C12-08 [P06-07]

12:35-13:35

Pathogenic frameshift peptides form unique multi-functional droplets in ichthyosis with confetti

O Takato Sugiyama<sup>1</sup>, Kazuya Matsuo<sup>2</sup>, Risa Nobuta<sup>1</sup>, Ruriko Endo<sup>1</sup>, Kentaro Shiraki<sup>3</sup>, Norifumi Shioda<sup>2</sup>, Toshifumi Nomura<sup>1</sup>

Department of Dermatology, Institute of Medicine, University of Tsukuba, <sup>2</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>3</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, University of Tsukuba, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, <sup>4</sup>Department of Genomic Neurology, Institute of Medicine, <sup>4</sup>Department of Genomic Neurology, <sup>4</sup>Department of Genomic

<sup>1</sup>Department of Dermatology, Institute of Medicine, University of Tsukuba, Tsukuba, <sup>2</sup>Department of Genomic Neurology, Institute of Molecular Embryology and Genetics (IMEG), Kumamoto University, Kumamoto, <sup>3</sup>Faculty of Pure and Applied Sciences, University of Tsukuba, Tsukuba

Chairs: Manabu Ohyama, Kenji Kabashima

### Luncheon Seminar 12

### "Returning patients to their daily lives - The usefulness of JAK inhibitors -"

LS12-1 Understanding alopecia areata: From the latest research to treatment advances

O Yohei Natsuaki

Department of Dermatology, Kurume University School of Medicine

LS12-2 Staphylococcal agr quorum sensing system and skin microbiome : Unveiling their role in infantile atopic dermatitis

O Yumi Matsuoka

Cutaneous Allergy and Host Defense, Immunology Frontier Research Center, Osaka University

Co-sponsored by Pfizer Japan Inc.

# Sponsored Lecture 2 "2024 La Roche-Posay Research Grant"

14:50-15:50 Chair: Akimichi Morita

SL2-1 Integrating 1-on-1 nurse-led eczema education in dermatology visits improves outcomes, self-efficacy & satisfaction: A pilot study

O Corinne Maiolo

myPRODERM Dermatology Clinics, City of Adelaide

SL2-2 2-Mercaptonicotinoyl Glycine (2-MNG): A Novel Melanogenesis Inhibitor for Hyperpigmentation Disorders

○ Jun Suzuki

NIHON LOREAL K.K., Tokyo

Co-sponsored by NIHON L'ORÉAL K.K.

### December 6, - December 8, Poster

#### Poster Presentation

### 2022 JSID's Fellowship Shiseido Research Grant

#### SE-1 STING-mediated anti-tumor strategy by epigenetic modification

O Yu Sawada

Department of Dermatology, University of Occupational and Environmental Health, Kitakyushu

#### SE-2 A drug screening using a FDA-approved drug library identifies selectively cytotoxic agents for angiosarcoma cells

O Teruki Yanagi<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medicine, University of the Ryukyus, Okinawa, <sup>2</sup>Department of Dermatology, Faculty of Medicine and Graduate school of Medicine, Hokkaido University, Sapporo

### 2023 JSID's Fellowship Shiseido Research Grant

#### SE-3 Analysis of homologous recombination in skin using genetically engineered mouse models

O Gyohei Egawa

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

#### SE-4 Elucidating Sex Differences in Immune Response and the Molecular Mechanisms in Dermal Fibroblasts

O Takehiro Takahashi

Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai

### Category 1 (P01): Adaptive Immunity

#### P01-01 Natural IgE production requires cognate interaction between invariant NKT cells and B cells via CD1d

[II-2]

O Akihiko Kitoh<sup>1</sup>, Rintaro Shibuya<sup>2</sup>, Sho Hanakawa<sup>3</sup>, Kenji Kabashima<sup>1,3</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Kimberly and Eric J. Waldman Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, <sup>3</sup>Skin Research Labs, Agency for Science, Technology and Research (A\*STAR), Singapore

### P01-02 CD301b\* cDC2 facilitate cytotoxic T lymphocytes activation within inducible skin-associated lymphoid tissue in [II-3] contact dermatitis

○ Fuuka Minami¹, Ryota Asahina¹², Sachiko Ono¹, Tetsuya Honda³, Gyohei Egawa⁴, Satoshi Nakamizo¹, Kenji Kabashima¹¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, ²Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, ³Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, ⁴Department of Dermatology, Kagoshima University, Kagoshima

#### P01-03 Maintenance of dermal CD4+ tissue-resident memory T cells via lymphatic endothelial cells-derived interleukin-7

[C02-01]

○ Ryota Asahina¹.², Fuuka Minami², Kenji Kabashima²

<sup>1</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, <sup>2</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

### P01-04 Innovations in Allergen-Specific Immunotherapy for Atopic Dermatitis: The Critical Function of a Peripheral-induced Specific Treg Lineage

Kelun Zhang<sup>1,2</sup>, Su Min Kim<sup>1,2</sup>, Hye Li Kim<sup>1,2</sup>, Wanjin Kim<sup>1</sup>, Yeon Woo Jung<sup>1</sup>, Kwang Hoon Lee<sup>1</sup>, Chang Ook Park<sup>1,2</sup>
 Department of Dermatology and Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul, <sup>2</sup>Brain Korea 21 PLUS Project for Medical Sciences, Yonsei University College of Medicine, Seoul

#### P01-05 Cytotoxic CD4+ T cells eliminate senescent dermal fibroblasts by targeting cytomegalovirus antigen

[C02-03]

O Tatsuya Hasegawa<sup>1,2,3</sup>, Tomonori Oka<sup>2,3</sup>, Heehwa G. Son<sup>2,3</sup>, Valeria S. Oliver-Garcia<sup>2,3</sup>, Marjan Azin<sup>2,3</sup>, Thomas M. Eisenhaure<sup>4</sup>, David J Lieb<sup>4</sup>, Nir Hacohen<sup>2,4</sup>, Shadmehr Demehri<sup>2,3</sup>

<sup>1</sup>MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, <sup>2</sup>Center for Cancer Research, Massachusetts General Hospital and Harvard Medical School, Boston, <sup>3</sup>Department of Dermatology, Massachusetts General Hospital and Harvard Medical School, Boston, <sup>4</sup>Broad Institute of MIT and Harvard, Boston

#### P01-06 The expression of fatty-acid binding protein 5 in T cells of resident memory T cell-mediated skin diseases

[C02-04] Shoichi Matsuda<sup>1,4</sup>, Shuichi Nakai<sup>2,4</sup>, Toshihiro Masuda<sup>3</sup>, Rei Watanabe<sup>4,5</sup>, Manabu Fujimoto<sup>4</sup>

<sup>1</sup>Drug Development Research Laboratories, Maruho Co., Ltd., Kyoto, <sup>2</sup>Strategic research planning & management Dept., Maruho Co., Ltd., Kyoto, <sup>3</sup>Translational Research Dept., Maruho Co., Ltd., Kyoto, <sup>4</sup>Department of Dermatology, Osaka University, Osaka, <sup>5</sup>Department of Dermatology, Juntendo University, Tokyo

# P01-07 TRPV4 promotes cutaneous wound healing by regulating keratinocytes and fibroblasts migration and collagen [C04-05] production in fibroblasts in mice

O Bayarmaa Taivanbat, Sahori Yamazaki, Akihiko Uchiyama, Syahla Nisaa Amalia, Yuta Inoue, Mai Ishikawa, Keiji Kosaka, Yoko Yokoyama, Sachiko Ogino, Ryoko Torii, Sei-ichiro Motegi

The Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi

### P01-08 Transic atopic

### Transient Receptor Potential Vanilloid 4 (TRPV4) regulates type 2 inflammation and pruritus in MC903-induced atopic dermatitis mouse model

O Keiji Kosaka, Akihiko Uchiyama, Syahla Nisaa Amalia, Yuta Inoue, Mai Ishikawa, Yoko Yokoyama, Sachiko Ogino, Yuki Watanuki, Ryoko Torii, Sei-ichiro Motegi

The Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi

#### P01-09 [O01-02]

### Modulation of psoriatic inflammation through autophagy activation: the role of keratinocyte-specific Rubicon inhibition in a murine model

O Yoichiro Urata<sup>1</sup>, Toshiya Miyake<sup>1</sup>, Satoshi Nakamizo<sup>1</sup>, Rintaro Shibuya<sup>1</sup>, Tamotsu Yoshimori<sup>2</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, <sup>2</sup>Health Promotion System Science, Graduate School of Medicine, Osaka University, Suita

#### P01-10 [O01-03]

#### Atopic dermatitis from the perspective of B cell function

O Akitaka Hata, Toshiaki Kogame, Takayoshi Komatsu-Fujii, Hiroaki Takishima, Kenji Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

#### P01-11 [O01-04]

#### Cell Death Mediated by Intracellular Free Iron Enhances Efficacy of Tumor Immunotherapy with TCR-T cells

O Daisuke Ehara<sup>1,2</sup>, Kiyoshi Yasui<sup>2</sup>, Mitsuhiro Yoneda<sup>2</sup>, Sachiko Okamoto<sup>3</sup>, Yasunori Amaishi<sup>3</sup>, Daisuke Muraoka<sup>4</sup>, Hiroaki Ikeda<sup>2</sup>, Hiroyuki Murota<sup>1</sup>

<sup>1</sup>Department of Dermatology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, <sup>2</sup>Department of Oncology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, <sup>3</sup>Tech. Development Ctr, Takara Bio Inc., Kusatsu, <sup>4</sup>Aichi Cancer Ctr. Res. Inst., Div. of Translational Oncoimmunology, Nagoya

#### P01-12 [O01-05]

#### Spatial transcriptomic analysis of epidermal keratinocytes of the fistula lesions in hidradenitis suppurativa

O Ken-Ichi Hasui¹, Yoshio Kawakami¹, Yoshihiro Matsuda¹, Yohei Yasutomi¹, Himino Ashida¹, Shuta Tomida², Shin Morizane¹

<sup>1</sup>Department of Dermatology, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama University, Okayama, <sup>2</sup>Department of Biobank, Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama University, Okayama

#### P01-13 [O01-06]

### CXCR6 regulates localization of CD8\* tissue-resident memory T cells to the epidermis in a murine contact hypersensitivity

O Takahide Iioka<sup>1</sup>, Ryota Asahina<sup>1,2</sup>, Toshiya Miyake<sup>1</sup>, Fuuka Minami<sup>1</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu

#### P01-14 [O01-07]

#### Psychological stress enhances itch behavior in atopic dermatitis by increasing sensitivity of sensory nerves

O Kei Nagao¹², Soichiro Yoshikawa¹, Ryota Hashimoto³, Toshiro Takai⁴, Sumika Toyama¹, Mitsutoshi Tominaga¹, Kenji Takamori¹⁵¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, ²Department of Cellular Physiology Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, ³Laboratory of Cell Biology, Biomedical Research Core Facilities, Juntendo University Graduate School of Medicine, Tokyo, ⁴Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, ⁵Department of Dermatology, Juntendo University Urayasu Hospital, Chiba

#### P01-15 [O01-08]

#### Prevention of atopic dermatitis by skin and intestinal tract microbiota using DOHaD model

○ Yukihiko Kato¹, Chiho Yanai¹, Ryo Muko², Yosuke Amagai², Yoshihiro Umebayashi¹, Rina Kurokawa³, Wataru Suda³, Hiroshi Matsuda², Akane Tanaka²

<sup>1</sup>Tokyo Medical University Hachioji Medical Center, Tokyo, <sup>2</sup>Tokyo University of Agriculture and Technology, Tokyo, <sup>3</sup>RIKEN Center for Integrative Medical Sciences, Yokohama

#### P01-16

#### Gene expression analysis of reactive lymphoid follicle-like structures in the skin of Kimura's disease

[O01-09]

 $\circ$  Toshiaki Kogame, Takayoshi Komatsu-Fujii, Hiroaki Takishima, Akitaka Hata, Kenji Kabashima Department of Dermatology, Kyoto University, Kyoto

P01-17 [O01-10]

#### Cold exposure and its impact on local skin immune responses in murine models of contact hypersensitivity

O Tomoya Takegami<sup>1</sup>, Satoru Yonekura<sup>1</sup>, Saeko Nakajima<sup>1,2</sup>, Shuto Kanameishi<sup>1</sup>, Koki Kataoka<sup>1</sup>, Kenji Kabashima<sup>1,3,4</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Department of Drug Discovery for Inflammatory Skin Diseases, Kyoto University Graduate School of Medicine, Kyoto, <sup>3</sup>A\*STAR Skin Research Labs (A\*SRL), Agency for Science, Technology and Research (A\*STAR), Singapore, <sup>4</sup>Singapore Immunology Network (SIgN), Agency for Science, Technology and Research (A\*STAR), Singapore

#### P01-18 Persistent anti-inflammatory effects of voluntary exercise in a mouse model of atopic dermatitis

[O01-11]

Wanchen Zhao¹, Ge Peng¹, Alafate Abudouwanli¹, Arisa Ikeda¹², Quan Sun¹, Mengyao Yang¹³, Shan Wang¹⁴, Hideoki Ogawa¹,
 Ko Okumura¹, François Niyonsaba¹⁵

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, <sup>3</sup>Department of Dermatology, the First Affiliated Hospital of China Medical University, Liaoning, <sup>4</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, Beijing, <sup>5</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

#### P01-19 Regulatory function of B cells in contact hypersensitivity re-stimulation

[O01-12]

O Yutaka Matsumura<sup>1</sup>, Hanako Koguchi-Yoshioka<sup>1</sup>, Rei Watanabe<sup>2</sup>, Manabu Fujimoto<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Osaka University, Suita, <sup>2</sup>The Department of Dermatology, Juntendo University, Tokyo

#### P01-20 Topographical and chronological maturation of the skin immune barrier

 Zsolt Dajnoki, Aniko Kapitany, Lilla Soltesz, Viktoria Nagy, Krisztian Gaspar, Andrea Szegedi Department of Dermatology, Faculty of Medicine, University of Debrecen, Debrecen

#### P01-21 An investigation into Immune Cell Reactivity upon wounding

[O01-13]

Aashal B Shah

Department of Pharmacology, GMERS Medical College and Civil Hospital, Valsad, Gujarat

#### P01-22 Allergic contact dermatitis activate hair follicle stem cells through macrophages

O Sabrina Mai-Yi Fan<sup>1,2,3</sup>, Kai-Rong Huang<sup>1,2</sup>, Kang-Yu Tai<sup>5</sup>, Yu-Qian Chen<sup>2</sup>, Yi-Shin Chou<sup>2</sup>, Sung-Jan Lin<sup>1,2,3,4,5</sup>

<sup>1</sup>Research Center for Cell Therapy, Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>2</sup>Department of Biomedical Engineering, National Taiwan University, Taipei, <sup>3</sup>Research Center for Developmental Biology and Regenerative Medicine, National Taiwan University, Taipei, <sup>4</sup>Department of Dermatology, National Taiwan University Hospital and College of Medicine, Taipei, <sup>5</sup>Genome and Systems Biology Degree Program, National Taiwan University and Academia Sinica, Taipei

### P01-23 A neuronal subset in the spinal dorsal horn responsible for itch transmission in mouse models of allergic contact dermatitis and psoriasis

O Miho Shiratori-Hayashi<sup>12</sup>, Yuto Shiraishi<sup>3</sup>, Kensho Kanehisa<sup>3</sup>, Konatsu Asai<sup>3</sup>, Yukari Ibusuki<sup>3</sup>, Kounosuke Yamakawa<sup>3</sup>, Mitsutoshi Tominaga<sup>1</sup>, Yoshitoshi Kasuya<sup>2,4</sup>, Kenji Takamori<sup>1</sup>, Makoto Tsuda<sup>3</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Molecular and Systems Pharmacology, Faculty of Pharmacy, Juntendo University, Urayasu, <sup>3</sup>Department of Molecular and Systems Pharmacology, Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, <sup>4</sup>Department of Respirology, Faculty of Medicine, Chiba University, Chiba

### Category 2 (PO2): Auto-Immunity

#### P02-01 Deciphering the immune mechanism of autoreactive B cells in Pemphigus Vulgaris

[III-3]

 $\circ$  Baptiste Janela<sup>1</sup>, Gerome Bohelay<sup>2,3</sup>, Gokce Oguz<sup>4</sup>, Vipin Narang<sup>5</sup>, Bernett Lee<sup>1</sup>, Adaikalavan Ramasamy<sup>4</sup>, Anne Marie Cardine<sup>6</sup>, Vivien Hebert<sup>7</sup>, Florent Ginhoux<sup>5</sup>, Evan Newell<sup>5</sup>, Pascal Joly<sup>7</sup>, Frederic Caux<sup>2,3</sup>, Philippe Musette<sup>2,3</sup>

<sup>1</sup>Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore, <sup>2</sup>Department of Dermatology and Referral Centre for Autoimmune Bullous Diseases, Avicenne Hospital, Paris, <sup>3</sup>Inserm UMR 1125, University Sorbonne, Paris, <sup>4</sup>Genome Institute of Singapore, Singapore, <sup>5</sup>Singapore Immunology Network, Singapore, <sup>6</sup>INSERM UMRS 976, Paris, <sup>7</sup>Inserm U1234, CHU Rouen, Rouen

# P02-02 Non-human reads in human WGS identify endogenous HHV-6B and blood anellovirus virome associated with [I-2] autoimmune diseases and COVID-19 risk

O Yukinori Okada¹, Sasa Noah¹³, Shohei Kojima², Rie Koide², Rei Watanabe¹⁴, Yuumi Nakamura¹, Shinichi Imafuku⁵, Yayoi Tada⁶, Shinichi Sato³, Masatoshi Jinnin², Tatsuyoshi Kawamura®, Shinji Shimada®, Shigetoshi Sano®, Manabu Fujimoto¹, Akimichi Morita¹⁰

<sup>1</sup>Osaka University, Suita, <sup>2</sup>RIKEN Center for Integrative Medical Sciences, Tokyo, <sup>3</sup>The University of Tokyo, <sup>5</sup>Juntendo University, Tokyo, <sup>5</sup>Fukuoka University, Fukuoka, <sup>6</sup>Teikyo University, Tokyo, <sup>5</sup>Wakayama Medical University, Wakayama, <sup>8</sup>University of Yamanashi, Yamanashi, <sup>9</sup>Kochi University, Kochi, <sup>10</sup>Nagoya City University, Nagoya

#### P02-03 Dermal adipogenesis protects against psoriatic skin inflammation

[C05-01]

 $\circ$  Wenlu Zhang, Tian Xia, Rundong Wu, Xiao Hu, Rongshuang Xia, Ling-juan Zhang

State Key Laboratory of Cellular Stress Biology, School of Pharmaceutical Sciences, Xiamen University, Xiamen

# P02-04 Mathematical dermatology based on visual skin eruption linked to pathophysiological states in chronic spontaneous urticaria

O Sungrim Seirin-Lee<sup>1,2</sup>, Yuhki Yanase<sup>3</sup>, Daiki Matsubara<sup>4</sup>, Takahiro Hiraga<sup>1</sup>, Hiroshi Ishii<sup>3</sup>, Ryo Saito<sup>3</sup>, Shunsuke Takahagi<sup>3,6</sup>, Michihiro Hide<sup>3,7</sup>

<sup>1</sup>Kyoto University Institute for Advanced Study, Kyoto University, Kyoto, <sup>2</sup>Graduate School of Medicine, Kyoto University, Kyoto, <sup>3</sup>Department of Pharmacotherapy, Hiroshima University, Hiroshima, <sup>4</sup>Department of Dermatology, Hiroshima University, Hiroshima, <sup>5</sup>RIES, Hokkaido University, Sapporo, <sup>6</sup>Department of Dermatology, JA Hiroshima General Hospital, Hiroshima, <sup>7</sup>Department of Dermatology, Hiroshima City Hiroshima Citizens Hospital, Hiroshima

#### P02-05 Immunological skew in thymoma-associated multi-organ autoimmunity

[C05-03]

 Manao Kinoshita, Youichi Ogawa, Takuya Sato, Shinji Shimada, Tatsuyoshi Kawamura Department of Dermatology, University of Yamanashi, Yamanashi

#### P02-06 Granzyme K Contributes to PAR-2 Mediated Itch Pathway of Imiquimod-Induced Psoriasis Model

[C05-04]

Aoi Hiroyasu<sup>1</sup>, Beni Amatya<sup>1</sup>, Daisuke Tsuruta<sup>1</sup>, David J. Granville<sup>2,3,4,5</sup>, O Sho Hiroyasu<sup>1,2,3,4</sup>

<sup>1</sup>The Department of Dermatology, Osaka Metropolitan University, Osaka, <sup>2</sup>International Collaboration on Repair Discoveries (ICORD) Centre, Vancouver, <sup>3</sup>Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, <sup>4</sup>British Columbia Professional Firefighters' Burn and Wound Healing Group, Vancouver Coastal Health Research Institute, Vancouver, <sup>5</sup>Centre for Heart Lung Innovation, Providence Research, University of British Columbia, Vancouver

#### P02-07 The Role of TLR7 and TLR9 in the Pathogenesis of Systemic Sclerosis

[C05-05]

O Chenyang Wang

The department of Dermatology, Kanazawa university, Kanazawa

#### P02-08 Immune Shift to Enhanced Cytotoxicity of Peripheral NKG2D+ CD8 T Cells in Active Alopecia Areata

[C05-06]

O Doyoung Kim, Kyung Bae Chung, Ji-Hye Hwang, Eun Hye Kim

Department of Dermatology, Yonsei University College of Medicine, Seoul

### P02-09 The selective S1P1 receptor modulator Cenerimod ameliorates murine IMQ induced psoriasis-like skin [C05-07] inflammation model

O Xibei Jia, Yasuhito Hamaguchi, Takashi Matsushita

Department of Dermatology, Faculty of Medicine, Institute of Medical Pharmaceutical and Health Science, Kanazawa University, Kanazawa

#### P02-10 A potential contribution of \$100A11 to skin fibrosis and pulmonary involvement in systemic sclerosis

[C08-01]

O Takuya Takahashi¹, Takehiro Takahashi¹, Tetsuya Ikawa¹, Hitoshi Terui¹, Toshiya Takahashi¹, Yuichiro Segawa¹, Hayakazu Sumida², Ayumi Yoshizaki²³, Shinichi Sato², Yoshihide Asano¹

<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>2</sup>Department of Dermatology, The University of Tokyo Graduate School of Medicine, Tokyo, <sup>3</sup>Department of Clinical Cannabinoid Research, University of Tokyo Graduate School of Medicine. Tokyo

#### P02-11 Anti-Survival Motor Neuron (SMN) Complex Antibodies as Biomarkers for MCTD-associated ILD and PAH

[O01-15]

○ Haruka Koizumi, Yoshinao Muro, Satoshi Kamiya, Norika Akashi, Yuta Yamashita, Mariko Momohara, Takuya Takeichi, Masashi Akiyama

The Department of Dermatology, Nagoya University, Nagoya

#### P02-12 Circulating extracellular vesicles reflect clinical phenotypes of anti-centromere antibody-positive patients

[O01-16]

O Mariko Ogawa-Momohara¹, Yoshinao Muro¹, Kentaro Taki², Yoshihisa Nakano³, Takashi Yokoyama¹, Takuya Takeichi¹,
 Masashi Akiyama¹

<sup>1</sup>The Department of Dermatology, Nagoya University, Nagoya, <sup>2</sup>Division for Medical Research Engineering, Nagoya University, Nagoya, <sup>3</sup>Public Health and Health Systems, Nagoya University, Nagoya

#### P02-13 IgM autoantibody against the basement membrane zone spontaneously generated in mice

[O01-17]

Chihiro Shiiya¹, Ken Muramatsu¹, Norihiro Yoshimoto¹, Sho Katayama¹, Takuya Kawamura¹, Shoko Mai¹, Yosuke Mai¹,
 Hiroyuki Kitahata², Yoichiro Fujioka³, Ken Natsuga¹, Hiroaki Iwata¹⁴, Kentaro Izumi¹, Hideyuki Ujiie¹

<sup>1</sup>The Department of Dermatology, Hokkaido University, Sapporo, <sup>2</sup>Department of Physics, Graduate School of Science, Chiba University, Chiba, <sup>3</sup>Department of Cell Physiology, Faculty of Medicine, Hokkaido University, Sapporo, <sup>4</sup>Department of Dermatology, Graduate School of Medicine, Gifu University, Gifu

#### P02-14 Potential Explanation for High Sensitivity of C3 in Direct Immunofluorescence for Bullous Pemphigoid

[O01-18]

 $^{\circ}$  Dongjun Im, Kayoko Tanaka, Hiroaki Iwata

Department of Dermatology, Gifu university, Gifu

# P02-15 Increased Levels of Common $\gamma$ -Chain Correlate with Disease Severity in Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis

O Ayane Sakamoto, Yuko Watanabe, Izumi Moteki, Noriko Ikeda, Yukie Yamaguchi Department of Environmental Immuno-Dermatology, Yokohama City University, Yokohama

#### P02-16 Thrombospondin-1 Deficient Exacerbates the Pathogenesis of Imiquimod-Induced Psoriasis

○ Chieh-Shan Wu¹, Wen-Ho Chuo², Chi-Chien Lin³

<sup>1</sup>Department of Dermatology, Pingtung Veterans General Hospital, Pingtung, <sup>2</sup>Department of Pharmacy, Tajen University, Pingtung, <sup>3</sup>Institute of Biomedical Science and Rong Hsing Research Center for Translational Medicine, National Chung-Hsing University, Taichung

#### P02-17 Role of MZB1 positive cells in the lesions of alopecia areata

[O01-20]

O Takayoshi Komatsu-Fujii, Toshiaki Kogame, Keigo Takase, Akitaka Hata, Kenji Kabashima Department of Dermatology, Kyoto University, Kyoto

#### P02-18 Mitochonic acid-5 ameliorates fibrosis and vasculopathy in a mouse model of systemic sclerosis

[O01-21]

O Yuichiro Segawa¹, Takehiro Takahashi¹, Takehiro Suzuki², Chitose Suzuki², Takaaki Abe², Yoshihide Asano¹

<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>2</sup>Department of Nephrology, Endocrinology and Vascular Medicine, Tohoku University Graduate School of Medicine, Sendai

# P02-19 Atractylodin reduced the lesion severity of IMQ-induce psoriasis-like mice through inhibiting the NF-kappa B pathways

○ Wen-Ho Chuo¹, Chieh-Shan Wu², Chi-Chien Lin³

<sup>1</sup>Department of Pharmacy, Tajen University, Pingtung, <sup>2</sup>Department of Dermatology, Pingtung Veterans General Hospital, Pingtung, <sup>3</sup>Institute of Biomedical Science and Rong Hsing Research Center for Translational Medicine, National Chung-Hsing University, Taichung

### P02-20 Fibroblast focused single cell transcriptome analysis of the lung in bleomycin-induced systemic sclerosis mouse model

O Aya Maekawa¹, Sho Yamazaki³, Yuya Ouchi³, Tomomi Kitayama³, Takashi Shimbo⁴, Ikuko Ueda¹, Manabu Fujimoto¹, Katsuto Tamai²¹Department of Dermatology, Integrated Medicine, Graduate School of Medicine, Osaka University, Suita, ²Department of Stem Cell Therapy Science, Graduate School of Medicine, Osaka University, Suita, ³StemRIM Inc, Ibaraki, ⁴Division of Gene Therapy Science, Graduate School of Medicine, Osaka University, Suita

### P02-21 The anti-IgE autoantibodies are biomarkers of early omalizumab response in patients with chronic spontaneous urticaria

O Yusuke Niwa<sup>1,2</sup>, Koremasa Hayama<sup>1,2</sup>, Shota Toyoshima<sup>3</sup>, Keisuke Shimizu<sup>1,2</sup>, Maho Tagui<sup>1,2</sup>, Mana Ito<sup>1,2</sup>, Tomomi Sakamoto<sup>2</sup>, Tadashi Terui<sup>1,2</sup>, Hideki Fujita<sup>1,2</sup>, Yoshimichi Okayama<sup>2,4,5,6,7</sup>

<sup>1</sup>Division of Cutaneous Science, Department of Dermatology, Nihon University School of Medicine, Tokyo, <sup>2</sup>Center for Allergy, Nihon University School of Medicine, Tokyo, <sup>3</sup>Department of Biochemistry & Molecular Biology, Nippon Medical School, Tokyo, <sup>4</sup>Department of Allergy, Internal Medicine, Misato Kenwa Hospital, Misato, <sup>5</sup>Department of Medicine, Division of Respiratory Medicine, Nihon University School of Medicine, Tokyo, <sup>6</sup>Department of Internal Medicine, Division of Respiratory Medicine and Allergology, Showa University School of Medicine, Tokyo, <sup>7</sup>Advanced Medical Science Research Center, Gunma Paz University, Graduate School of Health Sciences, Takasaki

#### P02-22 Establishing minimal clinically important differences (MCIDs) for the pemphigus disease area index (PDAI)

[O01-24] O Henry Tseng<sup>1,2</sup>, Corey Stone<sup>1,2</sup>, Boaz Shulruf<sup>2</sup>, Dedee F. Murrell<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, St George Hospital, Sydney, <sup>2</sup>Faculty of Medicine, University of New South Wales, Sydney

# P02-23 Validation and utility of commercial envoplakin ELISA kits in detection of autoantibodies in paraneoplastic pemphigus

O Norito Ishii<sup>1,2</sup>, Hiroshi Koga<sup>1,2</sup>, Kwesi Teye<sup>1,2</sup>, Masahiro Tsutsumi<sup>1,2</sup>, Takekuni Nakama<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, Kurume University School of Medicine, Kurume, <sup>2</sup>Kurume University Institute of Cutaneous Cell Biology, Kurume

# P02-24 Correlation of BP180, BP230, and type VII collagen antibody titers in serum, blister fluid, erosion, and saliva in pemphigoid diseases

O Hiroshi Koga¹, Norito Ishii¹, Masahiro Tsutsumi¹, Kwesi Teye², Mieko Kosaka³, Takekuni Nakama¹

<sup>1</sup>Department of Dermatology, Kurume University School of Medicine, Kurume, <sup>2</sup>Kurume University Institute of Cutaneous Cell Biology, Kurume, <sup>3</sup>Maruho Co., Ltd., Osaka

### P02-25 Basophil Histamine Release Assay in Chronic Spontaneous Urticaria: Clinical and Laboratory Insights from a Vietnamese Population

○ My Nguyen Thi Tra¹², Minh Vu Nguyet²³, Katrine Baumann⁴, My Le Huyen³, Per Stahl Skov⁴, Doanh Le Huu²³

<sup>1</sup>Hue University of Medicine and Pharmacy, Hue, <sup>2</sup>Hanoi Medical University, Hanoi, <sup>3</sup>Vietnam National Dermatology and Venereology Hospital, Hanoi, <sup>4</sup>Reblab, Copenhagen

#### P02-26 A new murine model of human eosinophilic fasciitis: role IL-17

[O04-02] O Takashi Ito, Toshiyuki Yamamoto

Fukushima Medical University, The Department of Dermatology, Fukushima

#### P02-27 IL-36 signaling and its role in systemic inflammatory skin diseases

O Ayaka Ichikawa, Keiichi Yamanaka

Department of Dermatology, Mie University Graduate School of Medicine, Mie

#### P02-28 The role of RANKL in osteoporosis of IMQ-induced psoriasis mouse model

[O04-03] O Natsuko Saito-Sasaki, Yu Sawada

The Department of Dermatology, University of Occupational and Environmental health, Kitakyusyu

#### P02-29 Siblings with neonatal lupus erythematosus

[O04-04] • Pengyue Tang

[I-1]

The Department of Dermatology, Shenzhen children's hospital, Shenzhen

### Category 3 (PO3): Carcinogenesis and Cancer

#### P03-01 The interaction between CD155 and TIGIT promotes tumor proliferation in cutaneous T-cell lymphoma

Ryoma Honda¹, Naomi Takahashi-Shishido², Tomomitsu Miyagaki²-³, Hikari Boki², Shinichi Sato², Makoto Sugaya¹
¹The Department of Dermatology, International University of Health and Welfare, Narita, ²The Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, ³Department of Dermatology, St. Marianna University School of Medicine, Kawasaki

### P03-02 Spatial proteomic cell-cell correlation analysis reveals optimal tumor microenvironment for immunotherapy in Merkel cell carcinoma

O Motoki Nakamura<sup>1</sup>, Dai Ogata<sup>2</sup>, Junji Kato<sup>3</sup>, Maki Yoshimitsu<sup>1</sup>, Tetsuya Magara<sup>1</sup>, Hiroto Watanabe<sup>1</sup>, Shinji Kano<sup>1</sup>, Reiko Nakamura<sup>1</sup>, Hiroshi Kato<sup>1</sup>, Akimichi Morita<sup>1</sup>

<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, <sup>2</sup>Department of Dermatologic Oncology, National Cancer Center Hospital, Tokyo, <sup>3</sup>Department of Dermatology, Sapporo Medical University School of Medicine, Sapporo

#### P03-03 Genetic intratumor heterogeneity and clonal evolution in extramammary Paget's disease

[C10-03]

O Kenichiro Tanaka¹, Ikko Kajihara², Kazuro Shimokawa³, Naotoshi Nakamura³, Yudo Kusaba², Ryoko Sakamoto², Saki Maeda-Otsuka², Saori Yamada-Kanazawa², Soichiro Sawamura², Hisashi Kanemaru², Katsunari Makino², Jun Aoi², Shinichi Masuguchi², Takashi Suzuki³, Satoshi Fukushima²

<sup>1</sup>The Department of Dermatology, Kumamoto Shinto General Hospital, Kumamoto, <sup>2</sup>The Department of Dermatology, Kumamoto University, Kumamoto, <sup>3</sup>Osaka University, Center for Mathematical Modeling and Data Science, Osaka

### P03-04

#### Ahed, a spliceosomal protein, has crucial roles in proliferation of normal keratinocytes and tumor cells

[C10-04] O Mikiro Takaishi, Kozo Nakai, Shigetoshi Sano

Department of Dermatology, Kochi Medical School, Kochi University, Nankoku

#### P03-05

#### Insights into T cell clonality of Mycosis Fungoides via T Cell Receptor Repertoire Analysis

[C10-05]

O Takashi Sakaida, Yoshifumi Kanayama, Mai Sakurai, Yuki Enomoto, Aya Yamamoto, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

#### P03-06 [C10-06]

#### Novel detection and clinical utility of serum-derived extracellular vesicle in angiosarcoma

O Jing Wang¹, Kazunori Yokoi¹, Yusuke Yoshioka², Rei Watanabe³, Yasuhiro Fujisawa⁴, Takahiro Ochiya², Atsushi Tanemura¹, Manabu Fujimoto¹

<sup>1</sup>Department of Dermatology, Osaka University Graduate School of Medicine, Suita, <sup>2</sup>Department of Molecular and Cellular Medicine, Institute of Medical Science, Tokyo Medical University, Tokyo, <sup>3</sup>Department of Dermatology, Juntendo University School of Medicine, Tokyo, <sup>4</sup>Department of Dermatology, University of Tsukuba, Tsukuba

#### P03-07

#### Targeting NEDD8-mediated neddylation: a new approach to improve melanoma treatment

[C06-06]

○ Leon Tsung-Ju Lee<sup>1,2,3</sup>, Yuan-Feng Lin<sup>1,4</sup>

<sup>1</sup>Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, <sup>2</sup>Department of Dermatology, School of Medicine, Taipei Medical University, Taipei, <sup>3</sup>Department of Dermatology, Taipei Medical University Hospital, Taipei, <sup>4</sup>Cell Physiology and Molecular Image Research Center, Wan Fang Hospital, Taipei Medical University, Taipei

#### P03-08

#### Rapid identification of cutaneous squamous cell carcinoma using paper spray ionization mass spectrometry

O Yi-Hua Liao<sup>1</sup>, Laura Min Xuan Chai<sup>2</sup>, Yu-Hsuan Chen<sup>2</sup>, Cheng-Chih Hsu<sup>2</sup>

<sup>1</sup>Department of Dermatology, College of Medicine, National Taiwan University, Taipei, <sup>2</sup>Department of Chemistry, National Taiwan University, Taipei

Basophils drive tumor progression and metastasis through Th2-polarization with IL-4 in primary cutaneous

### P03-09

#### melanoma

[O04-05] melanom

O Aki Tajima¹, Naotomo Kambe², Izumi Kishimoto¹, Noriko Kume¹, Fumikazu Yamazaki³, Hideaki Tanizaki¹

<sup>1</sup>Department of Dermatology, Kansai Medical University, Hirakata, <sup>2</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>3</sup>Department of Dermatology, Tokai University, Isehara

#### P03-10 [O04-06]

### Tertiary lymphoid structures inhibit invasive progression and provide a better prognosis in advanced extramammary Paget's disease

O Tetsuya Magara, Motoki Nakamura, Maki Yoshimitsu, Shinji Kano, Hiroshi Kato, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

#### P03-11

### Single-Cell RNA Sequencing Reveals Cellular Heterogeneity and Pathogenesis in Actinic Keratosis and Squamous Cell Carcinoma

○ Young Bok Lee<sup>1</sup>, Seung-Pyo Hong<sup>2,3</sup>, Dong Soo Yu<sup>1</sup>, Jong-Il Kim<sup>2,3</sup>

<sup>1</sup>Department of dermatology, College of medicine, The Catholic University of Korea, Uijeongbu, <sup>2</sup>Department of Biomedical Sciences, Seoul National University College of Medicine, Seoul, <sup>3</sup>Genomic Medicine Institute, Medical Research Center, Seoul National University. Seoul

#### P03-12 [O04-07]

### High-glucose environment altered keratinocyte response to UVB irradiation: insights on photocarcinogenic resistance of diabetic skin

○ Yang-Yi Chen<sup>1,2</sup>, Shu-Mei Huang³, Cheng-Che E. Lan<sup>2,3</sup>

<sup>1</sup>Graduate Institute of Clinical Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung City, <sup>2</sup>Department of Dermatology, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung City, <sup>3</sup>Department of Dermatology, College of Medicine, Kaohsiung Medical University, Kaohsiung City

#### P03-13 [O04-08]

#### Spatial Assessment of Ki67 to Stratify for MITF Phenotypes in Primary and Metastatic Melanoma

O Jordan D. Kumar<sup>1</sup>, Satoru Sugihara<sup>1</sup>, Sachit Seth<sup>2</sup>, Gency Gunasingh<sup>1</sup>, Loredana Spoerri<sup>1</sup>, Cassandra Rowe<sup>1</sup>, Helmut Schaider<sup>1</sup>, Kiarash Khosrotehrani<sup>1</sup>, Rupert Ecker<sup>2</sup>, Nikolas K. Haass<sup>1</sup>

<sup>1</sup>Frazer Institute, University of Queensland, Brisbane, <sup>2</sup>TissueGnostics, Vienna

#### P03-14 The dual function of antimicrobial peptides in melanoma: Perspectives from experimental and clinical research

[O04-09] Quan Sun¹, Ge Peng¹, Wanchen Zhao¹, Alafate Abudouwanli¹, Mengyao Yang¹², Shan Wang¹³, Hideoki Ogawa¹, Ko Okumura¹, François Niyonsaba¹³

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, The First Hospital of China Medical University, Shenyang, <sup>3</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, <sup>4</sup>Faculty of International Liberal Arts, Tokyo

### P03-15 Body Composition, Clinical Characteristics, and Treatment Modalities as Prognostic Factors in Cutaneous [O04-10] Angiosarcoma

O Satoru Yonekura, Yuichiro Endo, Saeko Nakajima, Kenji Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

#### P03-16 Comprehensive analysis of the chemokine/cytokine profiles in advanced mycosis fungoides

[O04-11]

O Manami Takahashi-Watanabe, Taku Fujimura, Emi Yamazaki, Ryo Amagai, Yumi Kambayashi, Mayuko Amagai, Toshiya Takahashi, Yoshihide Asano

The Department of Dermatology, University of Tohoku, Sendai

#### P03-17 Prognostic Significance of STING Expression in Extramammary Paget's Disease

[O04-12]

O Yoko Amagata, Natsuko Sasaki, Yu Sawada

Department of Dermatology, University of Occupational and Environmental Health, Kitakyushu

### P03-18 Upregulated expression of glucose transporter isoform 1 in invasive and metastatic extramammary Paget's disease

○ Daiki Rokunohe¹, Mika Matsumoto¹, Takanori Sasaki², Yasushi Matsuzaki¹, Hajime Nakano¹, Hiroki Mizukami², Daisuke Sawamura¹, Ejiiro Akasaka¹

<sup>1</sup>Department of Dermatology, Hirosaki University, Hirosaki, <sup>2</sup>Department of Pathology and Molecular Medicine, Hirosaki University, Hirosaki

#### P03-19 The accuracy of Giemsa, and methylene blue stains in Mohs surgery for basal cell carcinoma: A pilot study

[O04-13]

O Phanitchanat Phusuphitchayanan<sup>1</sup>, Apasee Sooksamran<sup>1</sup>, Poonnawis Sudtikoonaseth<sup>1</sup>, Titaporn Nopmaneepaisarn<sup>2</sup>, Nutpacha Chotikawichean<sup>2</sup>

<sup>1</sup>Institute of Dermatology, Bangkok, <sup>2</sup>Department of Dermatology, Rajavithi Hospital, Bangkok

#### P03-20 TROP2 expression and therapeutic implications in cutaneous squamous cell carcinoma

O Keiko Tanegashima<sup>1</sup>, Yuka Tanaka<sup>1</sup>, Takamichi Ito<sup>1</sup>, Yoshinao Oda<sup>2</sup>, Takeshi Nakahara<sup>1</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, <sup>2</sup>Department of Anatomic Pathology, Graduate School of Medical Sciences, Kyushu University, Fukuoka

# P03-21 Possible Association Between Melanoma from Congenital Nevus and Estrogen or Progesterone Receptor [O04-14] Expression: Clinicopathological Analysis

O Takako Tsukamoto¹, Yohei Iwata¹, Chiho Sumitomo¹,², Kazumitsu Sugiura¹

<sup>1</sup>The Department of Dermatology, Fujita Health University, Toyoake, <sup>2</sup>SUMITOMO SKIN CLINIC, Nagakute

#### P03-22 Pretreatment neutrophil-to-lymphocyte ratio predicts survival in mucosal melanoma

O Yi-Shuan Sheen, Chian-Tzu Huang, Yi-Hua Liao, Chia-Yu Chu

The Department of Dermatology, National Taiwan University Hospital, Taipei

#### P03-23 Functional analysis of Rap2 in tumor associated macrophage

○ Kimiko Takei¹, Masato Umikawa², Yoshito Yamashiro³, Kenzo Takahashi¹

<sup>1</sup>The Department of Dermatology, University of the Ryukyus, Okinawa, <sup>2</sup>The Department of Medical Chemistry, University of the Ryukyus, Okinawa, <sup>3</sup>Department of Advanced Technologies, National Cerebral and Cardiovascular Center, Research Institute, Osaka

#### P03-24 Potential role of ICAM-1 expressed on circulating melanoma cells

O Yukiko Kiniwa, Kenta Nakamura, Asuka Mikoshiba, Ryuhei Okuyama Shinshu University, Matsumoto

### P03-25 Co-existence of oligoclonal and polyclonal HTLV-1-positive T cells successfully treated by ultraviolet B [O04-15] phototherapy and etretinate

O Kosei Nishitani<sup>1</sup>, Satoshi Nakamizo<sup>1</sup>, Takero Shindo<sup>2</sup>, Yo Kaku<sup>1</sup>, Masakazu Fujimoto<sup>3</sup>, Masahiro Hirata<sup>3</sup>, Kai Mizoguchi<sup>3</sup>, Kazuhiro Kawai<sup>4</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kyoto University, Kyoto, <sup>2</sup>Department of Hematology and Oncology, Kyoto University, Kyoto, <sup>3</sup>Department of Diagnostic Pathology, Kyoto University, Kyoto, <sup>4</sup>Department of Dermatology, Kido Hospital, Niigata

# P03-26 A clinicopathological analysis of forkhead box A1 (FOXA1) and estrogen receptor alpha expression in extramammary Paget's disease

O Yuna Yamada¹, Yohei Iwata¹, Chiho Sumitomo¹,², Kazumitsu Sugiura¹

<sup>1</sup>The Department of Dermatology, Fujita Health University, Toyoake, <sup>2</sup>SUMITOMO SKIN CLINIC, Nagakute

#### P03-27 Effectiveness of 5-Fluorouracil in Comparison to Other Treatments in the Reduction of Actinic Keratosis Lesions

[**O04-17**] O Jessica Zhuang<sup>2,3</sup>, Valerie Yii<sup>1</sup>, Bowen Xia<sup>4</sup>, ZF Liu<sup>5,6</sup>, Lawrence Lin<sup>5</sup>, Christopher Chew<sup>5,6,7,8</sup>

<sup>1</sup>Sinclair Dermatology Investigational Research Education and Clinical Trials (DIRECT), Melbourne, <sup>2</sup>Faculty of Medicine, University of Melbourne, Melbourne, <sup>3</sup>Department of Dermatology, Royal Melbourne Hospital, Melbourne, <sup>4</sup>Monash Health, Melbourne, <sup>5</sup>Faculty of Medicine, Monash University, Melbourne, <sup>6</sup>Department of Dermatology, Alfred Health, Melbourne, <sup>5</sup>Victorian Melanoma Service, Alfred Health, Melbourne, <sup>6</sup>Skin Health Institute, Melbourne

#### P03-28 Role of interleukin-13 in the pathogenesis of angiosarcoma

Hinako Saito, Hayakazu Sumida, Okuto Iwasawa, Ayaka Sugimori, Issei Omori, Shinichi Sato
 The Department of Dermatology, University of Tokyo, Tokyo

### Category 4 (PO4): Cell-Cell Interactions in the Skin

### P04-01 Increased LL37 in psoriasis and rosacea promotes the uptake of low-density lipoprotein and development of atherosclerosis

O Yoshiyuki Nakamura<sup>1,3</sup>, Nikhil Kulkarni<sup>1</sup>, Tatsuya Dokoshi<sup>1</sup>, Toshiya Takahashi<sup>1</sup>, Elizabeth Luo<sup>2</sup>, Haleh Alimohamadi<sup>2</sup>, Tomofumi Numata<sup>1</sup>, Gerard Wong<sup>2</sup>, Richard Gallo<sup>1</sup>

<sup>1</sup>The Department of Dermatology, UC San Diego, San Diego, <sup>2</sup>The Department of Bioengineering, UC Los Angeles, Los Angeles, <sup>3</sup>The Department of Dermatology, University of Tsukuba, Tsukuba

### P04-02 Crosstalk Between Adipocyte Lineage Cells and Mast Cells Drives Skin Inflammation and Fibrosis in Atopic [I-3] Dermatitis

O Shujun Heng, Zhuolin Guo, Jie Li, Ling-juan Zhang

The State Key Lab of Cellular Stress Biology, School of Pharmaceutical Sciences, Xiamen University, Xiamen

## P04-03 Single-cell RNA-seq of human dermis reveals age-associated fibroblasts and defines loss of fibroblastic identity as a hallmark of aging skin

O Mika Sawane<sup>1</sup>, Tsukasa Kouno<sup>2</sup>, Yoshinari Ando<sup>2</sup>, Miki Kojima<sup>2</sup>, Makiko Komata<sup>1</sup>, Jay W. Shin<sup>2,3</sup>, Kentaro Kajiya<sup>1</sup> MIRAI Technology Institute, Shiseido Co., Ltd, Yokohama, <sup>2</sup>IMS, RIKEN, Yokohama, <sup>3</sup>Genome Institute of Singapore, A\*STAR, Singapore

#### P04-04 HAS3-Derived Hyaluronic Acid Modulates Immune Responses in Atopic Dermatitis

[C08-03]

O Mayuko Amagai, Takehiro Takahashi, Hitoshi Terui, Toshiki Okazaki, Tomoko Chiba, Saaya Akai, Toshiya Takahashi, Maki Ozawa, Yoshihide Asano

The Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai

#### P04-05 Mucopolysaccharide polysulfate increases local skin blood volume through nitric oxide production

[C08-04]

O Tam Kurachi, Hironobu Ishimaru, Ryo Tadakuma, Akira Koda, Yuhki Ueda, Takaaki Doi

Drug Development Research Laboratories, Kyoto R&D Center, Maruho Co., Ltd., Kyoto

#### P04-06

#### IL-33 and TNF $\alpha$ as causes of purpura formation associated with the severity of DIHS/DRESS

[C08-05]

O Shingo Takei, Ryota Hayashi, Natsumi Hama, Riichiro Abe

Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

#### P04-07 [O04-18]

#### Sensory re-innervation triggers ECM remodelling through the cross-talk with mast cells

○ Moe Tsutsumi¹²²³³4, Marta Silva e Sousa², Sofoklis Koudounas², Onur Egriboz², Wolfgang Funk³, Maximilian Kueckelhaus⁴, Ilaria Piccini², Marta Bertolini², Kentaro Kajiya¹

<sup>1</sup>MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, <sup>2</sup>Monasterium Laboratory Skin & Hair Research Solutions GmbH, Muenster, <sup>3</sup>Schoenheitsklinik Dr Funk, Muenchen, <sup>4</sup>Clinic Fachklinik Hornheide, Muenster

#### P04-08

#### Serum MIF is a disease-specific marker of acquired idiopathic generalized anhidrosis

[O04-19]

O Manon Okamura, Ryota Hayashi, Shingo Takei, Tatsuya Katsumi, Riichiro Abe

Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

#### P04-09 [O04-20]

#### Bead aggregation assays with desmoglein and desmocollin for evaluation of the disease activity in pemphigus

○ Miki Hamanaka¹, Ken Ishii¹.², Mari Urushibata¹, Kenji Yoshida¹, Akira Ishiko¹

<sup>1</sup>The Department of Dermatology, Toho University School of Medicine, Tokyo, <sup>2</sup>The Department of Dermatology, Tokyo Dental College Ichikawa General Hospital, Ichikawa

#### P04-10 Peripheral increase of substance P impairs hippocampal synaptic plasticity and memory

○ Kyeong-No Yoon<sup>2,3,4</sup>, Sun Yong Kim<sup>2,5</sup>, Jin Ho Chung<sup>1,2,3,5,6</sup>, Yong-Seok Lee<sup>2,5,7,8</sup>, Dong Hun Lee<sup>1,3,4,6</sup>

<sup>1</sup>Department of Dermatology, Seoul National University, Seoul, <sup>2</sup>Department of Biomedical Sciences, Seoul National University, Seoul, <sup>3</sup>Laboratory of Cutaneous Aging Research, Seoul National University, Seoul, <sup>4</sup>Institute of Human-Environmental Interface Biology, Seoul National University, Seoul, <sup>5</sup>Department of Physiology, Seoul National University, Seoul, <sup>6</sup>Institute on Aging, Seoul National University, Seoul, <sup>7</sup>Neuroscience Research Institute, Seoul National University, Seoul, <sup>8</sup>Wide River Institute of Immunology, Seoul National University, Seoul

#### P04-11 Functional analysis of miR-4497 contained in extracellular vesicles derived from environmental stimulus-[O04-21] responsive keratinocytes

O Christopher T. Knight, Ayami Iijima, Misato Sugahara, Makiko Goto, Katsuyuki Maeno, Akira Motoyama, Masashi Miyai Shiseido Co., Ltd., MIRAI Technology Institute, Yokohama

#### P04-12 Secreted Phosphoprotein 1-CD44 Deficiency Promotes Melanocyte Senescence Through ROS Production

[O04-22]

 ${}^{\circ}\, Yul \ Hee \ Kim^{\scriptscriptstyle 2}, \ So \ Yeon \ Myeong^{\scriptscriptstyle 1}, \ Yeongeun \ Kim^{\scriptscriptstyle 1}, \ Jin \ Cheol \ Kim^{\scriptscriptstyle 1}, \ Tae \ Jun \ Park^{\scriptscriptstyle 2}, \ Hee \ Young \ Kang^{\scriptscriptstyle 1}$ 

<sup>1</sup>Department of Dermatology, Ajou University School of Medicine, Suwon, <sup>2</sup>Department of Biochemistry and Molecular Biology, Ajou University School of Medicine, Suwon

#### P04-13 Dermal to epidermal communication is altered with aging

O Jean-Baptiste Grieu<sup>1</sup>, Laurie Verzeaux<sup>2</sup>, Clement Nivet<sup>2</sup>, Elodie Aymard<sup>2</sup>, Helene Muchico<sup>2</sup>, Brigitte Closs<sup>2</sup> SILAB North East Asia KK., Tokyo, <sup>2</sup>SILAB, Brive

#### P04-14 Proteases that activate pro-IL-36s in sterile neutrophillic pustular dermatitis

[O04-23]

O Lisa Minai, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura

Department of Dermatology, University of Yamanashi, Chuo

#### P04-15 Transfection of dsDNA induces cell senescence via ATR signaling pathway in human keratinocytes

[O04-24]

O Akihiro Aioi<sup>1</sup>, Tomozumi Imamichi<sup>2</sup>, Jun-ichi Kashiwakura<sup>3</sup>, Emiko Okuda-Ashitaka<sup>4</sup>

<sup>1</sup>Basic Research, Septem-Soken, Osaka, <sup>2</sup>Frederick National Laboratory for Cancer Research, Applied and Developmental Research Directorate, Frederick, <sup>3</sup>Department of Life Science, Faculty of Pharmaceutical Sciences, Hokkaido University of Science, Sapporo, <sup>4</sup>Department of Biomedical Engineering, Osaka Institute of Technology, Osaka

#### P04-16 The interplay of autophagy and oxidative stress in the senescence melanocytes

[O04-25]

O Jin Cheol Kim<sup>1,4</sup>, Yeongeun Kim<sup>1,4</sup>, Sang Hyun Kim<sup>2</sup>, Tae Jun Park<sup>3,4</sup>, Hee Young Kang<sup>1,4</sup>

<sup>1</sup>Department of Dermatology, Ajou University School of Medicine, Suwon, <sup>2</sup>Department of Biomedical Science, The Graduate School, Ajou University, Suwon, <sup>3</sup>Department of Biochemistry and Molecular Biology, Ajou University School of Medicine, Suwon, <sup>4</sup>Inflamm-Aging Translational Research Center, Ajou University School of Medicine, Suwon

#### P04-17 Cellular Synchronization: Key to Optimal Skin Health and Integrity

Nadine Pernodet, Kelly Dong, Earl C. Goyarts
 Estée Lauder Research Laboratories, NY

#### P04-18 Comprehensive characterization of cells with primary cilia in Atopic dermatitis and Psoriasis

O Mikihito Ike<sup>1</sup>, Manami Toriyama<sup>1</sup>, Motoki Nakamura<sup>2</sup>, Akimichi Morita<sup>2</sup>, Fumitaka Fujita<sup>3</sup>

<sup>1</sup>The Department of Pharmaceutical Sciences, University of Osaka, Suita, <sup>2</sup>The Department of Medical school, University of Nagoya City, Nagoya, <sup>3</sup>Mandom Corporation, Osaka

### Category 5 (PO5): Epidermal Structure and Barrier Function

### P05-01 Impact of SASPase Deficiency on Skin Barrier Integrity: Altered Desquamation and Acidification in the Stratum [III-1] Corneum

O Keitaro Fukuda<sup>1,2</sup>, Sawa Okada<sup>1,3</sup>, Yoshihiro Ito<sup>2</sup>, Yuki Furuichi<sup>2</sup>, Takeshi Matsui<sup>4</sup>, Masayuki Amagai<sup>1,2</sup>

<sup>1</sup>Skin Homeostasis, RIKEN-IMS, Yokohama, <sup>2</sup>Dermatology, Keio University School of Medicine, Tokyo, <sup>3</sup>Pharmaceutical Science, Keio University, Tokyo, <sup>4</sup>Evolutionary Cell Biology of the Skin, Tokyo University of Technology, Hachioji

### P05-02 Linking Intracellular Bulk Water Increase to Elevated Calcium Levels During Corneoptosis in Stratum [III-5] Granulosum Cells

O Shota Kawanami<sup>1</sup>, Keiichiro Shiraga<sup>2</sup>, Yuichi Ogawa<sup>2</sup>, Keitaro Fukuda<sup>3,4</sup>, Masayuki Amagai<sup>3,4</sup>, Takeshi Matsui<sup>1,3,4</sup>

<sup>1</sup>Bionics Program, Graduate School of Bionics, Computer and Media Science, Tokyo University of technology, Tokyo, <sup>2</sup>Graduate School of Agriculture, Kyoto University, Kyoto, <sup>3</sup>Center for Integrative Medical Scieces, RIKEN, Yokohama, <sup>4</sup>Depertment of Dermatology, Keio University School of Medicine, Tokyo

#### P05-03 Loricrin and T cell immunity: evidence from photocarcinogenesis

[C11-01]

○ Xinyi Wang¹, Yosuke Ishitsuka¹, Dennis R. Roop²

<sup>1</sup>University of Osaka, Osaka, <sup>2</sup>Department of Dermatology and Charles C. Gates Center for Regenerative Medicine, University of Colorado, Aurora

# P05-04 Three distinct ultrastructural stages of dying epidermal stratum granulosum cells during corneoptosis revealed by high-pressure freezing

○ Takeshi Matsui¹²²³, Ai Hirabayashi⁴, Mayuko Sato⁵, Kiminori Toyooka⁵, Hiroyuki Sasaki⁶, Masayuki Amagai²³

<sup>1</sup>School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, <sup>2</sup>RIKEN Center for Integrative Medical Sciences, Yokohama, <sup>3</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>4</sup>Institute for Life and Medical Sciences, Kyoto University, Kyoto, <sup>5</sup>RIKEN Center for Sustainable Resource Science, Yokohama, <sup>6</sup>Department of Occupational Therapy, School of Rehabilitation, Tokyo Professional University of Health Sciences, Tokyo

#### P05-05 Protective role of catestatin in a mouse model of atopic dermatitis via Notch1/PKC pathway [C01-02]OGe Peng<sup>1,2,3</sup>, Wanchen Zhao<sup>1</sup>, Alafate Abudouwanli<sup>1</sup>, Quan Sun<sup>1</sup>, Mengyao Yang<sup>1,2</sup>, Shan Wang<sup>1,3</sup>, Shigaku Ikeda<sup>1</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>1</sup>, François Niyonsaba<sup>1,4</sup> Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, the First Affiliated Hospital of China Medical University, Shenyang, <sup>3</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, Beijing, <sup>4</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo P05-06 Sweating disturbance negatively affects skin barrier function and increases the risk of food allergy [C01-03]O Hironobu Ishimaru<sup>1,2</sup>, Yasuo Okamoto<sup>1</sup>, Yumi Aoyama<sup>3</sup> Department of Pharmacology, Kawasaki Medical School, Okayama, 2Kyoto R&D Center, Maruho Co., Ltd., Kyoto, 3Department of Dermatology, Kawasaki Medical School, Okayama P05-07 Deep learning-based automatic topographical image assessment of skin barrier dysfunction and a cluster analysis [C01-04] of atopic dermatitis O Kenta Nakamoto<sup>1</sup>, Hironobu Ishimaru<sup>1</sup>, Tatsuki Ohta<sup>2</sup>, Tetsushi Koide<sup>2</sup>, Yumi Aoyama<sup>1</sup> <sup>1</sup>Dermatology, Kawasaki Medical School, Kurashiki, <sup>2</sup>Research Institute for Nanodevices, Hiroshima University, Higashihiroshima P05-08 How an epidermal barrier abnormality develops in diabetes mellitus: the roles of inflammation and ceramide [C01-05] metabolic abnormality Kyong-Oh Shin¹², Hahyn Ann¹, Yerim Choi¹², Karin Goto¹, Eung Ho Choi³, ○Yoshikazu Uchida¹, Kyungho Park¹ <sup>1</sup>Hallym University, Chuncheon, <sup>2</sup>LaSS Inc, Chuncheon, <sup>3</sup>Yonsei University Wonju College of Medicine, Seoul P05-09 Overexpression of acid ceramidase in the epidermis of mice provokes atopic dry skin-like symptoms [C01-06] O Mariko Takada<sup>1</sup>, Miho Sashikawa-Kimura<sup>2</sup>, Hossain Razib<sup>2</sup>, Xiaonan Xie<sup>1</sup>, Mayumi Komine<sup>2</sup>, Mamitaro Ohtsuki<sup>2</sup>, Genji Imokawa<sup>1</sup> <sup>1</sup>Utsunomiya University, Utsunomiya, <sup>2</sup>Jichi Medical University, Shimotsuke P05-10 Novel insights from changes in skin surface lipidomics profile and phenotype in various age groups [C01-07] O Kyung Eun Lee<sup>1</sup>, Kyong-Oh Shin<sup>2</sup>, Hyeyoun Kim<sup>1</sup>, Hee Yeon Cho<sup>1</sup>, Minji Kim<sup>1</sup>, Kyungho Park<sup>3</sup>, Seunghyun Kang<sup>1</sup> <sup>1</sup>COSMAX BTI, Seongnam, <sup>2</sup>LaSS Inc, Chuncheon, <sup>3</sup>Hallym University, Chuncheon P05-11 Importance of integrin $\alpha 6\beta 4$ -plectin interaction in the physical strength of the epithelial sheet structure sustained [C02-05]by keratin network $\circ$ Yoshiaki Hirako, Kou Hashimoto, Ryosuke Asakura Graduated School of Science, Nagoya University, Nagoya P05-12 Skin changes due to changes in enzyme-inhibitor balance induced by atopic dermatitis, aging, and environment [O02-01] in stratum corneum maturation O Masashi Miyai<sup>1</sup>, Akira Motoyama<sup>1</sup>, Junichiro Hiruma<sup>2</sup>, Mami Yamamoto<sup>2</sup>, Ryoji Tsuboi<sup>2</sup>, Toshihiko Hibino<sup>1,2</sup> Shiseido Co., Ltd., MIRAI Technology Institute, Yokohama, 2Department of Dermatology, Tokyo Medical University, Tokyo P05-13 High resolution imaging of intra-dermal distributions of cosmetic ingredients using NanoSIMS [O02-02] Keishi Kihara¹, Akira Motoyama¹, ○ Kazuhiro Matsuda² MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, <sup>2</sup>Surface Science Laboratories, Toray Research Center, Inc., Shiga P05-14 **Loricrin regulates hair follicle regeneration** [O02-03] O Yosuke Ishitsuka, Xinyi Wang, Jun Akome, Manabu Fujimoto Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine, Suita P05-15 GPNMB is related to differentiation and cellular senescence in normal human epidermal keratinocytes [O02-04] O Yukiko Mizutani, Rico Shimada, Kasumi Matsumoto, Miyu Gunji, Mariko Otsu, Shintaro Inoue Department of Cosmetic Health Science, Gifu Pharmaceutical University, Gifu P05-16 Hyperosmotic stress is a cause of dry skin resulting from low humidity [O02-05] O Hitoshi Masaki, Yukiko Izutsu-Matsumoto, Yuri Okano CIEL Co.Ltd., Kanagawa P05-17 Effect of TNF-α, IL-17 and IL-22 on the expression of filaggerin-2 and hornerin: Analysis of a three-dimensional [O02-06] psoriatic skin model O Teruhiko Makino<sup>1</sup>, Megumi Mizawa<sup>1</sup>, Keita Takemoto<sup>1</sup>, Seiji Yamamoto<sup>2</sup>, Tadamichi Shimizu<sup>1</sup> <sup>1</sup>Department of Dermatology, University of Toyama, Toyama, <sup>2</sup>Department of Pathology, University of Toyama, Toyama P05-18 Betacellulin, a member of the EGF family, attenuates atopic dermatitis-like symptoms through EGFR signaling [O02-07] and autophagy activation O Alafate Abudouwanli¹, Ge Peng¹, Wanchen Zhao¹, Arisa Ikeda¹², Quan Sun¹, Mengyao Yang¹³, Shan Wang¹⁴, Ko Okumura¹, Hideoki Ogawa<sup>1</sup>, François Niyonsaba<sup>1,5</sup> Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, <sup>3</sup>Department of Dermatology, The First Affiliated Hospital of China Medical

for Children's Health, Beijing, <sup>5</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

University, Shenyang, Liaoning, <sup>4</sup>Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center

#### P05-19 Loricrin modulates neonatal immunity to prevent atopic march

[O02-08]

O Jun Akome, Yosuke Ishitsuka, Xinyi Wang, Manabu Fujimoto

Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine, Suita

#### P05-20 The impact of exposome on skin barrier integrity and cellular senescence

[C02-06]

○ Eun Jung Lee¹, Jong Ho Park², Hye-Won Na³, Ji Young Kim¹, Seohyun Park¹, Yu Jeong Bae¹, Shinwon Hwang¹, Il Joo Kwon¹, Hyoung-June Kim³, Hae Kwang Lee², Sang Ho Oh¹

<sup>1</sup>The Department of Dermatology, Yonsei University College of Medicine, Seoul, <sup>2</sup>P&K Skin Research Center, Seoul, <sup>3</sup>AMOREPACIFIC Research and Innovation Center, Yongin

#### P05-21 Soothing benefits of Centella asiatica extract

[O02-09]

O Yan Wu<sup>1,2</sup>, Binwei Deng<sup>2</sup>, Jian (Richard) Cao<sup>2</sup>, Nadine Pernodet<sup>3</sup>

<sup>1</sup>Dr. Jart+, Asia Advanced Technology Pioneering, Shanghai, <sup>2</sup>Estée Lauder Companies R&D, Asia Innovation Center, Shanghai, <sup>3</sup>R&D, The Estée Lauder Companies, NY

#### P05-22 Elucidation of the pathogenesis of atopic dermatitis focusing on the IL-33-regulatory T-cell axis

O Sumika Toyama<sup>1</sup>, Soichiro Yoshikawa<sup>1</sup>, Yayoi Kamata<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Chiba

#### P05-23 Immature differentiation of keratinocytes leads to horny thickening by degraded expression of steroid sulfatase

O Masaki Yoshida¹, Yuzuki Ineyama¹, Sora Muraoka¹, Shota Koya¹, Yuka Ishii¹, Rena Yamamoto¹, Hitoshi Masaki², Nobuo Nagai

<sup>1</sup>School of Bioscience and Biotechnology, Tokyo University of Technology, Hachioji, Tokyo, <sup>2</sup>CIEL CO., LTD., Sagamihara, Kanagawa, <sup>3</sup>Nagahama Institute of Bio-science and Technology, Nagahama, Shiga

### P05-24 Fucosylation Deficiency Enhances Imiquimod-induced Psoriasis-Like Skin Inflammation By Promoting CXCL1 Expression

O Youngae Lee, Na Li, Joong Heon Suh, Jang-Hee Oh, Seon-Pil Jin, Dong Hun Lee, Jin Ho Chung Department of Dermatology, Seoul National University College of Medicine, Seoul

#### P05-25 Analyses of genes related to epidermal hyperplasia

[O02-10]

○ Tomohiro Tobita¹, Mitsutoshi Tominaga¹, Kenji Takamori¹²

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo Univ. Graduate school of Medicine, Urayasu, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

#### P05-26 Putative roles of lipoxygenases in antioxidant barrier function of psoriasis and dermatitis

O Hyunjung Kim, Sungwoo Kim, Jihye Maeng, Joomi Yu

Department of Dermatology, Chungnam National University School of Medicine, Chungnam National University Sejong Hospital, Sejong

#### P05-27 Berberine, a Natural Alkaloid, Prevents Skin Aging by Up-Regulating Mitochondrial Ubiquitin Ligase MITOL/ MARCH5

O Takeshi Tokuyama<sup>1</sup>, Shigeru Yanagi<sup>2</sup>

<sup>1</sup>Division of Regenerative Medicine, Jichi Medical University, Shimotsuke, <sup>2</sup>Laboratory of Molecular Biochemistry, Department of Life Science, Faculty of Science, Gakushuin University, Mejiro, Tokyo

#### P05-28 A role of repetin in cornification and barrier formation in human epidermis

○ Megumi Mizawa¹, Teruhiko Makino¹, Keita Takemoto¹, Seiji Yamamoto², Tadamichi Shimizu¹

<sup>1</sup>Department of Dermatology, Faculty of Medicine, Academic Assembly, University of Toyama, Toyama, <sup>2</sup>Department of Pathology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama

#### P05-29 Calcitriol, an active form of vitamin D3, improves dermatitis in NC/Nga mice with atopic dermatitis

○ Yoshie Umehara¹, Ge Peng¹, Ko Okumura¹, Hideoki Ogawa¹, François Niyonsaba¹.²

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

#### P05-30 Optimizing Topical Cannabinoid Dosing in Chronic Plaque Psoriasis: A Machine Learning Approach

O Andi N. A. Ureng<sup>1</sup>, Rifaldy Fajar<sup>2</sup>, Prihantini Prihantini<sup>3</sup>, Sahnaz V. Putri<sup>4</sup>

<sup>1</sup>Department of Pharmacy, Andini Persada College of Health Sciences, Mamuju, <sup>2</sup>Computational Biology and Medicine Laboratory, Yogyakarta State University, Sleman, <sup>3</sup>Machine Learning for BioMedicine Laboratory, Bandung Institute of Technology, Bandung, <sup>4</sup>Health Management Laboratory, International University Semen Indonesia, Gresik

#### P05-31 Effect of heparinoid and phospho-pyridoxal on improving the function of tight junction

O Hiroki Sakamoto<sup>12</sup>, Momoyo Nishikawa<sup>1</sup>, Ryota Asahina<sup>23</sup>, Gyohei Egawa<sup>24</sup>, Seigo Yamada<sup>1</sup>, Yoshiyuki Obayashi<sup>1</sup>, Kenji Kabashima<sup>2</sup> Well-being Research Laboratories, Lion Corporation, Kanagawa, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, <sup>3</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, <sup>4</sup>Department of Dermatology, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

#### P05-32 Efficacy of hyaluronan tetrasaccharides on the synthesis of natural moisturizing factors in keratinocytes

O Harumi Annaka, Madoka Kage, Yutaka Takagi

Josai University, Graduate School of Pharmaceutical Sciences, Sakado

#### P05-33 Characterisation of natural moisturising factors levels in atopic dermatitis patients

O Stephen Wearne<sup>1</sup>, Ruo Yan Ong<sup>1</sup>, Sze Han Lee<sup>1</sup>, James Chan<sup>1,2</sup>, John Common<sup>1</sup>

<sup>1</sup>A\*STAR Skin Research Labs, Agency for Science Technology and Research, Singapore, <sup>2</sup>Singapore Institute of Food and Biotechnology Innovation, Agency for Science Technology and Research, Singapore

#### P05-34 Nonsense variant in CYP4F22 causes loss of the corneocyte lipid envelope in lamellar ichthyosis

#### [O02-11]

O Ryo Fukaura, Kana Tanahashi, Michiya Omi, Takuya Takeichi, Masashi Akiyama

Nagoya University Graduate School of Medical Sciences, Department of Dermatology, Nagoya

#### P05-35 Comparison of in vitro 3D human skin models reconstructed with different dermal matrices

O Khek-Chian Tham<sup>1</sup>, Seong Soo Lim<sup>1</sup>, John E.A. Common<sup>1</sup>, Carine Bonnard<sup>1,2</sup>

<sup>1</sup>A\*STAR Skin Research Labs (A\*SRL), Agency for Science, Technology and Research (A\*STAR), Singapore, <sup>2</sup>Skin Research Institute of Singapore (SRIS), Singapore

#### P05-36 Elucidation of microscopic characteristics of stratum corneum

Yasuko Obata¹, ⊙Shu Mao¹, Ikki Shibasaki¹, Yuri Ikeuchi-Takahashi¹, Kenya Ishida²

<sup>1</sup>Hoshi University, Tokyo, <sup>2</sup>Takasago International Corporation, Kanagawa

### P05-37 Hyaluronan tetrasaccharides delays the induction of murine epidermal abnormality caused by topically applied imiquimod

O Ayumi Taniguchi, Madoka Kage, Yutaka Takagi

Josai University, Graduate School of Pharmaceutical Sciences, Sakado

### P05-38 Deciphering scalp stiffness: characterization of extracellular matrix component distribution in male androgenetic alopecia

○ Criselda Jean G. Cruz<sup>1,2,3</sup>, I-Tzu Lai<sup>1</sup>, Yi-Han Chang<sup>1,2</sup>, Chao-Chun Yang<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>International Center for Wound Repair and Regeneration (iWRR), National Cheng Kung University, Tainan, <sup>3</sup>Department of Dermatology, University of the Philippines - Philippine General Hospital, Manila

#### P05-39 TRPV4 expression in atopic dermatitis and the effect by osmotic stress

○ Atsuko Kamo¹, Mao Hotta², Mitsutoshi Tominaga², Kenji Takamori²,

<sup>1</sup>Laboratory of Clinical Pathophysiology, Juntendo University Graduate School of Health Care and Nursing, Urayasu, Chiba, <sup>2</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate school of Medicine, Urayasu, Chiba, <sup>3</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu, Chiba

### P05-40 Epidermal keratinocytes secrete hyaluronidase 1 (HYAL1) and regulate hyaluronan metabolism in an extracellular pH-dependent manner

 ${\color{gray}{\circ}} \ Risa\ Takezawa^{\scriptscriptstyle 1},\ Manami\ Masuda^{\scriptscriptstyle 1},\ Minori\ Abe^{\scriptscriptstyle 1,2},\ Megumi\ Miyazawa^{\scriptscriptstyle 1},\ Shintaro\ Inoue^{\scriptscriptstyle 1},\ Yukiko\ Mizutani^{\scriptscriptstyle 1}$ 

<sup>1</sup>Department of Cosmetic Health Science, Gifu Pharmaceutical University, Gifu, <sup>2</sup>Division of Cell Structure, National Institute for Physiological Science, Okazaki

### Category 6 (PO6): Genetic Disease, Gene Regulation and Gene Therapy

# P06-01 Identification of epigenetic *FDFT1*-associated porokeratosis and (epi-)genotype-phenotype correlation of porokeratosis in $\sim$ 100 individuals

O Sonoko Saito¹, Yuki Saito²³, Showbu Sato¹, Satomi Aoki¹, Noriko Ono¹, Yoshihiro Ito¹, Ai Yoshioka⁴, Hisato Suzuki³, Takashi Sasaki⁶, Tomoko Kawaiˀ, Kenichiro Hata²³, Kenjiro Kosaki⁵, Masayuki Amagai¹, Kazuhiko Nakabayashiˀ, Akiharu Kubo¹⁴

<sup>1</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>2</sup>Department of Gastroenterology, Keio University School of Medicine, Tokyo, <sup>3</sup>Division of Molecular Oncology, National Cancer Center Research Institute, Tokyo, <sup>4</sup>Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe, <sup>5</sup>Center for Medical Genetics, Keio University School of Medicine, Tokyo, <sup>6</sup>Center for Supercentenarian Medical Research, Keio University School of Medicine, Tokyo, <sup>7</sup>Department of Maternal-Fetal Biology, National Center for Child Health and Development, Tokyo, <sup>8</sup>Department of Human Molecular Genetics, Gunma University Graduate School of Medicine, Maebashi

#### P06-02 Defective extracellular secretion of SERPINB7 protein in Nagashima-type palmoplantar keratosis

[C12-03]

Catsuhito Sasaki¹, Takato Sugiyama¹, Keitaro Umezawa², Risa Nobuta¹, Chika Tsutsumi³, Yuri Miura², Ryo Ushioda³⁴,
 Toshifumi Nomura¹

<sup>1</sup>Department of Dermatology, Institute of Medicine, University of Tsukuba, Tsukuba, <sup>2</sup>Research Team for Mechanism of Aging, Tokyo Metropolitan Institute of Gerontology, Tokyo, <sup>3</sup>Department of Molecular Biosciences, Faculty of Life Sciences, Kyoto Sangyo University, Kyoto, <sup>4</sup>Institute for Protein Dynamics, Kyoto Sangyo University, Kyoto

### P06-03 Treatment of epidermolytic ichthyosis and ichthyosis with confetti with epidermal autografts cultured from revertant skin

O Kana Tanahashi<sup>1</sup>, Michihiro Kono<sup>1,2</sup>, Takenori Yoshikawa<sup>1</sup>, Yuika Suzuki<sup>1</sup>, Masukazu Inoie<sup>3</sup>, Yachiyo Kuwatsuka<sup>4</sup>, Fumie Kinoshita<sup>4</sup>, Takuya Takeichi<sup>1,5</sup>, Masashi Akiyama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Department of Dermatology and Plastic Surgery, Akita University Graduate School of Medicine, Akita, <sup>3</sup>Japan Tissue Engineering Co., Ltd., Gamagori, <sup>4</sup>Department of Advanced Medicine, Nagoya University Hospital, Nagoya, <sup>5</sup>Nagoya University Institute for Advanced Research, Nagoya

#### P06-04 Establishment of Porokeratosis Model Cells by Gene Editing Using the CRISPR Cas9 System

[C12-05] O Shinya Hashimoto, Ai Yoshioka, Takeshi Fukumoto, Akiko Kubo, Akiharu Kubo

Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe

#### P06-05 ZNF750 regulates epidermal-immune crosstalk and the development of Langerhans cells

[C12-06] Lotem Adar, Bar Schwartz, Liat Oss-Ronen, Roi Gazit, Oldan Cohen

Ben-Gurion University of the Negev, Be'er Sheva

### P06-06 Mutant mRNAs resulting from loss-of-function mutations in the gene encoding filaggrin are degraded by nonsense-mediated mRNA decay

O Risa Nobuta, Takato Sugiyama, Toshifumi Nomura

Department of Dermatology, Institute of Medicine, University of Tsukuba, Tsukuba

#### P06-07 Pathogenic frameshift peptides form unique multi-functional droplets in ichthyosis with confetti

[C12-08] O Takato Sugiyama¹, Kazuya Matsuo², Risa Nobuta¹, Ruriko Endo¹, Kentaro Shiraki³, Norifumi Shioda², Toshifumi Nomura¹

<sup>1</sup>Department of Dermatology, Institute of Medicine, University of Tsukuba, Tsukuba, <sup>2</sup>Department of Genomic Neurology, Institute of Molecular Embryology and Genetics (IMEG), Kumamoto University, Kumamoto, <sup>3</sup>Faculty of Pure and Applied Sciences, University of Tsukuba, Tsukuba

#### P06-08 MEFV variants are a predisposing factor for generalized pustular psoriasis

[O02-13] O Takenori Yoshikawa¹, Takuya Takeichi¹, Kazuki Nishida², Yumiko Kobayashi², Kazumitsu Sugiura³, Yoshinao Muro¹, Masashi Akiyama¹

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Department of Advanced Medicine, Nagoya University Hospital, Nagoya, <sup>3</sup>Department of Dermatology, Fujita Health University School of Medicine, Toyoake

# P06-09 mTORC1 activation of somatostatin-expressing neurons in cortical layer 5 contribute epileptogenesis in tuberous sclerosis complex

○ Fumiki Yamashita¹, Makiko Koike-Kumagai¹, Manabu Fujimoto², Mari Wataya-Kaneda¹,²

<sup>1</sup>Department of Neurocutaneous Medicine, Division of Health Sciences, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup> Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka

# P06-10 Mechanism behind farnesyltransferase inhibitor mediated amelioration of Hutchinson-Gilford progeria is applicable to other laminopathies

O Mattheus Xing Rong Foo, Peh Fern Ong, Oliver Dreesen

Cell Aging, A\*STAR Skin Research Labs, Skin Research Institute of Singapore, A\*STAR, Singapore

### P06-11 Identification and characterization of a novel 3.96 kb deletion spanning exons 3 and 4 of *ATP2C1* in a patient with Hailey-Hailey disease

 ${}^{\circ}\, Kwesi\, Teye^{\scriptscriptstyle 1},\, Hiroshi\, Koga^{\scriptscriptstyle 2},\, Masahiro\, Tsutsumi^{\scriptscriptstyle 2},\, Norito\, Ishii^{\scriptscriptstyle 2},\, Takahiro\, Hamada^{\scriptscriptstyle 2},\, Takekuni\,\, Nakama^{\scriptscriptstyle 2}$ 

<sup>1</sup>Kurume University Institute of Cutaneous Cell Biology, Kurume, <sup>2</sup>Department of Dermatology, Kurume University School of Medicine, Kurume

#### P06-12 The integration of phenotype, genotype, and epigenetic analysis in tuberous sclerosis complex

[O02-17] O Emi Kaneda¹, Hanako Koguchi-Yoshioka¹², Satoshi Hattori³, Keisuke Nimura⁴, Saki Ishino⁵, Manabu Fujimoto¹, Mari Wataya-Kaneda¹²

<sup>1</sup>The Department of Dermatology, Osaka University, Suita, <sup>2</sup>The Department of Neurocutaneous Medicine, Osaka University, Suita, <sup>3</sup>The Department of Biomedical Statistics, Osaka University, Suita, <sup>4</sup>The Division of Gene Therapy Science, Osaka University, Suita, <sup>5</sup>The CoMIT Omics Center, Osaka University, Suita

### P06-13 Three cases of non-hereditary solitary porokeratosis of Mibelli exhibiting lesion-specific biallelic somatic defects in *FDFT1*

○ Ai Yoshioka¹, Sonoko Saito², Satomi Aoki², Hiroaki Hanafusa³, Takashi Seo⁴, Ken Natsuga⁴, Kazuhiko Nakabayashi⁵, Masayuki Amagai², Takeshi Fukumoto¹, Akiko Kubo¹, Akiharu Kubo¹²

<sup>1</sup>Division of Dermatology, Department of Internal Related, Graduate School of Medicine, Kobe University, Kobe, <sup>2</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>3</sup>Department of Pediatrics, Kobe University Graduate School of Medicine, Kobe, <sup>4</sup>Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, <sup>5</sup>Department of Maternal-Fetal Biology, National Research Institute for Child Health and Development, Tokyo

#### P06-14 Withdrawn

### P06-15 Two cases of Hailey-Hailey disease with novel pathogenic ATP2C1 variants suggesting possible genotype/phenotype correlations

O Michiya Omi¹, Takuya Takeichi¹², Yasutoshi Ito¹³, Takenori Yoshikawa¹, Yuki Mizutani⁴⁵, Miki Nagai⁴, Mariko Seishima⁴⁻, Tomoo Ogi³⁵, Yoshinao Muro¹, Masashi Akiyama¹

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, <sup>2</sup>Nagoya University Institute for Advanced Research, Nagoya, <sup>3</sup>Department of Dermatology, National Hospital Organization, Nagoya Medical Center, Nagoya, <sup>4</sup>Gifu Prefectural General Medical Center, Gifu, <sup>5</sup>Department of Dermatology, Mie University, Graduate School of Medicine, Tsu, <sup>6</sup>Department of Dermatology, Asahi University Hospital, Gifu, <sup>7</sup>Department of Dermatology, Gifu University Graduate School of Medicine, Gifu, <sup>8</sup>Department of Genetics, Research Institute of Environmental Medicine (RIeM), Nagoya University, Nagoya, <sup>9</sup>Department of Human Genetics and Molecular Biology, Nagoya University Graduate School of Medicine, Nagoya

#### P06-16 Methotrexate Reduces Pruritus in Patients with Recessive Dystrophic Epidermolysis Bullosa

[O02-20]

O Hsin Yu Huang<sup>1,5</sup>, Wilson Jr F. Aala<sup>2</sup>, Yi-Kai Hong<sup>1,4</sup>, Alexandros Onoufriadis<sup>3</sup>, John A. McGrath<sup>1,3</sup>, Chao-Kai Hsu<sup>1,2,4</sup>

<sup>1</sup>Department of Dermatology, National Chun Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, <sup>3</sup>St Johns Institute of Dermatology, School of Basic and Medical Biosciences, Kings College London, London, <sup>4</sup>International Center for Wound Repair and Regeneration, National Cheng Kung University, Tainan, <sup>5</sup>Tainan Hospital, Ministry of Health and Welfare, Tainan

#### P06-17 Genetic association between palmoplantar pustulosis and HLA polymorphisms

[O02-21]

O Nobuhiro Takahashi<sup>1,2</sup>, Tomomichi Shimizu<sup>1</sup>, Akio Kondoh<sup>1</sup>, Fumikazu Yamazaki<sup>1</sup>, Shingo Suzuki<sup>2</sup>, Takahi Shiina<sup>2</sup>, Tomotoka Mahuchi<sup>1</sup>

<sup>1</sup>Tokai University School of Medicine, Isehara, <sup>2</sup>Department of Basic Medical Science and Molecular Medicine, Tokai University School of Medicine, Isehara

#### P06-18 Efficacy of Asymmetric siRNA Targeting Androgen Receptors for the Treatment of Androgenetic Alopecia

 $\circ$  lk Jun Moon¹, Hae Kyeong Yoon², Doyeun Kim³, Myung Eun Choi¹, Seung Hee Han², June Hyun Park³, Sun Woo Hong³, Hyesoo Cho¹, Dong Ki Lee³⁴, Chong Hyun Won¹²

<sup>1</sup>Department of Dermatology, Asan Medical Center, Seoul, <sup>2</sup>Asan Institute for Life Sciences, Asan Medical Center, Seoul, <sup>3</sup>OliX Pharmaceuticals, Suwon, <sup>4</sup>Department of Chemistry, Sungkyunkwan University, Suwon

### P06-19 The Effect of Epigenetic Changes due to Particle Matter on the Development and exacerbation of Atopic Dermatitis

Yoon Jin Roh, ○ Do Yeon Kwon, Hye Won Song, Seung Hyeon Kim, Jun Seok, Mi-Kyung Lee, Kui Young Park Chung-Ang University Dermatology, Seoul

### P06-20 IL1F10 (IL-38) Role in Skin Inflammation: Establishing an In Vitro Model *via* CRISPR/Cas9 system and Evolutionary Insights

O Shino Fujimoto, Akihiko Yamaguchi, Toshifumi Takahashi, Akiko Arakawa, Noriki Fujimoto Department of Dermatology, Shiga University of medical science, Otsu

P06-21 Withdrawn

[O02-22]

# Category 7 (P07): Innate Immunity, Microbiology, Microbiome

# P07-01 Constipation-Induced Gut Dysbiosis Aggravates Acne: Insights from a Novel Mouse Model Revealing [II-6] Mechanisms of the Gut-Skin Axis

O Masakazu Tamai<sup>1</sup>, Takashi Sugihira<sup>1</sup>, Seitaro Nakagawa<sup>1</sup>, Shuo Li<sup>2</sup>, Manabu Fujimoto<sup>1</sup>, Yumi Matsuoka-Nakamura<sup>1,2</sup>
<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Suita, <sup>2</sup>Cutaneous Allergy and Host Defense, Immunology Frontier Research Center, Osaka University, Suita

#### P07-02 Ccl2+ Fibroblasts orchestrate epithelial barrier function against S.aureus

[C09-01]

 $\circ$  Tatsuya Dokoshi, Michelle Bagood, Marcus Chan, Richard L Gallo

The department of dermatology, university of California San Diego, San Diego

# P07-03 Stress-experienced monocytes/macrophages lose their anti-inflammatory function via $\beta$ 2-adrenergic receptor in skin allergic inflammation

O Soichiro Yoshikawa<sup>1,2</sup>, Hitoshi Urakami<sup>2,3</sup>, Kei Nagao<sup>1,2</sup>, Kensuke Miyake<sup>4</sup>, Shuhei Sano<sup>5</sup>, Zheyu Hu<sup>5</sup>, Emi Nishii<sup>5</sup>, Atsushi Fujimura<sup>2</sup>, Takeshi Y. Hiyama<sup>6</sup>, Keji Naruse<sup>7</sup>, Hajime Karasuyama<sup>4</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,8</sup>, Shin Morizane<sup>3</sup>, Sachiko Miyake<sup>5</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Cellular Physiology, Okayama University Academic Field of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>3</sup>Department of Dermatology, Okayama University Academic Field of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>4</sup>Inflammation, Infection & Immunity Laboratory, Advanced Research Institute, Tokyo Medical and Dental University (TMDU), Tokyo, <sup>5</sup>Department of Immunology, Juntendo University Graduate School of Medicine, Tokyo, <sup>6</sup>Department of Integrative Physiology, Tottori University Graduate School and Faculty of Medicine, Yonago, <sup>7</sup>Department of Cardiovascular Physiology, Okayama University Academic Field of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, <sup>8</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

#### P07-04 Genetic barrier dysfunction drives skin inflammation during atopy and cutaneous pathogenic colonization

[C09-03]

 ${}^{\circ} \, Ying \, Shiang \, Lim^{\scriptscriptstyle 1}, \, Belle \, Yap^{\scriptscriptstyle 1}, \, Lifang \, Koh^{\scriptscriptstyle 1}, \, Jasrie \, Muhammad^{\scriptscriptstyle 2}, \, Franklin \, Zhong^{\scriptscriptstyle 2}, \, John \, Common^{\scriptscriptstyle 1}$ 

<sup>1</sup>A\*STAR Skin Research Labs, Singapore, <sup>2</sup>Nanyang Technological University, Singapore

# P07-05 Cutaneous palmitic acid with some involvement from the microbiome drives acne formation through *Lrig1*<sup>hi</sup> sebocytes in the hair follicle

○ Takashi Sugihira¹², Seitaro Nakagawa¹³, Manabu Fujimoto³, Yumi Matsuoka-Nakamura¹³,

<sup>1</sup>Cutaneous Immunology and Microbiology, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup>Basic Research Development Division, Rohto Pharmaceutical Co., Ltd., Kizugawa, <sup>3</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, <sup>4</sup>Cutaneous Allergy and Host Defense, Immunology Frontier Research Center, Osaka University, Osaka

#### P07-06 Bacteria-derived lipopeptides inhibit the release of IL-33 in models of Atopic Dermatitis

[C09-05]

O Helen Williams<sup>1</sup>, Ryo Muko<sup>2</sup>, Emily Wright<sup>1</sup>, Hiroshi Matsuda<sup>3</sup>, Akane Tanaka<sup>2,3</sup>, Peter D Arkwright<sup>1</sup>, Joanne L Pennock<sup>1</sup>

Lydia Becker Institute of Immunology and Inflammation, University of Manchester, Manchester, <sup>2</sup>Institute of Global Innovation Research, Tokyo University of Agriculture & Technology, Tokyo, <sup>3</sup>Laboratories of Comparative Animal Medicine, Tokyo University of Agriculture & Technology, Tokyo

# P07-07 Proteomics analysis of skin microbiome: the skin flora affects the immune status via serum extracellular vesicles in atopic dermatitis

○ Toru Kawai¹, Satoshi Muraoka², Masatoshi Eguchi¹, Hong Ha Nguyen¹, Shingo Takei¹, Haruna Kimura¹, Tatsuya Katsumi¹, Kouichi Tomii¹, Elena Borzova¹, Akito Hasegawa¹, Ryota Hayashi¹, Jun Adachi², Riichiro Abe¹

<sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>Laboratory of Proteomics for Drug Discovery, Center for Drug Design Research, National Institute of Biomedical Innovation, Health and Nutrition, Osaka

#### P07-08 Identification of natural killer cells and innate lymphoid cells in human epidermis

[C09-07]

O Youichi Ogawa, Takuya Sato, Shinji Shimada, Tatsuyoshi Kawamura Department of Dermatology, University of Yamanashi, Yamanashi

# P07-09 TNF- $\alpha$ induction via linear ubiquitination in keratinocytes is associated with the pathogenesis of the imiquimod-induced psoriasis model

○ Ken I. Kosaka¹, Satoshi Nakamizo¹, Gyohei Egawa², Kazuhiro Iwai³, Kenji Kabashima¹

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Department of Dermatology, Kagoshima University, Kagoshima, <sup>3</sup>Department of Molecular and Cellular Physiology, Kyoto University Graduate School of Medicine, Kyoto

#### P07-10 Comprehensive metagenomic analysis of axillary microbiota in Japanese male subjects with axillary osmidrosis

[O02-23]

O Miki Watanabe<sup>1,2</sup>, Miho Uematsu<sup>2</sup>, Kosuke Fujimoto<sup>2</sup>, Daisuke Tsuruta<sup>1</sup>, Satoshi Uematsu<sup>2</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Osaka Metropolitan University, Osaka, <sup>2</sup>Department of Immunology and Genomics, Graduate School of Medicine, Osaka Metropolitan University, Osaka

# P07-11 Investigation into the inflammatory cascade of secondary disease in dystrophic epidermolysis bullosa using spatial transcriptomics

○ Yoshio Kawakami¹, Ken-Ichi Hasui¹, Yoshihiro Matsuda¹, Yohei Yasutomi¹, Himino Ashida¹, Ai Kajita¹, Yoji Hirai¹, Keiji Iwatsuki¹, Shuta Tomida², Shin Morizane¹

<sup>1</sup>Department of Dermatology, Okayama University, Okayama, <sup>2</sup>Department of Biobank, Okayama University, Okayama

#### P07-12 Skin keratinocytes expressing mutation in the Cx26 gene cause susceptibility to chronic cutaneous candidiasis

[O02-25]

O Alshimaa Mostafa¹, Teruasa Murata¹², Akihiko Kitoh¹, Hiromi Doi¹, Gyohei Egawa¹³, Kenji Kabashima¹

<sup>1</sup>The Department of Dermatology, Kyoto University, Kyoto, <sup>2</sup>Department of Dermatology, Hyogo Medical University, Hyogo, <sup>3</sup>Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima

#### P07-13 Synergistic Effects of Western Diet and Blue LED Light on Itch and Neural Inflammation in Mice

[O05-01]

○ Wei-Tai Yu¹,2,3,4, Hsin-Su Yu⁵,6

'Department of Dermatology, College of Medicine, Kaohsiung Medical University, Kaohsiung, 'Department of Dermatology, Kaohsiung University Gangshan Hospital, Kaohsiung, 'Department of Dermatology, Kaohsiung Medical University Hospital, Kaohsiung, 'Master of Public Health Degree Program, College of Public Health, National Taiwan University, Taipei, 'National Institute of Environmental Health Sciences, National Health Research Institutes, Miaoli, 'Graduate Institute of Clinical Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung

#### P07-14 Enhanced Antioxidant Activity in Multinucleated Giant Cells within Granulomas

[O05-02]

○ Satoshi Nakamizo¹², Kenji Kabashima¹

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Alliance Laboratory for Advanced Medical Research, Kyoto University Graduate School of Medicine, Kyoto

# P07-15 Characteristics of gene expression and microbiota in tonsils of patients with palmoplantar pustulosis and pustulotic arthro-osteitis

 $\circ$  Satomi Kobayashi $^1$ , Hideki Nakagawa $^2$ , Masato Komai $^3$ 

<sup>1</sup>Department of Dermatology, Seibo International Catholic Hospital, Tokyo, <sup>2</sup>Department of Otolaryngology, Seibo International Catholic Hospital, Tokyo, <sup>3</sup>Research Unit, R&D division, Kyowa Kirin Co., Ltd., Shizuoka

#### P07-16 Regnase-1 3'UTR mutant mice develop psoriasis like dermatitis with Köbner phenomenon

[O05-04]

O Hiroyuki Morisaka<sup>1</sup>, Kazuhiko Maeda<sup>2,3</sup>, Manabu Fujimoto<sup>4</sup>, Shizuo Akira<sup>2,3</sup>

<sup>1</sup>Department of Stem Cell Gene Therapy Science, Graduate School of Medicine, Osaka University, Suita, <sup>2</sup>Laboratory of Host Defense, World Premier Institute-Immunology Frontier Research Center (WPI-IFReC), Osaka University, Suita, <sup>3</sup>Department of Host Defense, Research Institute for Microbial Diseases (RIMD), Osaka University, Suita, <sup>4</sup>Department of Dermatology, Integrated Medicine, Graduate School of Medicine, Osaka University, Suita

#### P07-17 Squaric acid dibutylester promotes innate immune-driven hair growth with CD206\* macrophage accumulation

[O05-05]

O Koichi Tomii<sup>1,2</sup>, Tomoya Katakai<sup>2</sup>, Riichiro Abe<sup>1</sup>

<sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>Department of Immunology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

#### P07-18 Purinergic molecules in murine bone marrow-derived mast cells

[O05-06]

O Takuya Sato, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura

Department of Dermatology, University of Yamanashi, Chuo

### P07-19 Microbiome Disruptions, Inflammation, and JAK/STAT Signaling in Southeast Asian Ichthyosis Patients: [O05-07] Implications for Antibiotic Treatment

Ngan K Nguyen¹, Minh Ho³, ○ Bao C Bui²

<sup>1</sup>Department of Omics, International University, Ho Chi Minh, <sup>2</sup>University of Health Sciences, Vietnam National University, Ho Chi Minh, <sup>3</sup>Department of Dermatology, Yale School of medicine, New Haven

### P07-20 Decoding the Impact of Air Pollution on Rosacea Exacerbations through Machine Learning and Transcriptomic Integration

O Rifaldy Fajar<sup>1</sup>, Elfiany Evy<sup>2</sup>, Sahnaz V. Putri<sup>3</sup>, Prihantini Prihantini<sup>4</sup>

<sup>1</sup>Computational Biology and Medicine Laboratory, Yogyakarta State University, Sleman, <sup>2</sup>Dermatology Research Unit, BLK General Hospital, Bulukumba, <sup>3</sup>Health Management Laboratory, International University Semen Indonesia, Gresik, <sup>4</sup>Machine Learning for BioMedicine Laboratory, Bandung Institute of Technology, Bandung

### P07-21 Predicting Well-Being in Psoriasis Patients with Wearable Biometrics and Microbiome Analysis Using Machine Learning

O Sahnaz V. Putri<sup>1</sup>, Rifaldy Fajar<sup>2</sup>, Prihantini Prihantini<sup>3</sup>, Andi N. A. Ureng<sup>4</sup>, Elfiany Evy<sup>5</sup>

<sup>1</sup>Health Management Laboratory, International University Semen Indonesia, Gresik, <sup>2</sup>Computational Biology and Medicine Laboratory, Yogyakarta State University, Sleman, <sup>3</sup>Machine Learning for BioMedicine Laboratory, Bandung Institute of Technology, Bandung, <sup>4</sup>Department of Pharmacy, Andini Persada College of Health Sciences, Mamuju, <sup>5</sup>Dermatology Research Unit, BLK General Hospital, Bulukumba

# P07-22 Papain protease activity on SDS-treated skin is essential to skin inflammation and Th17/Th22 induction but dispensable to Th2 induction

O Sakiko Maruyama<sup>1,2</sup>, Keiko Takada<sup>1,2</sup>, Tomoko Yoshimura<sup>1,2</sup>, Shuntaro Ishihara<sup>1,2</sup>, Mengnan Chen<sup>2</sup>, Seiji Kamijo<sup>2</sup>, Saya Shimizu<sup>2</sup>, Mitsutoshi Tominaga<sup>3</sup>, Kenji Takamori<sup>3</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>2</sup>, Shigaku Ikeda<sup>1</sup>, Rei Watanabe<sup>1</sup>, Toshiro Takai<sup>2</sup>

<sup>1</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>3</sup>Juntendo Itch Research Center (JIRC), Juntendo University Graduate School of Medicine, Chiba

# P07-23 Successful isolation of efficient bacteriophages against Escherichia coli strains detected from patients hospitalized in our hospital

○ Junko Nishikawa¹, Junko Okano², Toshifumi Takahashi¹, Takahiko Nakagawa³, Hideto Kojima⁴, Noriki Fujimoto¹

<sup>1</sup>The Department of Dermatology, Shiga University of Medical Science, Shiga, <sup>2</sup>The Department of Plastic Surgery, Shiga University of Medical Science, Shiga, <sup>3</sup>The Department of Regenerative Medicine Development, Shiga University of Medical Science, Shiga, <sup>4</sup>The Department of Biocommunication Development, Shiga University of Medical Science, Shiga

#### P07-24 Involvement of PARP1 in IL-36-induced inflammatory responses in skin keratinocytes

O Nan-Lin Wu<sup>1,2,3</sup>, Pa-Fan Hsiao<sup>1,2</sup>, Ling-Ya Chiu<sup>3,4,5</sup>, Yi-Ting Huang<sup>5</sup>, Jen-Yu Wang Wang<sup>1,2</sup>, Te-An Lee Lee<sup>6</sup>

<sup>1</sup>Department of Dermatology, MacKay Memorial Hospital, Taipei, <sup>2</sup>Department of Medicine, MacKay Medical College, New Taipei City, <sup>3</sup>Institute of Biomedical Sciences, MacKay Medical College, New Taipei City, <sup>4</sup>Department of Nursing, MacKay Medical College, New Taipei City, <sup>5</sup>Department of Medical Research, MacKay Memorial Hospital, Taipei, <sup>6</sup>Department of Urology, Hsinchu MacKay Memorial Hospital, Hsinchu

### P07-25 Epicutaneous papain application on intact or tape-stripped skin induces protease activity-dependent acute itch and Th sensitization

O Shuntaro Ishihara<sup>1,2</sup>, Toru Kimitsu<sup>1,2</sup>, Seiji Kamijo<sup>2</sup>, Yurie Masutani<sup>1,2</sup>, Tomoko Yoshimura<sup>1,2</sup>, Saya Shuimizu<sup>2</sup>, Keiko Takada<sup>1,2</sup>, Mengnan Chen<sup>2</sup>, Sakiko Maruyama<sup>1,2</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>2</sup>, Rei Watanabe<sup>1</sup>, Shigaku Ikeda<sup>1</sup>, Toshiro Takai<sup>2</sup>

Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Atopy (Allergy) Research

#### P07-26 ICG-001 prevents the emergence of atopic dermatitis but not psoriasis in mouse models

O Takashi Sakai, Yuriko Sho, Haruna Matsuda-Hirose, Yutaka Hatano

Center, Juntendo University Graduate School of Medicine, Tokyo

Department of Dermatology, Faculty of Medicine, Oita University, Yufu

#### P07-27 Alterations in Scalp Microorganisms after Er: YAG Laser Treatment for Eastern Asian Androgenetic Alopecia Patients via 16S Sequencing

○ Jinfang Liu¹, Guangpeng Liu¹, Yongxian Lai²

<sup>1</sup>Department of Plastic and Reconstructive Surgery, Shanghai Tenth People's Hospital, School of Medicine, Tongji University, Shanghai, <sup>2</sup>Department of Dermatologic Surgery, Shanghai Skin Disease Hospital, Shanghai

### Category 8 (PO8): Patient Population Research

#### P08-01 [C07-06]

#### Prediction of disease progression in Early Severe Systemic Sclerosis: a multicenter, prospective cohort analysis

O Saori Uesugi-Uchida¹, Manabu Fujimoto², Yoshihide Asano³, Masatoshi Jinnin⁴, Takashi Matsushita⁵, Sei-ichiro Motegi⁶, Shinichi Sato², Minoru Hasegawa¹

Departments of Dermatology, University of Fukui, Fukui, Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Department of Dermatology, Wakayama Medical University Graduate School of Medicine, Wakayama, Department of Dermatology, Faculty of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Department of Dermatology, Gunma University Graduate School of Medicine, Gunma, Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo

#### P08-02 [C10-08]

#### Diagnostic scoring system for intravascular large B-cell lymphoma

○ Maho Nakashima¹, Motoi Takenaka², Takeharu Kato³, Yasushi Miyazaki⁴, Hiroyuki Murota²

<sup>1</sup>Department of Dermatology, Nagasaki University Hospital, Nagasaki, <sup>2</sup>Department of Dermatology, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, <sup>3</sup>Department of Hematology, Nagasaki University Hospital, Nagasaki, <sup>4</sup>Department of Hematology, Atomic Bomb Disease Institute, Nagasaki University, Nagasaki

#### P08-03

#### Nemolizumab Improves Pruritus in Patients with Intrinsic Atopic Dermatitis Lacking Atopic Predisposition

[C07-01] O Emi Sato¹, Keita Tsutsui¹², Hiroki Shimizu¹, Kotaro Ito¹³

<sup>1</sup>Department of Dermatology, Fukuoka University Faculty of Medicine, Fukuoka, <sup>2</sup>Fukuoka Central Hospital, Fukuoka, <sup>3</sup>Ito Dermatology Clinic, Kitsuki

#### P08-04 [C07-07]

### Impact of Environmental Factors on Skin Irritation Severity: Comparative Analysis of Demographics and Health Outcomes in Vietnam

○ Bao C Bui<sup>1</sup>, Huy Nguyen<sup>1</sup>, Ngan K Nguyen<sup>2</sup>

<sup>1</sup>Department of Medical Science, University of Health Sciences, Ho Chi Minh City, <sup>2</sup>Department of Biotechnology, International University, Ho Chi Minh City

#### P08-05

#### Lipid Profiles and TyG Index as Predictors of Melanoma Incidence: Insights from the UK Biobank

[C06-07] O Javad Alizargar

Kashan Medical University, Isfahan

#### P08-06

#### Development of novel molecular skin type analysis via microneedle patch and biomarker profiling

 $\circ$  Ji Hye Kim¹, Seo Hyeong Kim¹, Yoon Mi Choi¹, Soo Min Seo¹, Eun Young Jang¹, Yeon Woo Jung², Chang Ook Park², Do Hyeon Jeong³, Kwang Hoon Lee¹

<sup>1</sup>CUTIS Biomedical Research Center Ltd., Seoul, <sup>2</sup>Department of Dermatology & Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul, <sup>3</sup>RAPHAS Ltd., Seoul

#### P08-07 [O05-11]

### Exploring the Synergy of big data in bridging digital health and cosmetics industries for advanced hair loss research

○ Seoyeon Kyung¹, Dongeol Lee¹, Seunghyun Kang¹, Dong Keon Yon²²⁵, Selin Woo², Minji Kim², Hayeon Lee², Jiseung Kang³, Masoud Rahmati⁴, Yujun Park⁶, Seyoung Mun⁶

<sup>1</sup>COSMAX BTI, Seongnamsi, <sup>2</sup>Center of Digital Health, Kyung Hee University Medical Center, Seoul, <sup>3</sup>Department of Anesthesia, Massachusetts General Hospital, Boston, <sup>4</sup>Department of Physical Education and Sport Sciences, Lorestan University, Khoramabad, <sup>5</sup>Department of Pediatrics, Kyung Hee University Medical Center, Seoul, <sup>6</sup>Department of Nanobiomedical Science, Dankook University, Cheonan

#### P08-08

#### Utilizing SERPINB7 Immunostaining for Enhanced Diagnosis of Hereditary Palmoplantar Keratoderma

#### [O05-12]

O Mari Kishibe, Mai Komatsu, Hiroyoshi Nozaki, Satomi Igawa, Akemi Ishida-Yamamoto

Department of Dermatology/Asahikawa Medical University, Asahikawa

#### P08-09

#### The association of IL-31 with pruritis in eruptive pruritic papular porokeratosis (EPPP)

[O05-13]

O Satomi Igawa<sup>1</sup>, Akemi Ishida-Yamamoto<sup>1</sup>, Noriaki Toyota<sup>2</sup>, Mari Kishibe<sup>1</sup>

<sup>1</sup>Department of Dermatology, Asahikawa Medical University, Asahikawa, <sup>2</sup>Minami 6 Dermatological Clinic, Asahikawa

#### P08-10 The contribution of atopic diseases to alopecia areata

O Ying Yi Lu<sup>1,2</sup>, Chieh-Hsin Wu<sup>3,4</sup>

<sup>1</sup>Department of Dermatology, Kaohsiung Veterans General Hospital, Kaohsiung City, <sup>2</sup>School of Medicine, College of Medicine, National Sun Yat-sen University, Kaohsiung City, <sup>3</sup>Department of Surgery, School of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung City, <sup>4</sup>Division of Neurosurgery, Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung City

P08-11

Withdrawn

[O05-14]

### Category 9 (PO9): Patient-Targeted Research

#### P09-01 Epigenetic memory in healed psoriatic keratinocytes

[11-4]

O Sayaka Shibata, Kentaro Awaji, Asumi Koyama, Yukiko Ito, Haruka Taira, Shinichi Sato

Department of Dermatology, Graduate School of Medicine, The University of Tokyo, Tokyo

#### P09-02 [I-4]

○ Yuiin Lee

Department of Dermatology, Eunpyeong St. Marys Hospital, College of Medicine, The Catholic University of Korea, Seoul

Characterization of Circulating Monocytes in Atopic Dermatitis through Single-Cell RNA Sequencing

### P09-03

### Spatially Transcriptomic Analysis Reveals Alopecia Areata-Specific Gene Expression Signatures Compared to

#### [C07-02]

Seborrheic Dermatitis

O SoHee Park

Department of Dermatology, Eunpyeong St. Marys Hospital, Seoul

#### P09-04 [C07-03]

### Consistent PD-1 decrease in cytotoxic T cell subsets suggests treatment-resistency in rapidly progressive alopecia

○ Ryo Takahashi¹, Misaki Kinoshita-Ise², Yoshimi Yamazaki², Masahiro Fukuyama², Manabu Ohyama¹,²

<sup>1</sup>Flow Cytometry Core Facility, Kyorin University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo

#### P09-05 [C07-04]

## Validation of a closed-loop AI and haptic-enabled wearable device for nocturnal scratching in mild atopic dermatitis

O Albert F. Yang¹, Soham Patel²³, Keum San Chun⁴, Dylan Richards⁴, Jessica R. Walter⁵, Kazuaki Okamoto⁶, Amy S. Paller³¬¬¬¬, Akihiko Ikoma⁶, Shuai Xu³¬¬¬, Shuai Xu³¬¬¬, Shuai Xu³¬¬¬, Shuai Xu¬¬¬, Shua

<sup>1</sup>Department of Dermatology, University of Michigan, Ann Arbor, <sup>2</sup>University of Kansas School of Medicine, Kansas City, <sup>3</sup>Department of Dermatology, Northwestern University Feinberg School of Medicine, Chicago, <sup>4</sup>Sibel Health, Niles, <sup>5</sup>Department of Obstetrics and Gynecology, Northwestern University Feinberg School of Medicine, Chicago, <sup>6</sup>Maruho Co., Ltd., Osaka, <sup>7</sup>Department of Pediatrics (Dermatology), Northwestern University Feinberg School of Medicine, Chicago, <sup>8</sup>Querrey Simpson Institute for Bioelectronics, Northwestern University, Chicago, <sup>9</sup>Department of Biomedical Engineering, Northwestern University, Evanston

#### P09-06 [C07-05]

#### Decoding the Immune Mechanisms in Papuloerythroderma of Ofuji: Clinical and Molecular Insights

O Koki Kataoka¹, Fuuka Minami¹, Ryota Asahina¹.², Satoru Yonekura¹, Saeko Nakajima¹.³, Kenji Kabashima¹.⁴,

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Center for One Medicine Innovative Translational Research (COMIT), Gifu University, Gifu, <sup>3</sup>Department of Drug Discovery for Inflammatory Skin Diseases, Kyoto University Graduate School of Medicine, Kyoto, <sup>4</sup>A\*STAR Skin Research Labs (A\*SRL), Agency for Science, Technology and Research (A\*STAR), 8A Biomedical Grove, #06-06 Immunos, Singapore, <sup>5</sup>Singapore Immunology Network (SIgN), Agency for Science, Technology and Research (A\*STAR), 8A Biomedical Grove, Level 3 Immunos, Singapore

#### P09-07

#### MicroRNA as a disease marker of psoriasis

[O05-15]

O Yuko Higashi<sup>1,2</sup>, Munekazu Yamakuchi<sup>3</sup>, Tomoko Fukushige<sup>1</sup>, Takuro Kanekura<sup>1</sup>, Teruto Hashiguchi<sup>3</sup>, Gyohei Egawa<sup>1</sup>
Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima, <sup>2</sup>Department of Dermatology, Kagoshima City Hospital, Kagoshima, <sup>3</sup>Department of Laboratory and Vascular Medicine, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

#### P09-08 [O05-16]

### Could Mechanical Stress Serve as a Predisposing Factor for the Malignant Transformation of Seborrheic Koratosis?

O Hiroyoshi Nozaki<sup>1</sup>, Tomoe Nakagawa<sup>1</sup>, Kaori Umekage<sup>1</sup>, Kyoko Kanno<sup>1</sup>, Mari Kishibe<sup>1</sup>, Masaru Honma<sup>2</sup>, Akemi Ishida-Yamamoto<sup>1</sup> Department of Dermatology, Asahikawa Medical University, Asahikawa, <sup>2</sup>International Medical Support Center, Asahikawa Medical University, Asahikawa

#### P09-09

# Amlitelimab normalises the atopic dermatitis gene signature in the skin of patients with moderate-to-severe atopic dermatitis

○ Eriko Kudo¹, Shawn G. Kwatra², Margitta Worm³, Stephan Weidinger⁴, Franck Augé⁵, Shaima Belhechmi⁵, Annick Peleraux⁶, John T. OʻMalley¬, Charlotte Bernigaud⁵, Natalie Rynkiewicz¬

<sup>1</sup>Sanofi, Tokyo, <sup>2</sup>Department of Dermatology and Maryland Itch Center, University of Maryland School of Medicine, Baltimore, <sup>3</sup>Department of Dermatology and Allergology, University Medical Center Berlin, Berlin, <sup>4</sup>Department of Dermatology and Allergy, University Hospital Schleswig-Holstein, Kiel, <sup>5</sup>Sanofi, Paris, <sup>6</sup>Sanofi, Montpellier, <sup>7</sup>Sanofi, Cambridge

#### P09-10 [O05-17]

#### Development of a digital image analysis system to objectively evaluate the treatment response in cellulitis

O Kazunori Miyata<sup>1</sup>, Jun Yamagami<sup>2</sup>, Yuko Takenaka<sup>2</sup>, Mai Onuki<sup>2</sup>, Tomoaki Sawayanagi<sup>3</sup>, Naoko Ishiguro<sup>2</sup>

<sup>1</sup>Department of Dermatology, Tokyo Women's Medical University Yachiyo Medical Center, Chiba, <sup>2</sup>Department of Dermatology, Tokyo Women's Medical University, Tokyo, <sup>3</sup>Realinite Co., Ltd., Tokyo

### P09-11 Rilzabrutinib reduces biomarkers related to itch and disease severity in chronic spontaneous urticaria and atopic dermatitis

O Kenji Yahata<sup>1</sup>, Marcus Maurer<sup>2,3</sup>, Jörg Scheffel<sup>2,3</sup>, Leon Kircik<sup>4</sup>, Jessica Gereige<sup>5</sup>, Vinh Truong<sup>6</sup>, Vincent Mikol<sup>7</sup>

<sup>1</sup>Sanofi, Tokyo, <sup>2</sup>Institute of Allergology, Charité - Universitätsmedizin Berlin, Berlin, <sup>3</sup>Fraunhofer Institute for Translational Medicine and Pharmacology ITMP, Immunology and Allergology, Berlin, <sup>4</sup>Icahn School of Medicine at Mount Sinai, New York, <sup>5</sup>Sanofi, Cambridge, <sup>6</sup>Ividata Life Sciences (contracted by Sanofi), Paris, <sup>7</sup>Sanofi, Paris

### P09-12 Usefulness of skin sampling using microneedle patch in atopic dermatitis study: Comparison of RNA analysis results with skin biopsy

○ Seo Hyeong Kim<sup>1</sup>, Ji Hye Kim<sup>1</sup>, Wanjin Kim<sup>2</sup>, Chang Ook Park<sup>2</sup>, Do Hyeon Jeong<sup>3</sup>, Kwang Hoon Lee<sup>1</sup>

<sup>1</sup>CUTIS Biomedical Research Center Ltd., Seoul, <sup>2</sup>Department of Dermatology & Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul, <sup>3</sup>RAPHAS Ltd., Seoul

#### P09-13 Comparison between Local Anesthetic Minimal-Invasive Liposuction (LAMS) using normal saline and half saline

[O05-18]

○ Kyungho Paik¹, Nam Chul Kim², Jeong Eun Kim², Jinmook Jeong², Chang-Hun Huh¹

<sup>1</sup>Seoul National University Bundang Hospital, Seongnam, <sup>2</sup>365mc Hospital Network, Seoul

### P09-14 In vitro evidence demonstrating the nondepleting mechanism of action of amlitelimab, an OX40 Ligand monoclonal antibody

O Hiroyuki Fujita¹, James G. Krueger², Brian S. Kim³, Stephan Weidinger⁴, Yoko Kataoka⁵, Mark Peakman⁴, John T. O'Malley⁴, Karl Yen², Cheng-Che Li⁴, Cassie Van Krinks⁴, Janina Nahler⁴

<sup>1</sup>Sanofi, Tokyo, <sup>2</sup>Laboratory for Investigative Dermatology, The Rockefeller University, New York, <sup>3</sup>Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, <sup>4</sup>Department of Dermatology and Allergy, University Hospital Schleswig-Holstein, Kiel, <sup>5</sup>Osaka Habikino Medical Center, Habikino, <sup>6</sup>Sanofi, Cambridge, <sup>7</sup>Sanofi, Rotkreuz

#### P09-15 The in-vivo exfoliation and 3h anti-acne efficacy of a clearing gel containing 2% salicylic acid

[O05-19]

O Shuyan Yang², Liwei Wang¹, Chao Yuan¹, Rachel Zhao², Yan Zhong², Lucas Kruger³, Kristine Schmalenberg¹

<sup>1</sup>Department of Skin and Cosmetic Research, Shanghai Skin Disease Hospital, School of Medicine, Tongji University, Shanghai, <sup>2</sup>APAC Innovation Center, the Estée Lauder Companies, Shanghai, <sup>3</sup>Global Clinical and Consumer Sciences, The Estée Lauder Companies, NY

#### P09-16 Increased IL-31 Expression in Eosinophilic Pustular Folliculitis and Its Possible Role in Disease Pathogenesis

○ Saeko Nakajima¹, Satoru Yonekura¹, Eiko Toichi², Yu Sawada³, Kenji Kabashima¹

<sup>1</sup>Kyoto University, Kyoto, <sup>2</sup>NHO Kyoto Medical Center, Kyoto, <sup>3</sup>University of Occupational and Environmental Health, Kitakyushu

#### P09-17 Deep Venous Thrombosis Risk in Elderly Patients with Lower Leg Cellulitis

[O05-20]

O Romane Teshima, Yu Sawada, Natsuko Sasaki

University of Occupational and Environmental Health, Kitakyushu

#### P09-18 Effect of food processing on allergenicity in Anisakis allergy

O Maiko Yamaura, Kana Inoue, Ayaka Ito, Shoko Yokoyama, Erina Hagihara, Yuma Sunaga, Sachiko Koshikawa, Naoko Inomata The Department of Dermatology, Showa University School of Medicine, Tokyo

## P09-19 Anti-acne efficacy of a botanic gel containing 1% salicylic acid: double-blinded, randomized controlled 3-day study

O Chao Yuan<sup>1</sup>, Liwei Wang<sup>1</sup>, Yunyun Zheng<sup>2</sup>, Xiaomin Zhao<sup>2</sup>, Yan Zhong<sup>2</sup>, Lucas Kruger<sup>3</sup>, Kristine Schmalenberg<sup>3</sup>, Hao Ouyang<sup>3</sup>

Department of Skin and Cosmetic Research, Shanghai Skin Disease Hospital, School of Medicine, Tongji University, Shanghai, <sup>2</sup>APAC Innovation Center, the Estée Lauder Companies, Shanghai, <sup>3</sup>Global Clinical and Consumer Sciences, The Estée Lauder Companies, NY

#### P09-20 Epidemiological survey of tick bites in Shizuoka Prefecture, Japan from 2016 through 2023

O Masako Matsutani, Masaru Natsuaki, Nobuo Kanazawa

The Department of Dermatology, Hyogo Medical University, Nishinomiya

#### P09-21 A 3-Step product Regimen Efficacy on Acne Vulgaris for both Female and Male

[O05-22]

O Liwei Wang<sup>1</sup>, Chao Yuan<sup>1</sup>, Shuyan Yang<sup>2</sup>, Xiaomin Zhao<sup>2</sup>, Yan Zhong<sup>2</sup>, Lucas Kruger<sup>3</sup>, Kristine Schmalenberg<sup>3</sup>

<sup>1</sup>Shanghai Skin Disease Hospital, Shanghai, <sup>2</sup>APAC Innovation Center, the Estée Lauder Companies, Shanghai, <sup>3</sup>Global Clinical and Consumer Sciences, The Estée Lauder Companies, NY

### Category 10 (P10): Pharmacology and Drug Development

# P10-01 Breakthrough drug in Stevens-Johnson syndrome/toxic epidermal necrolysis: Drug discovery to prevent cell [II-1] death via formyl peptide receptor-1

O Haruna Kimura<sup>1</sup>, Akito Hasegawa<sup>1</sup>, Tomoki Nishiguchi<sup>12</sup>, Hong Ha Nguyen<sup>1</sup>, Masatoshi Eguchi<sup>1</sup>, Takeaki Ozawa<sup>2</sup>, Riichiro Abe<sup>1</sup> Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>Department of Chemistry, School of Science, The University of Tokyo, Tokyo

#### P10-02 [C08-06]

#### Role of MrgprA3-expressing primary sensory neurons in itch responses in atopic dermatitis model mice

O Masanori Fujii<sup>1,2</sup>, Kyoko Fujii<sup>2</sup>, Ryosuke Miyagawa<sup>2</sup>, Taisei Enomoto<sup>2</sup>, Takato Ohtsuka<sup>2</sup>, Yuma Yasui<sup>3</sup>

Department of Analytical Pharmacology, Faculty of Pharmacy, Meijo University, Aichi, <sup>2</sup>Laboratory of Pharmacology, Division of Pathological Sciences, Kyoto Pharmaceutical University, Kyoto

#### P10-03 [C08-07]

#### Advancements in Stevens-Johnson syndrome/toxic epidermal necrolysis treatment: targeting cell death pathways via Fas-Fas ligand inhibition

O Yuki Saito¹, Roberta Lotti²³, Haruna Kimura¹, Akito Hasegawa¹, Brydon Bennett², Antonino Amato², Carlo Pincell², Riichiro Abe¹ <sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, <sup>2</sup>PinCell s.r.l., Milano, DermoLab, University of Modena and Reggio Emilia, Modena

#### P10-04

#### CDK inhibitors disrupt mRNA processing and synergize with Bcl-xL inhibitors in Merkel cell carcinoma

[C10-02]

O Khalid A Garman<sup>1</sup>, Tara Gelb<sup>1</sup>, Dimitrios Anastasakis<sup>2</sup>, Madhu Lal Nag<sup>3</sup>, Matthew D Hall<sup>3</sup>, Markus Hafner<sup>2</sup>, Isaac Brownell<sup>1</sup> Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, Maryland, <sup>2</sup>RNA Molecular Biology Laboratory, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, <sup>3</sup>National Center for Advancing Translational Sciences, National Institutes of Health, Bethesda

#### P10-05

#### NADPH oxidase inhibitor induces type XVII collagen and inhibits senescence, both In-vitro and In-vivo

[C12-01]

O Tuba Musarrat Ansary, Koji Kamiya, Md Razib Hossain, Mayumi Komine

The department of Dermatology, Jichi Medical University, Shimotsuke

#### P10-06 [C12-02]

#### Difamilast, a topical phosphodiesterase 4 inhibitor, induced CREB-mediated production of human beta defensin 3 in human keratinocytes

O Gaku Tsuji12, Ayako Yumine12, Koji Kawamura2, Masaki Takemura2, Kazuhiko Yamamura12, Takamichi Ito2, Makiko Kido-Nakahara<sup>2</sup>, Takeshi Nakahara<sup>1</sup>

<sup>1</sup>Research and Clinical Center for Yusho and Dioxin, Kyushu University Hospital, Fukuoka, <sup>2</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka

#### P10-07

#### Cytoprotection mechanisms of keratinocyte cytoprotectants against sorafenib toxicity

[O05-23]

O Yayoi Kamata¹, Rui Kato², Mitsutoshi Tominaga¹, Sumika Toyama¹, Eriko Komiya¹, Jun Utsumi¹, Takahide Kaneko², Yasushi Suga²,

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

#### P10-08

#### Serum cytokine and chemokine profiling in drug-induced hypersensitivity syndrome

[O05-24]

O Elena Borzova, Ryota Hayashi, Osamu Ansai, Shingo Takei, Riichiro Abe

Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata

#### P10-09 [O05-25]

### Bexarotene-induced upregulation of Siglec-7 and Siglec-9 on peripheral blood T cells: a potential therapeutic

Miki Kume¹, Rei Watanabe², Manabu Fujimoto¹, ○ Eiji Kiyohara¹

<sup>1</sup>Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup>Department of Medicine for Cutaneous Immunological Diseases, Course of Integrated Medicine, Graduate School of Medicine, Osaka University,

#### P10-10

#### Combination of CPI-613 and hydroxychloroquine sensitizes melanoma cells to anoikis

O Naohisa Ichiki<sup>1</sup>, Chiemi Saigo<sup>2,3,4</sup>, Yuki Hanamatsu<sup>2</sup>, Hiroaki Iwata<sup>1</sup>, Tamotsu Takeuchi<sup>2,4</sup>

<sup>1</sup>Department of Dermatology, Gifu University Graduate School of Medicine, Glfu, <sup>2</sup>Department of Pathology and Translational Research, Gifu University Graduate School of Medicine, Gifu, 3The United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, Gifu, <sup>4</sup>Center for One Medicine Innovative Translational Research; COMIT, Gifu University,

### P10-11

[O03-01]

#### Low-temperature plasma-activated Ringer's lactate solution induces cell death on malignant melanoma cells

O Akira Miyazaki<sup>1</sup>, Tomoki Taki<sup>1</sup>, Kae Nakamura<sup>2</sup>, Hiromasa Tanaka<sup>2</sup>, Masaru Hori<sup>2</sup>, Katsumi Ebisawa<sup>3</sup>, Masashi Akiyama<sup>1</sup> Department of Dermatology, Nagoya University, Nagoya, 2Center for Low-Temperature Plasma Sciences, Nagoya University, Nagoya, <sup>3</sup>Department of Plastic and Reconstructive Surgery, Nagoya University, Nagoya

#### P10-12 [O03-02]

#### An extract of Arctium lappa L. may mitigate psoriatic inflammation by targeting EGFR

O Mengyao Yang<sup>1,2</sup>, Ge Peng<sup>1</sup>, Quan Sun<sup>1</sup>, Wanchen Zhao<sup>1</sup>, Alafate Abudouwanli<sup>1</sup>, Arisa Ikeda<sup>3</sup>, Shan Wang<sup>4</sup>, Hideoki Ogawa<sup>1</sup>, Ko Okumura<sup>1</sup>, François Niyonsaba<sup>1</sup>

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, The First Hospital of China Medical University, Shenyang, 3Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, 'Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, <sup>5</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

### P10-13

#### Dictamnine and fraxinellone from Cortex Dictamni alleviates atopic dermatitis by inhibiting the activation of keratinocytes and basophils

O Jia-You Fang<sup>1</sup>, Shih-Chun Yang<sup>2</sup>, Shih-Hsuan Wei<sup>1</sup>

<sup>1</sup>Chang Gung University, Taoyuan, <sup>2</sup>Soochow University, Taipei

#### P10-14 Risk factors for liver enzyme abnormalities after oral terbinafine for onychomycosis: a multicenter study

[O03-03]

O Hua-Ching Chang<sup>1,2,3</sup>, Kai-Wen Chuang<sup>1</sup>

<sup>1</sup>Department of Dermatology, Taipei Medical University Hospital, Taipei, <sup>2</sup>Department of Dermatology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, <sup>3</sup>Department of Pharmacology, College of Medicine, National Taiwan University, Taipei

#### P10-15 Anti-Diabetic Agent, Pinitol Improves Lipopolysaccharide-Damaged in Human Dermal Fibroblasts

O Dong Wook Shin, Jinsick Kim

Research Institute for Biomedical and Health Science, Konkuk University, Chungju

#### P10-16 The therapeutic effects of limonene on atopic dermatitis in vivo and in vitro

OChi-Feng Hung

School of Medicine, Fu Jen Catholic University, New Taipei City

#### P10-17 Potential alleviating effect of sulforaphane on atopic dermatitis

○ Shan Wang¹², Ge Peng¹, Mengyao Yang¹³, Alafate Abudouwanli¹, Quan Sun¹, Wanchen Zhao¹, Arisa Ikeda¹⁴, Hideoki Ogawa¹, Ko Okumura¹, François Niyonsaba¹⁵

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, <sup>2</sup>The Department of Dermatology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing, <sup>3</sup>Department of Dermatology, The First Hospital of China Medical University, Shenyang, <sup>4</sup>Department of Nephrology, Juntendo University Graduate School of Medicine, Tokyo, <sup>5</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

### P10-18 Protective effects of Andrographis Paniculata extract and Andrographolide against blue light-induced damage to human epidermal keratinocytes

○ Hee Seon Shin, Eun Bi Yu, Jong Sung Lee

The Department of Integrative Biotechnology, Sungkyunkwan University, Suwon-si

#### P10-19 Anti-inflammatory effect of soft coral-derived brianolide on atopic dermatitis

O Yuan-Hsin Lo1, Meng-Fang Huang2, Chi-Feng Hung2

<sup>1</sup>Department of Dermatology, Fu Jen Catholic University Hospital, Fu Jen Catholic University, New Taipei City, <sup>2</sup>MS Program in Transdisciplinary Long Term Care, Fu Jen Catholic University, New Taipei City

#### P10-20 The anti-inflammatory activity of flavonoids and alkaloids from Sophora flavescens alleviates psoriasiform lesions

O Yu-Kuo Chung<sup>1,4</sup>, Cai-Ling Jhong<sup>4</sup>, Jia-You Fang<sup>1,2,3,4</sup>

<sup>1</sup>Graduate Institute of Biomedical Sciences, Chang Gung University, Taoyuan, <sup>2</sup>Research Center for Food and Cosmetic Safety and Research Center for Chinese Herbal Medicine, Chang Gung University of Science and Technology, Taoyuan, <sup>3</sup>Department of Anesthesiology, Chang Gung Memorial Hospital, Taoyuan, <sup>4</sup>Pharmaceutics Laboratory, Graduate Institute of Natural Products, Chang Gung University, Taoyuan

### Category 11 (P11): Photobiology

#### P11-01 Skin Aging through the Regulation of NRIP1 and PRDM1 Associated with DNA Methylation

[C11-02]

○ Yidan Cui¹, Ji Hwan Moon², Hye Sun Shin³, Min-Kyoung Kim¹, Dong Hun Lee¹

<sup>1</sup>Department of Dermatology, Seoul National University College of Medicine, Seoul, <sup>2</sup>Samsung Genome Institute, Samsung Medical Center, Seoul, <sup>3</sup>AMOREPACIFIC Research and Innovation Center, Yongin

### P11-02 The Pigmentation of Blue Light is Mediated by Both Melanogenesis Activation and Autophagy Inhibition through OPN3-TRPV1

○ Eunbi Yu, Heeseon Shin, Jongsung Lee

Department of Integrative Biotechnology, Sungkyunkwan University, Suwon

### P11-03 Ultraviolet-B irradiation expands skin-resident CD81\*Foxp3\* regulatory T cells with a highly activated phenotype [O03-04] Oldinald Mixtury Odanaka Masaki Imai? Akimichi Morita Sayuri Vamazaki

○ Hiroaki Shime¹, Mizuyu Odanaka¹, Masaki Imai², Akimichi Morita³, Sayuri Yamazaki

<sup>1</sup>Department of Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya, <sup>2</sup>Department of Medical Technology and Sciences, Faculty of Health Sciences, Kyoto Tachibana University, Kyoto, <sup>3</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

#### P11-04 UVB radiation-induced skin carcinogenesis and the impact of low dose UVA irradiation

[O03-05]

O Katharina Maria Rolfes, Jean Krutmann, Thomas Haarmann-Stemmann IUF-Leibniz Research Institute for Environmental Medicine, Duesseldorf

#### P11-05 Possible usefulness of Raman microscopy in the treatment of extramammary Paget's disease

[O03-06]

O Toshiki Kubo<sup>1,2</sup>, Rei Watanabe<sup>1</sup>, Takamichi Ito<sup>3</sup>, Takeshi Nakahara<sup>3</sup>, Manabu Fujimoto<sup>1</sup>, Katsumasa Fujita<sup>2,4</sup>, Atsushi Tanemura<sup>1</sup> Department of Dermatology, Osaka University, Suita, <sup>2</sup>Department of Applied Physics, Osaka University, Suita, <sup>3</sup>Department of Dermatology, Kyushu University, Fukuoka, <sup>4</sup>Institute for Open and Transdisciplinary Research Initiatives, Osaka University, Suita

#### P11-06 Induction of Treg and genetic change of CD4 T cells by UVC irradiation

[O03-07]

O Yoshifumi Kanayama, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate school of Medical Sciences, Nagoya

### P11-07 Drug-induced phototoxicity: Disruption of 6-formylindolo[3,2-b]carbazole metabolism sensitizes keratinocytes to UVA-induced apoptosis

Frederick Hartung, Katharina Maria Rolfes, Thomas Haarmann-Stemmann
 IUF - Leibniz Research Institute for Environmental Medicine Düsseldorf

# P11-08 Effects of Phototherapy on Antinuclear Antibody Titers in Patients with Various Skin Diseases: A Longitudinal Study

Oki Watanabe, Mai Sakurai, Yuki Enomoto, Aya Yamamoto, Akimichi Morita

Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya

#### P11-09 Effective Senolytics in Human Dermal Fibroblasts: Highlighting Fisetin, ABT263, and ABT737

Young Bin Lee, Hee-Seok Seo, Hyun Kang, Sung Ha Lim, Seung-Phil Hong
 The Department of Dermatology, Yonsei University Wonju College of Medicine, Wonju

### Category 12 (P12): Pigmentation and Melanoma

### P12-01 Co-blockade for CD276 and PD-1 signal enhances anti-melanoma T cell response [III-6] OKazubiro Acusanal Shusuko Kawashimal Vuka Saekil Vu Kawasharal Takamitru Matsuzawal

O Kazuhiro Aoyama¹, Shusuke Kawashima¹, Yuka Saeki¹, Yu Kawahara¹, Takamitsu Matsuzawa¹, Noriko Saito¹, Ayako Oikawa¹, Masahito Kawazu², Yosuke Togashi³, Yasuhiro Nakamura⁴, Tatsuyoshi Kawamura⁵, Yukiko Kiniwa⁶, Osamu Yamasaki², Satoshi Fukushima⁶, Takashi Inozume¹

<sup>1</sup>Department of Dermatology, Chiba University Graduate School of Medicine, Chiba, <sup>2</sup>Division of Cell Therapy, Chiba Cancer Center Research Institute, Chiba, <sup>3</sup>Department of Tumor Microenvironment, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, <sup>4</sup>Department of Skin Oncology/Dermatology, Saitama Medical University International Medical Center, Saitama, <sup>5</sup>Department of Dermatology, University of Yamanashi, <sup>6</sup>Department of Dermatology, Shinshu University, Matsumoto, <sup>7</sup>Department of Dermatology, Shinane University Faculty of Medicine, Izumo, <sup>8</sup>Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto

# P12-02 Dual Inhibition of FAK and PYK2 Overcomes Acquired Resistance to Immune Checkpoint Inhibitors by [I-5] Suppressing the IFN-STAT1-PDL1 Pathway

O Yuto Mizuno<sup>1,2</sup>, Masanari Umemura<sup>2</sup>, Chihiro Hayashi<sup>2</sup>, Akane Nagasako<sup>2</sup>, Yoko Ino<sup>3</sup>, Yayoi Kimura<sup>3</sup>, Yukie Yamaguchi<sup>2</sup>, Yoshihiro Ishikawa<sup>1</sup>

<sup>1</sup>Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, <sup>2</sup>Cardiovascular Research Institute (CVRI), Yokohama City University Graduate School of Medicine, Yokohama, <sup>3</sup>Advanced Medical Research Center, Yokohama City University, Yokohama

# P12-03 CXCL13 and CCL21 induce tertiary lymphoid structures and enhance the efficacy of immune checkpoint inhibitors in malignant melanoma

O Maki Yoshimitsu¹, Motoki Nakamura¹, Shinji Kano¹, Tetsuya Magara¹, Hiroshi Kato¹, Aiko Sakai², Masaya Sugiyama², Masashi Mizokami³, Akimichi Morita¹

<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, <sup>2</sup>Department of Viral Pathogenesis and Controls, National Center for Global Health and Medicine, Ichikawa, <sup>3</sup>Genome Medical Sciences Project, National Center for Global Health and Medicine, Ichikawa

#### P12-04 Nucleo-cytosolic acetyl-CoA drives tumor immune evasion by epigenetically regulating PD-L1 in melanoma

[C06-02]

 ${}^{\bigcirc}$  Huina Wang, Weinan Guo, Xiuli Yi, Chunying Li

Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an

# P12-05 Decreased serum levels of IL-4 correlate with the efficacy of the PAI-1 inhibitor in patients with anti-PD-1 antibody-refractory melanoma

© Emi Yamazaki, Taku Fujimura, Manami Takahashi-Watanabe, Ryo Amagai, Yumi Kambayashi, Yoshihide Asano The Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai

### P12-06 Ribosomal protein RPS10 plays a crucial role in melanin transportation and skin pigmentation [C03-06] OMONUKA Wada Irimada 1234456 Konshi Vamasaki <sup>12</sup> Konsuka Shida Kanama Kojima <sup>3</sup> Ikuka N. Motojka <sup>3</sup> Konshi

O Moyuka Wada-Irimada<sup>1,2,3,4,5,6</sup>, Kenshi Yamasaki<sup>1,2</sup>, Kosuke Shido<sup>1</sup>, Kaname Kojima<sup>3</sup>, Ikuko N. Motoike<sup>3</sup>, Kengo Kinoshita<sup>3,4,5,6</sup>, Yoshihide Asano<sup>1</sup>

<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, <sup>2</sup>Aloop Clinic & Lab, Tokyo, <sup>3</sup>Department of Integrative Genomics, Tohoku Medical Megabank Organization, Tohoku University, Sendai, <sup>4</sup>Graduate School of Information Sciences, Tohoku University, Sendai, <sup>5</sup>Advanced Research Center for Innovations in Next-Generation Medicine, Tohoku University, Sendai, <sup>6</sup>Institute of Development, Aging and Cancer, Tohoku University, Sendai

### P12-07 Endothelial progenitors: Unlocking Tumor Vessel Normalization to Overcome Therapeutic Challenges in [C06-04] Melanoma

O Laura Sormani<sup>1</sup>, Ghazaleh Hashemi<sup>1</sup>, Haiming Li<sup>1</sup>, Chenhao Zhou<sup>1</sup>, Kwong Ching Li<sup>1</sup>, Siu Hang Chan<sup>1</sup>, Samuel Tan<sup>1</sup>, Quan Nguyen<sup>2</sup>, Edwige Roy<sup>1</sup>, Kiarash Khosrotehrani<sup>1</sup>

<sup>1</sup>The University of Queensland, Frazer Institute, Brisbane, <sup>2</sup>The University of Queensland, Institute for Molecular Biology, Brisbane

### P12-08 Single-cell Spatial Profiling: A Bridge Between Clinical Dermatopathology And Melanoma Prognostic Modeling [C06-05]

○ Nick R. Love

The Department of Dermatology, University of California at Davis, Sacramento

#### P12-09 SIRT7 Protects Melanocytes Against Ferroptosis via the SMAD3-ATF3-GPX4 Axis in Vitiligo

[C03-07] O Xiu L. Yi, Li L. Wu, Weinan Guo, Yu Q. Yang, Hao Wang, Jia X. Chen, Heng X. Zhang

Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi'an

#### P12-10 Withdrawn

[O03-10]

### P12-11 Immune cell therapy utilizing iPS cell-derived proliferative myeloid cells for subcutaneous tumor models of melanoma

O Yuki Ichigozaki¹, Toshihiro Kimura¹, Haruka Kuriyama¹, Hisashi Kanemaru¹, Azusa Miyashita¹, Rong Zhang², Yasushi Uemura², Satoshi Fukushima¹

<sup>1</sup>Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, <sup>2</sup>Division of Cancer Immunotherapy, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center (NCC), Chiba

#### P12-12 The MITF-Rho-ROCK-ECM axis regulates MAPKi effect in three-dimensional melanoma spheroids

[O03-12]

O Satoru Sugihara<sup>1</sup>, Kota Tachibana<sup>1</sup>, Jordan Kumar<sup>1</sup>, Gency Gunasingh<sup>1</sup>, Glen M Boyle<sup>2</sup>, Nikolas K. Haass<sup>1</sup> Frazer Institute, the University of Queensland, Brisbane, <sup>2</sup>QIMR Berghofer Medical Reserch Institute, Brisbane

#### P12-13 Impact of the tumour microenvironment on melanoma proliferation, invasion and therapy

[O03-13]

Robert J. Ju, Kota Tachibana, Satoru Sugihara, Jordan Kumar, Yimeng Guan, Gisella Edny, Shahla Asgharzadeh Kangachar, Samantha J. Stehbens, O Nikolas K. Haass

Frazer Institute, University of Queensland, Brisbane

#### P12-14 Establishment and Evaluation of a Novel Vitiligo Model in Hairless Mice for Therapeutic Assessment

O Ken Okamura<sup>1</sup>, Yosuke Arai<sup>1</sup>, Junnosuke Kawaguchi<sup>1</sup>, Shinji Tsukada<sup>1,2</sup>, Yuko Abe<sup>1</sup>, Yutaka Hozumi<sup>1</sup>, Tamio Suzuki<sup>1</sup>Department of Dermatology, Faculty of Medicine, Yamagata University, Yamagata, <sup>2</sup>Maruho Co., Ltd., Osaka

#### P12-15 Precision diagnostics for early melanoma detection using spatial biology and Al-guided image analysis

[O03-15]

 $\circ$  Yung-Ching Kao¹, Andrew Causer², Chenhao Zhou¹, Xiao Tan², Darren Smit¹, Katie J. Lee¹, Blake O'Brien³, Angus Collins³, Kiarash Khosrotehrani¹⁴, H. Peter Soyer¹⁴, Quan Nguyen²⁵, Mitchell S. Stark¹

<sup>1</sup>Frazer Institute, The University of Queensland, Dermatology Research Centre, Brisbane, <sup>2</sup>QIMR Medical Research Institute, Brisbane, <sup>3</sup>Sullivan Nicolaides Pathology, Brisbane, <sup>4</sup>Department of Dermatology, Princess Alexandra Hospital, Brisbane, <sup>5</sup>Institute for Molecular Bioscience, the University of Queensland, Brisbane

#### P12-16 Generation of immortalized keratinocyte lines from different ethnic backgrounds for skin biology applications

[O03-16]

○ Oliver Dreesen, Mattheus XR Foo A\*STAR Skin Research Labs, Singapore

#### P12-17 A role of CXCL14 in melanoma progression

[O03-17]

O Mengyan Li<sup>1</sup>, Sanjay Lietzau<sup>1,2</sup>, Jenny Chung<sup>1,3</sup>, Akinori Kawakami<sup>1</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, <sup>2</sup>Hannover Medical School, Hannover, <sup>3</sup>CUNY School of Medicine, New York

#### P12-18 Investigation of the effect of TRPV1 inhibitor on skin damage caused by heat

[O03-18]

O Yu Gabe¹, Keigo Kawabata¹, Miyuki Sudo², Keigo Kajiwara², Shingo Tooi², Yoshito Takahashi¹

<sup>1</sup>Biological Science Research, Kao Corporation, Odawara, <sup>2</sup>Skin Care Research, Kao Corporation, Tokyo

### P12-19 Low-dosage of imiquimod induces melanogenesis and senescence in B16F10 melanoma cells through TLR7 and p53 pathways

○ Zheng-Yi Li¹, Jeng-Jer Shieh¹,2,3

<sup>1</sup>Institute of Biomedical Sciences, National Chung Hsing University, Taichung, <sup>2</sup>Department of Education and Research, Taichung Veterans General Hospital, Taichung, <sup>3</sup>Rong Hsing Research Center for Translational Medicine, National Chung Hsing University, Taichung

#### P12-20 Investigation of IRE1 $\alpha$ signaling in the skin: connection to hyperpigmentation and aging

O Ji Young Kim, Eun Jung Lee, Shinwon Hwang, Seohyun Park, Yu Jeong Bae, Il Joo Kwon, Sang Ho Oh The Department of Dermatology, Yonsei University College of Medicine, Seoul

# P12-21 Cryosurgery Reduces Lung Melanoma Metastasis in a Mouse Model: Renewed Potential in Melanoma [O03-19] Management

O Shih-han Wang<sup>1</sup>, Ting-Ting Chen<sup>2</sup>, Cheng-Lin Wu<sup>3</sup>, Wei-Ting Liu<sup>4</sup>, Yi-Hsuan Huang<sup>5</sup>, Tak-Wah Wong<sup>2,4,6</sup>

'Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, 'Department of Biochemistry and Molecular Biology, College of Medicine, National Cheng Kung University, Tainan, 'Department of Pathology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, 'Department of Dermatology, National Cheng Kung University Hospital, Tainan, 'Department of Oncology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, 'Center of Applied Nanomedicine, National Cheng Kung University, Tainan

#### P12-22 A Modified Autologous Non-cultured Epidermal Cellular Suspension Protocol - An Australian First

[O03-20]

O Raaisa R Islam, Monisha Gupta

The Skin Hospital, Darlinghurst

#### P12-23 A novel skin chromophore lipofuscin contributing to skin sallowness

[O03-21] OBinwei Deng¹, Xi Yang¹, Kelly Dong², Jian (Richard) Cao¹, Nadine Pernodet²

<sup>1</sup>Estée Lauder Companies Research and Development, Shanghai, <sup>2</sup>Research and Development, The Estée Lauder Companies, NY

### P12-24 An ex vivo skin explant based scientific model testing photoprotection efficacy of cosmetic sunscreen products under controlled UV exposure

 $\circ$  Mukta Sachdev, Aahan Sachdev, Ritambhara KR MSCR, Bangalore

#### P12-25 A novel method for evaluating melanocyte cytotoxicity using human ex vivo skin tissue culture model

[O03-23]

O Saaya Koike<sup>1</sup>, Takako Shibata<sup>1</sup>, Kiyotaka Hasegawa<sup>1</sup>, Tamio Suzuki<sup>2</sup>

<sup>1</sup>Shiseido Co., Ltd., MIRAI Technology Institute, Yokohama, <sup>2</sup>Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata

#### P12-26 A potent reagent against UV-induced carbonylation and skin yellowness

[O03-24]

O Xi Yang<sup>1</sup>, Jian (Richard) Cao<sup>1</sup>, Nadine Pernodet<sup>2</sup>

<sup>1</sup>Estée Lauder Companies Research and Development, Shanghai, <sup>2</sup>Research and Development, The Estée Lauder Companies, NY

#### P12-27 Diphenylcyclopropenone induces ROS-mediated Apoptosis in Melanoma Cells.

O Meng-Han Shen<sup>1,2</sup>, Jeng-Jer Shieh<sup>2,3</sup>, Zheng-Yi Li<sup>2</sup>, Mao-Chia Chang<sup>2</sup>

<sup>1</sup>Department of Dermatology, Wan Fang Hospital, Taipei Medical University, Taipei, <sup>2</sup>Institute of Biomedical Sciences, National Chung Hsing University, Taichung, <sup>3</sup>Department of Education and Research, Taichung Veterans General Hospital, Taichung

### P12-28 Therapeutic implications of circadian clock-enhancing small molecule on aging pigmentation in UVB-induced senescence model

○ Jiyun Lim¹², Jung Min Park¹, Hyun Mo Lee¹, Yoon Jae Kim¹, Jun Hyuk Cho¹, Soo Hong Seo¹, Hyo Hyun Ahn¹, Im Joo Rhyu², Jong-Wha Jung³, Gi Hoon Son⁴, Dai Hyun Kim¹²

<sup>1</sup>Department of Dermatology, Korea University College of Medicine, Seoul, <sup>2</sup>Department of Anatomy, Korea University College of Medicine, Seoul, <sup>3</sup>Research Institute of Pharmaceutical Sciences, College of Pharmacy, Kyungpook National University, Daegu, <sup>4</sup>Department of Biomedical Science, Korea University College of Medicine, Seoul

#### P12-29 Anti-glycation and anti-skin sallowness effects of Siegesbekia Orientalis extract on skin models

[O03-25]

O Jian (Richard) Cao<sup>1</sup>, Xi Yang<sup>1</sup>, Binwei Deng<sup>1</sup>, Nadine Pernodet<sup>2</sup>

<sup>1</sup>Estée Lauder Companies R&D, Shanghai, <sup>2</sup>R&D, The Estée Lauder Companies, NY

#### P12-30 Anti-glycation and tyrosinase inhibition effects of UP302

O Nora Ruth<sup>1</sup>, Jaimie Jerome<sup>1</sup>, Neelam Muizzuddin<sup>1</sup>, Ewa Markiewicz<sup>2</sup>, Olusola Idowu<sup>2</sup>, Tom Mammone<sup>1,3</sup>

<sup>1</sup>Estée Lauder Companies Research and Development, New York, <sup>2</sup>HexisLab Ltd, Newcastle upon Tyne, <sup>3</sup>Clinique Research Laboratories. New York

#### P12-31 Unravelling the effects of protein glycation on skin sallowness: an experimental and simulation approach

[O06-01]

○ Zhen Li¹, Yuping Su², Xi Yang¹, Yu Lin³, Senping Fan², Huanjun Zhou¹, Hao Long², Jian (Richard) Cao¹, Tom Mammone³, Nadine Pernodet³

<sup>1</sup>The Estée Lauder Companies Innovation (China), Shanghai, <sup>2</sup>School of Electronic Science and Engineering (National Model Microelectronics College) Xiamen University, Xiamen, <sup>3</sup>R&D, The Estée Lauder Companies, NY

### Category 13 (P13): Skin, Appendages, and Stem Cell Biology

#### P13-01 Epidermal keratinocyte progenitors transiently emerge as ectomesenchyme from non-neural ectoderm

[**I-6**]

O Asaka Miura<sup>12,3</sup>, Yuki Kobayashi<sup>1</sup>, Yoshikazu Hirose<sup>1</sup>, Yuya Ouchi<sup>2</sup>, Tomomi Kitayama<sup>2</sup>, Eiichi Takaki<sup>2</sup>, Ryoma Yamamoto<sup>2</sup>, Sho Yamazaki<sup>2</sup>, Machika Kawamura<sup>2</sup>, Kotaro Saga<sup>1</sup>, Takashi Shimbo<sup>1</sup>, Manabu Fujimoto<sup>3</sup>, Katsuto Tamai<sup>1</sup>

<sup>1</sup>Department of Stem Cell Therapy Science, Osaka University Graduate School of Medicine, Suita-city, <sup>2</sup>StemRIM Institute of Regeneration-Inducing Medicine, Suita-city, <sup>3</sup>Department of Dermatology, Osaka University Graduate School of Medicine, Suita-

# P13-02 Induction of tissue-specific premature stem cell aging promotes senescence-like phenotypes in remote multiple [C03-03] organs

O Yasuaki Ikuno<sup>1,2</sup>, Yukie Kande<sup>2</sup>, Ayano Narumoto<sup>2</sup>, Dai Ihara<sup>2</sup>, Noriki Fujimoto<sup>1</sup>, Hayato Naka-Kaneda<sup>2</sup>

<sup>1</sup>Department of Dermatology, Shiga University of Medical Science, Otsu, <sup>2</sup>Department of Anatomy, Shiga University of Medical Science, Otsu

#### P13-03 NKG2D activity in the course of alopecia areata is influenced by soluble MICA

[C03-01]

O Taisuke Ito, Reiko Kageyama, Takahiro Suzuki, Toshiharu Fujiyama, Tetsuya Honda Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu

### P13-04 Discovery of human dermal papilla cell surface markers for living cell isolation using a novel culture condition with WNT and FGF activation

○ Reina Hayakawa¹, Ryo Takahashi², Masahiro Fukuyama¹, Aki Tsukashima¹, Momoko Kimishima¹, Yoshimi Yamazaki¹, Manabu Ohyama¹²

<sup>1</sup>Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, <sup>2</sup>Flow Cytometry Core Facility, Kyorin University Graduate School of Medicine, Tokyo

#### P13-05 Cutaneous TRPV1 innervations trigger a macrophage and fibroblast containing pathway to activate hair growth

○ Tamar L. Ben-Shaanan¹²², Konrad Knopper¹², Lihui Duan¹², Ruiqi Liu³, Hanna Taglinao¹², Ying Xu¹², Jinping An¹², Maksim V. Plikus³, Jason G. Cyster¹²

<sup>1</sup>Department of Microbiology and Immunology, University of California, San Francisco, San Francisco, <sup>2</sup>Howard Hughes Medical Institute, San Francisco, <sup>3</sup>Department of Developmental and Cell Biology, University of California, Irvine

#### P13-06 A Multi-Omics Approach to create a Human Hair Atlas for healthy and AGA models

[C03-04]

O Carlos Clavel

A\*STAR Skin Research Labs, Singapore

### P13-07 Unveiling molecular secrets: a comparative genetic study of the nail unit, skin, hair follicle and onychomatricoma

O Taemin Lee, Joonho Shim, Ji Hye Park, Jong Hee Lee, Dongyoun Lee

Department of Dermatology, Samsung Medical Center, Sungkyunkwan University, Seoul

### P13-08 Characterization and functional analysis of dermal perivascular adipose tissue (PVAT) using single-nucleus RNA sequencing

 $\circ$  Riko Takimoto-Ito, Satoshi Nakamizo, Kenji Kabashima

The Department of Dermatology, Kyoto University graduate school of Medicine, Kyoto

### P13-09 An immune-adipocyte axis elicits hair regeneration by promoting adipocyte-hair follicle stem cell metabolic communication

○ Kang-Yu Tai¹, Chih-Lung Chen², Wei-Hung Wang², Sabrina Mai-Yi Fan³, Sung-Jan Lin⁴

<sup>1</sup>Genome and Systems Biology Degree Program, Academia Sinica and National Taiwan University, Taipei, <sup>2</sup>Department of Biomedical Engineering, National Taiwan University, Taipei, <sup>3</sup>Department of Medical Research, National Taiwan University Hospital, Taipei, <sup>4</sup>Department of Dermatology, National Taiwan University Hospital and College of Medicine, Taipei

#### P13-10 Elucidating the role of anti-aging matrix Fibulin 7 in skin inflammatory disease psoriasis

[C11-06]

○ Erna Raja¹, Jun Tsunezumi², Karolina Edlund³, Aiko Sada⁴, Hiromi Yanagisawa¹

<sup>1</sup>Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance (TARA), University of Tsukuba, Tsukuba, <sup>2</sup>Department of Pharmacy, Kyushu University of Health and Welfare, Miyazaki, <sup>3</sup>Leibniz Research Centre for Working Environment and Human Factors, University of Dortmund, Dortmund, <sup>4</sup>Medical Institute of Bioregulation, Kyushu University, Fukuoka

#### P13-11 Multiple fetal fibroblast subpopulations differently contribute to skin architecture development

[C11-07]

O Noriko Morioka<sup>1,2</sup>, Clarisse Ganier<sup>2</sup>, Fiona M Watt<sup>2,3</sup>

<sup>1</sup>Frontier Research Center, POLA Chemical Industries, Inc., Yokohama, <sup>2</sup>Centre for Gene Therapy and Regenerative Medicine, King's College London, London, <sup>3</sup>Directors' Unit, EMBL, Heidelberg

#### P13-12 Chemical Modulation of mitochondria-ER contacts: Effects in Melanogenesis

[O06-02]

○ Federica Dal Bello¹, Natasha Kaar¹, Sara Schiavon¹, Emad Norouzi Esfahani¹, Tomas Knedlik¹, Alessio Gianelle², Florine Grudet¹, Paula Rebelo¹, Giovanni Marzaro³, Adriana Chilin³, Marta Giacomello¹.⁴

<sup>1</sup>Department of Biology, University of Padova, Padova, <sup>2</sup>Sezione INFN di Padova, Padova, <sup>3</sup>Department of Pharmaceutical and Pharmacological Sciences, University of Padova, Padova, <sup>4</sup>Department of Biomedical Sciences, University of Padova, Padova

# P13-13 Histological characterization and transcriptomic analysis of acquired idiopathic generalized anhidrosis post corticosteroid pulse therapy

O Reiko Kageyama<sup>1</sup>, Keiko Sakamoto<sup>1,2</sup>, Satoshi Nakamizo<sup>3</sup>, Kenji Kabashima<sup>3</sup>, Keisuke Nagao<sup>2</sup>, Tetsuya Honda<sup>1</sup>

<sup>1</sup>Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, <sup>2</sup>Cutaneous Leukocyte Biology Section, Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, <sup>3</sup>Department of Dermatology, Kyoto University, Kyoto

#### P13-14 Carbonylated proteins elevate ROS levels in fibroblasts through RAGE

[O06-04]

O Yumiko Yamawaki, Yuri Okano, Hitoshi Masaki

CIEL CO., LTD., Sagamihara

# P13-15 Three-dimensional ultra-high frequency ultrasound non-invasively visualizes pathological changes predicting the prognosis of alopecia areata

○ Tatsuro Iwasaki¹², Misaki Kinoshita-Ise¹, Taiichiro Ida³, Masayuki Amagai², Manabu Ohyama¹

<sup>1</sup>Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, <sup>2</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, <sup>3</sup>Advantest Corporation, Saitama

#### P13-16 Possible role of spinal semaphorin 3A in itch and pain perceptions

[O06-06]

O Motoki Morita<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Yayoi Kamata<sup>1</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Chiba

#### P13-17 High-throughput workflow to study Melanosome morphology

[O06-07]

O Emad Norouzi Esfahani, Marta Giacomello

The Department of Biology, University of Padova, Padova

#### P13-18 A statistical model of the succession character of the scratching bouts evoked by itch sensation in mice

[O06-08]

O Kotaro Honda<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

#### P13-19 Mechanism of histamine production and secretion by sweat gland cells

[O06-09]

○ Hayato Mizuno¹, Shunsuke Takahagi¹,², Kazue Uchida¹, Kaori Ishii¹, Akio Tanaka¹

<sup>1</sup>Department of Dermatology, Institute of Biomedical & Health Sciences, Hiroshima University, Hiroshima, <sup>2</sup>Division of Dermatology, JA Hiroshima General Hospital, Hiroshima

#### P13-20 Mitophagy regulation restores mitochondrial function in the dermal fibroblasts and preserves skin youthfulness

[O06-10]

○ Tingyan Mi¹, Binwei Deng¹, Jian (Richard) Cao¹, Nadine Pernodet²

<sup>1</sup>Research and Development, The Estée Lauder Companies, Shanghai, <sup>2</sup>Research and Development, The Estée Lauder Companies, NY

#### P13-21 Uncover the critical environmental risk factors to pore visibility with an Al approach

[O06-11]

○ Hang Xie¹, Huanjun Zhou¹, Jin Yan Song², Zitao Ma³, Tianhao Li³, Xiao Long³, Danning Zeng¹, Xiaodi Wang¹, Su Shi⁴, Yulan Qu¹, Yajun Luo¹, Haidong Kan⁴, Jian (Richard) Cao¹, Nadine Pernodet⁵

<sup>1</sup>Estée Lauder Companies Innovation R&D (China) Co., Ltd., Shanghai, <sup>2</sup>Hangzhou C2H4 Internet Technology Co., Ltd., Hangzhou, <sup>3</sup>Department of Plastic and Reconstructive Surgery, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, <sup>4</sup>School of Public Health, Key Lab of Public Health Safety of the Ministry of Education and NHC Key Lab of Health Technology Assessment, Fudan University, Shanghai, <sup>5</sup>R&D, The Estée Lauder Companies, Melville, NY

#### P13-22 Role of Cutaneous Neuroinflammation and Potential Dorsal Root Ganglion in Rosacea

[O06-12]

O Sang Gyu Lee<sup>1,2</sup>, Dawoon Han<sup>1</sup>, Jihee Kim<sup>2</sup>

<sup>1</sup>Department of Dermatology, Yonsei University college of Medicine, Seoul, <sup>2</sup>Department of Dermatology, Yonsei University college of Medicine, Yongin

#### P13-23 Functional expression of TRP channels in human eccrine sweat glands

O Qianwen Luo¹, Hiroko Kato¹, Takeshi Hara¹², Atsushi Tanemura³, Yukinobu Nakagawa³, Hiroyuki Murota⁴, Makoto Tominaga⁵<sup>5,5,7,8</sup>, Kiyotoshi Sekiguchi⁰, Fumitaka Fujita¹²

<sup>1</sup>Graduate School of Pharmaceutical Sciences, Osaka University, Suita, <sup>2</sup>Mandom Corporation, Osaka, <sup>3</sup>Graduate School of Medicine, Osaka University, Suita, <sup>4</sup>Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, <sup>5</sup>Exploratory Research Center on Life and Living Systems National Institutes of Natural Sciences, Okazaki, <sup>6</sup>National Institute for Physiological Sciences, National Institutes of Natural Sciences, Okazaki, <sup>7</sup>Department of Physiological Sciences, SOKENDAI, (The Graduate University for Advanced Studies), Okazaki, <sup>8</sup>Nagoya Advanced Research and Development Center, Nagoya City University, Nagoya, <sup>9</sup>Division of Matrixome Research and Application, Institute for Protein Research, Osaka University, Suita

#### P13-24 Age-dependent effects of psychological stress on itch sensitivity in mice: improvement by serotonin

[O06-13]

O Qiaofeng Zhao<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Sumika Toyama<sup>1</sup>, Kenji Takamori<sup>1,2</sup>

<sup>1</sup>Juntendo Itch Research Center, Institute for Environmental and Gender-Specific Medicine, Juntendo University, Tokyo, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

### P13-25 Comparative Analysis of CAII and GCDFP-15 Expression in Sweat Glands of Acquired Idiopathic Generalized Anhidrosis

O Tomoki Sakiyama, Satoshi Nakamizo, Kenji Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto

#### P13-26 Involvement of Macrophage in the Pathogenesis of Acquired Idiopathic Generalized Anhidrosis

[O06-14]

O Chie Uchida, Tadatsune Iida, Takeshi Namiki, Naoko Okiyama

Department of Dermatology, Institute of Science Tokyo, Tokyo

#### P13-27 The effects of the CCHCR1 variant on pathogenesis of alopecia areata

O Phu C. Nguyen, Nagisa Yoshihara, Shigaku Ikeda, Rei Watanabe

Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo

#### P13-28 Involvement of Catecholamines in the Augmentation of Sebum Production in Hamster Sebocytes

O Koji Mizuno, Toshikazu Koiwai, Takashi Sato

Department of Biochemistry, Tokyo University of Pharmacy and Life Sciences, Hachioji

#### P13-29 Unraveling mechanical stiffness variations in human skin layers

○ Wan-Yu Chi<sup>1,2</sup>, Gang-Hui Lee<sup>2</sup>, Shyh-Jou Shieh<sup>2,3</sup>, Chao-Chun Yang<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>International Center for Wound Repair & Regeneration, National Cheng Kung University, Tainan, <sup>3</sup>Division of Plastic and Reconstructive Surgery, Department of Surgery, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan

#### P13-30 Potential of SCX as a novel anti-aging molecule for skin

○ Tsuyoshi Ikeda, Takahito Nakai, Hideki Nishiura

TOA Inc. (ex/Nihon Kolmar Co., Ltd.), Osaka

#### P13-31 Neutrophil elastase affects dermal fibroblasts themselves in various ways

O Ami Seino, Mayumi Shishido, Takahiro Isoda, Yuko Saitou POLA CHEMICAL INDUSTRIES, INC., Yokohama, Kanagawa

#### P13-32 Development of porous microneedle array patches (MAP) as a tool for interstitial fluid (ISF) extraction

○ Yosuke Koma¹, Yuko Tsuruma¹, Kensuke Tamura¹, Jongho Park², Tatsuki Iinuma³, Madoka Kage³, Shigenori Aoki¹, Shinya Takyu¹, Beomjoon Kim², Yutaka Takagi³

<sup>1</sup>LINTEC Corporation, Tokyo, <sup>2</sup>Institute of Industrial Science, The University of Tokyo, Tokyo, <sup>3</sup>Pharmaceutical Sciences, Josai University, Saitama

#### P13-33 Expression and functional analysis of endomorphins in peripheral tissues

○ Eriko Komiya¹², Kotaro Honda¹, Sumika Toyama¹, Yayoi Kamata¹, Makino Watanabe², Akira Minami², Mitsutoshi Tominaga¹, Kenji Takamori¹³

<sup>1</sup>Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Graduate School of Medicine, Juntendo University, Urayasu, <sup>2</sup>Department of Functional Morphology, Faculty of Pharmacy, Juntendo University, Urayasu, <sup>3</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

### P13-34 Effect of Afzelin on inflammation and lipogenesis in Particulate matter-stimulated C. acnes-treated SZ95 sebocytes

○ Ji Yeon Hong¹, Yonghee Choi¹, Yoon Jin Roh¹, Joon Seok¹, Mi-Kyung Lee², Kui Young Park¹

<sup>1</sup>Department of Dermatology, Chung-Ang University Hospital, Chung-Ang University College of Medicine, Seoul, <sup>2</sup>Department of Laboratory Medicine, Chung-Ang University Hospital, Chung-Ang University College of Medicine, Seoul

### Category 14 (P14): Tissue Regeneration and Wound Healing

#### P14-01 Transforming growth factor- $\beta$ signaling-mediated wound healing is required hair follicle neogenesis

[111-4]

O Tatsuya Ogawa, Chae Ho Lim, Olivia Yeroushalmi, Priya Marella, Soung Hoon Lee, Annette Kaminaka, Mayumi Ito The Ronald O. Perelman Department of Dermatology, NYU Grossman School of Medicine, New York

# P14-02 Comprehensive analyses of single cell-transcriptomic transition disclose precise mesenchymal activation for regenerating necrotic skingraft

○ Yoshikazu Hirose¹, Asaka Miura¹, Yuki Kobayashi², Yuya Ouchi², Tomomi Kitayama², Takashi Shimbo¹, Akio Tanaka³, Manabu Fujimoto⁴, Katsuto Tamai¹.²

<sup>1</sup>Department of Stem Cell Therapy Science, Graduate School of Medicine, Osaka University, Osaka, <sup>2</sup>StemRIM Inc., Osaka, <sup>3</sup>Department of Dermatology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, <sup>4</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka

#### P14-03 Collective cell migration dynamics of stratified epithelia under spatial confinement

[C04-02]

O Takuma Nohara¹, Ken Natsuga¹, Yosuke Mai¹, Junichi Kumamoto², Masaharu Nagayama², Tsukasa Oikawa³, Hideyuki Ujiie¹¹Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, ³Research Institute for Electronic Science, Hokkaido University, Sapporo, ³Department of Molecular Biology, Graduate School of Medicine, Sapporo

### P14-04 Trehalose promotes wound healing *in vitro* by enhancing the migration of human keratinocytes and VEGF [C04-03] secretion

O Keigo Taneda¹, Xiuju Dai¹, Kenji Watanabe², Teruko Tsuda¹, Hideki Mori¹, Ken Shiraishi¹, Yoichi Mizukami², Yasuhiro Fujisawa¹, Iun Muto¹

<sup>1</sup>Department of Dermatology, Ehime University Graduate School of Medicine, Toon, <sup>2</sup>Institute of Gene Research, Yamaguchi University Science Research Center, Yamaguchi

#### P14-05 Rapid Re-Epithelialization and Delayed Collagen Production in Adult Skin Micro-Wounds

[C04-04]

Chen H Kuan, ○ Sung-Jan Lin

Division of Plastic Surgery, Department of Surgery, National Taiwan University Hospital, Taipei

### P14-06 Apoptotic and necroptotic keratinocytes contribute to fibrosis in chronic graft-versus-host disease via the production of TGF-β

O Karin Endo<sup>1</sup>, Yuki Ichimura<sup>1,2</sup>, Takashi Matsui<sup>1</sup>, Risa Konishi<sup>1,3</sup>, Tadatsune Iida<sup>1</sup>, Takeshi Namiki<sup>1</sup>, Naoko Okiyama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo, Tokyo, <sup>2</sup>Division of Rheumatology, Department of Internal Medicine, Tokyo Women's Medical University, Tokyo, <sup>3</sup>Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba

### P14-07 Effects of antimicrobial peptide human B-defensin-3 on the production of intercellular adhesion molecule-1 in human dermal fibroblasts

○ Ying Zhangwei¹, Yoshie Umehara¹, Ko Okumura¹, Hideoki Ogawa¹, François Niyonsaba¹.²

<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University School of Medicine, Tokyo, <sup>2</sup>Faculty of International Liberal Arts, Juntendo University, Tokyo

#### P14-08 A deep learning for estimation of DESIGN-R 2020 grading score in patients with pressure ulcer

#### [O06-17]

O Takatoshi Shimauchi<sup>1</sup>, Tomoo Inubushi<sup>2</sup>, Shinsuke Nakazawa<sup>1</sup>, Etsuji Yoshikawa<sup>2</sup>, Taisuke Ito<sup>1</sup>, Yoshiki Tokura<sup>1</sup>, Tetsuya Honda<sup>1</sup> Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, <sup>2</sup>Central Research Laboratory, Hamamatsu Photonics K.K., Hamamatsu

#### P14-09 Dysfunction of hemidesmosomes facilitates keratinocyte migration during wound healing

O Atsuko Kimura, Yasushi Matsuzaki, Shogo Yao, Daisuke Sawamura, Eijiro Akasaka

The Department of Dermatology, University of Hirosaki, Hirosaki

#### P14-10 Investigating the Role of Piezo1 in Keloids Linked to Mechanical Stretch

○ Seoyoon Ham<sup>1</sup>, Joohee Lee<sup>1</sup>, Won Jai Lee<sup>2,3</sup>, Jin Woong Jung<sup>1</sup>, Ju Hee Lee<sup>1,2</sup>, Young In Lee<sup>1,2</sup>

<sup>1</sup>Department of Dermatology & Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul, <sup>2</sup>Scar Laser and Plastic Surgery Center, Yonsei Cancer Hospital, Seoul, <sup>3</sup>Department of Plastic Surgery, Yonsei University College of Medicine, Seoul

### P14-11 Exosomes Combined with Polymer Dots Dressings and 755 nm picosecond laser accelerate wound Healing in Nude Mice

O Yen-Jen Wang<sup>1</sup>, Chang-Cheng Chang<sup>2</sup>

<sup>1</sup>Department of dermatology, MacKay Memorial Hospital, Taipei, <sup>2</sup>Division of plastic and reconstructive surgery, China Medical University Hospital, Taipei

### P14-12 Epalrestat, an aldose reductase inhibitor, attenuates skin fibrosis and vascular damage in bleomycin-induced scleroderma mouse model

O Takenao Chino¹, Miku Imai¹, Hiroshi Kasamatsu¹, Takumi Hasegawa¹, Kentaro Nishimura¹, Saori Uchida¹, Shinichiro Niwa², Noritaka Oyama¹, Minoru Hasegawa¹

<sup>1</sup>The Department of Dermatology, University of Fukui, Fukui, <sup>2</sup>Link Genomics, Inc., Tokyo

#### P14-13 Observation of fine three-dimensional structure of cartilage

O Hideki Mori¹, Ryosuke Kawakami², Teruko Tsuda³, Kazuki Yatsuzuka³, Satoshi Yoshida³, Jun Muto³, Asami Tozawa¹, Ken Shiraishi³, Kenshi Imamura², Yasuhiro Fujisawa³

<sup>1</sup>The Department of Dermatology, Division of Plastic and Reconstructive surgery, Ehime University Graduate School of Medicine, Toon, <sup>2</sup>The Department of Molecular Medicine for Pathogenesis, Ehime University Graduate School of Medicine, Toon, <sup>3</sup>The Department of Dermatology, Ehime University Graduate School of Medicine, Toon

## P14-14 A Complex of Three Marine Extracts Demonstrate "Retinol-like" Anti-Aging Properties without Acute Inflammatory Responses

○ Jaime Emmetsberger<sup>1,2</sup>, Annette Ortiz<sup>2</sup>

<sup>1</sup>La Mer, Max Huber Research Labs, New York, <sup>2</sup>Research & Development, The Estée Lauder Companies, NY

#### P14-15 A Split-Face Pilot Study of Hybrid (CO2 and 1570nm) Laser versus CO2 Laser in Acne Scars

#### [O06-19]

O Manoj K Pawar

Department of Dermatology, Chic Clinic, Muscat

#### P14-16 Integrating Nrf-2 Technology with Collagen Boosters to Enhance Types I, III, and V Collagen Synthesis

O Jacqueline Trivero<sup>1</sup>, Krystle Corallo<sup>1</sup>, Nadine Pernodet<sup>1,2</sup>

<sup>1</sup>Estée Lauder Inc., R&D, NY, <sup>2</sup>SUNY, NY

### Category 15 (P15): Translational Studies

#### P15-01 Proteomic Insights into Sex-Specific Pathways in Androgenetic Alopecia and Female Pattern Hair Loss

[I-7]

 Sasin Charoensuksira¹, Jitlada Meephansan¹, Raksanawan Vanichvongvan¹, Poorichaya Somparn², Pattarin Tangtanatakul Tangtanatakul³⁴, Poonkiat Suchonwanit⁵

'Division of Dermatology, Chulabhorn International College of Medicine, Thammasat University, Pathum Thani, 'Center of Excellence in Systems Biology, Faculty of Medicine, Chulalongkorn University, Bangkok, 'Department of Transfusion Medicine and Clinical Microbiology, Faculty of Allied Health Sciences, Chulalongkorn University, Bangkok, 'Center of Excellence in Immunology and Immune-mediated diseases, Department of Microbiology, Chulalongkorn University, Bangkok, 'Division of Dermatology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok

#### P15-02 [C10-07]

#### Circulating tumor DNA detection during immunotherapy predicts progression in Merkel cell carcinoma

○ Tomoko Akaike¹, Daniel S. Hippe², Song Y. Park¹, Paul Nghiem¹², Lisa C. Zaba³

<sup>1</sup>Department of Dermatology, University of Washington School of Medicine, Seattle, <sup>2</sup>Fred Hutch Cancer Center, Seattle, <sup>3</sup>Department of Dermatology, Stanford University School of Medicine, Palo Alto

#### P15-03 [C04-06]

#### Key mediators of the IL-6 subfamily in hidradenitis suppurativa

○ Chia Bao Chu¹.², Chao Chun Yang¹, Shaw Jenq Tsai³

<sup>1</sup>Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, <sup>2</sup>Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, <sup>3</sup>National Chung Cheng University, Chiayi

#### P15-04 [C04-07]

### Blocking IL-17A, not IL-17F, Ameliorates Systemic Amyloidosis, and Both IL-17A and IL-17F Reduce Arteriosclerosis in Inflammatory Skin Mouse

O Takehisa Nakanishi¹, Shohei Iida¹, Masako Ichishi², Makoto Kondo¹, Mai Nishimura¹, Ayaka Ichikawa¹, Yoshiaki Matsushima¹, Yoichiro Iwakura³, Masatoshi Watanabe³, Keiichi Yamanaka¹

<sup>1</sup>Department of Dermatology, Mie University Graduate School of Medicine, Tsu, <sup>2</sup>Department of Oncologic Pathology, Mie University Graduate School of Medicine, Tsu, <sup>3</sup>Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo

#### P15-05

#### Distinct gut microbiome signatures of complete responders to omalizumab in chronic spontaneous urticaria

O Yung-Tsu Cho, Chia-Yu Chu

Department of Dermatology, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei

### P15-06 [C02-07]

#### Air pollution: The Hidden Connection to Microbiome Imbalance and Barrier Dysfunction

Suphagan Boonpethkaew<sup>1,2</sup>, Jitlada Meephansan<sup>1,3</sup>, Sasin Charoensuksira<sup>1</sup>, Punyaphat Sirithanabadeekul<sup>1,3</sup>,
 Chutinan Chueachavalit<sup>1</sup>, Sunchai Payungporn<sup>4</sup>

<sup>1</sup>Division of Dermatology, Chulabhorn International College of Medicine, Thammasat University, Pathum Thani, <sup>2</sup>Thammasat University, Pattaya Campus, Chonburi, <sup>3</sup>BDMS Health Research Center, Bangkok Dusit Medical Services PLC., Bangkok, <sup>4</sup>Research Unit of Systems Microbiology, Department of Biochemistry, Faculty of Medicine, Chulalongkorn University, Bangkok

### P15-07 [O06-20]

### Randomized trial of a pilot study to evaluate Spincare for wound healing in Recessive Dystrophic Epidermolysis Bullosa patients

O Yuri Ikeda, Ricardo Villanueva Gaona, Jenny Deng, Pirunthan Pathmarajah, Jean Y Tang

The Department of Dermatology, Stanford University, Palo Alto, California

#### P15-08 Brodalumab modulates molecular expression in psoriatic skin: the ESPRIT study

o Akimichi Morita¹, James G. Krueger², Chiharu Tateishi³, Eisaku Ogawa⁴, Koji Masuda⁵, Yukie Yamaguchi⁴, Sandra Garcet², Hong Hur², Naomi Shishido², Mona Uchida-Yamada², Yasumasa Kanai²

<sup>1</sup>Nagoya City University Graduate School of Medical Sciences, Nagooya, <sup>2</sup>The Rockefeller University, New York, <sup>3</sup>Osaka Metropolitan University Graduate School of Medicine, Osaka, <sup>4</sup>Shinshu University School of Medicine, Matsumoto, <sup>5</sup>Kyoto Prefectural University of Medicine, Kyoto, <sup>6</sup>Yokohama City University School of Medicine, Yokohama, <sup>7</sup>Medical Affairs, Kyowa Kirin Co., Ltd., Tokyo

#### P15-09 [O06-21]

#### A role of spinal cholecystokinin-2 receptor in mechanical alloknesis

O Mitsutoshi Tominaga¹, Kotaro Honda¹, Tomohiro Tobita¹, Eriko Komiya¹², Masafumi Yokota¹, Motoki Morita¹, Masaru Kurosawa¹, Sumika Toyama¹, Qiaofeng Zhao¹, Ying Zuo¹, Mao Hotta¹, Nanami Tanemoto¹, Miho Shiratori-Hayashi¹³, Atsuko Kamo⁴, Kenji Takamori¹⁵

'Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Urayasu, 'Department of Functional Morphology, Faculty of Pharmacy, Juntendo University, Urayasu, 'Department of Molecular and Systems Pharmacology, Faculty of Pharmacy, Juntendo University, Urayasu, 'Laboratory of Clinical Pathophysiology, Juntendo University Graduate School of Health Care and Nursing, Urayasu, 'Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu

#### P15-10

#### Increased CXCL10 and CXCR3 expression in pain and itch cutaneous neurofibroma

[**O06-22**] O Trang Q. T. Pham<sup>1</sup>, Hao J. Weng<sup>1,3,4,5</sup>, Chung P. Liao<sup>1,2</sup>

<sup>1</sup>International Ph.D. Program in Cell Therapy and Regenerative Medicine, College of Medicine, Taipei Medical University, Taipei, <sup>2</sup>Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taipei, <sup>3</sup>Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, <sup>4</sup>Department of Dermatology, Taipei Medical University-Shuang Ho Hospital, New Taipei, <sup>5</sup>Department of Dermatology, School of Medicine, College of Medicine, Taipei Medical University, Taipei

#### P15-11 EGF suppresses eczema in the NC/Tnd mouse model

#### [O06-23]

ORyo Muko¹, Helen Williams², Gurdeep Singh², Hiroshi Matsuda³, Joanne L Pennock², Peter D Arkwright², Akane Tanaka¹³
¹Institute of Global Innovation Research, Tokyo University of Agriculture & Technology, Tokyo, ²Lydia Becker Institute of Immunology and Inflammation, University of Manchester, Manchester, ³Laboratories of Comparative Animal Medicine, Tokyo University of Agriculture & Technology, Tokyo

### P15-12 Characterization of 2 distinct biomarker-defined endotypes in Japanese adult atopic dermatitis patients with moderate to severe disease

O Victoria Serelli-Lee<sup>1</sup>, Akichika Ozeki<sup>1</sup>, Christoph Preuss<sup>2</sup>, Robert J. Benschop<sup>2</sup>, Hitoe Torisu-Itakura<sup>1</sup>, Takashi Matsuo<sup>1</sup>, Ionathan T. Sims<sup>2</sup>

<sup>1</sup>Eli Lilly Japan K.K., Kobe, <sup>2</sup>Eli Lilly and Company, Indianapolis

#### P15-13 Spatial Transcriptomic Profiling Identifies Distinct Molecular Endotypes in Atopic Dermatitis-Psoriasis Overlap

○ Seon-Pil Jin<sup>1,2,3</sup>, Hyo Jeong Nam<sup>4</sup>, Yun Jung Huh<sup>5</sup>, Hyun Je Kim<sup>4,6,7</sup>, Jeong Eun Kim<sup>5,8</sup>

<sup>1</sup>Department of Dermatology, Seoul National University Hospital, Seoul, <sup>2</sup>Department of Dermatology, Seoul National University College of Medicine, Seoul, <sup>3</sup>Institute of Human-Environmental Interface Biology, Medical Research Center, Seoul National University, Seoul, <sup>4</sup>Department of Biomedical Sciences, Seoul National University Graduate School, Seoul, <sup>5</sup>Department of Dermatology, Hanyang University College of Medicine, Hanyang University Hospital, Seoul, <sup>6</sup>Department of Microbiology and Immunology, Seoul National University College of Medicine, Seoul, <sup>7</sup>Genomic Medicine Institute, Medical Research Center, Seoul National University, Seoul, <sup>8</sup>Hanyang Institute of Bioscience and Biotechnology, Hanyang University, Seoul

### P15-14 Simple, minimally invasive evaluation of inflammatory biomarkers in psoriasis via microneedle-based plasmonic fluor analysis

○ Dai Hyun Kim¹, Hyun Mo Lee¹, Sungjae Yoo², Jung Min Park¹, Jiyun Lim¹³, Yoon Jae Kim¹, Jun Hyuk Cho¹, Soo Hong Seo¹, Hyo Hyun Ahn¹, Sang Ihn Han²

<sup>1</sup>Department of Dermatology, Korea University College of Medicine, Seoul, <sup>2</sup>Biomaterials Research Center, Biomedical Research Division, Korea Institute of Science and Technology (KIST), Seoul, <sup>3</sup>Department of Anatomy, Korea University College of Medicine, Seoul

### P15-15 Individual Transcriptomic Profiling as a Determinant of Therapeutic Response to Patients with Atopic Dermatitis in Taiwan

○ Tom Chan, Chung-Han Chen, Yea-Ting Lu, Wen-Li Huang, Wen-Yuan Chang, Yung-Tsu Cho, Chia-Yu Chu Department of Dermatology, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei

### P15-16 Development of Artificial intelligence (AI)-assisted skin cancer diagnosis support software using smartphones for Koreans

 $^{\circ}$  Dae-Lyong Ha, Nam Gyoung Ha, Weon Ju Lee

Department of Dermatology, School of Medicine, Kyungpook National University, DAEGU

#### P15-17 Applications of Hyperspectral Imaging Engineering for Computer-Aided Detection of Skin Cancer

○ Yu-Ping Hsiao<sup>1,2</sup>, Hsiang-Chen Wang<sup>3,4,5</sup>

<sup>1</sup>Department of Dermatology, Chung Shan Medical University Hospital, Taichung, <sup>2</sup>School of Medicine, Chung Shan Medical University, Taichung, <sup>3</sup>Department of Mechanical Engineering, National Chung Cheng University, Chia Yi, <sup>4</sup>Department of Medical Research, Dalin Tzu Chi General Hospital, Chia Yi, <sup>5</sup>Technology Development, Hitspectra Intelligent Technology Co., Ltd., Kaohsiung

#### P15-18 A Novel Facial Night Cream with Marine Complex and Macrocystis Pyrifera Ferment Delivers Rapid and Long-Term Benefits to Aging Appearances

 ${\small \circ Lisa\ Di\ Natale^{12},\ Xiaomin\ Zhao^3,\ Suyu\ Wang^3,\ Parisi\ Michelle^2,\ Lisa\ Schmidt^2,\ Uma\ Santhanam^{1,2}}$ 

<sup>1</sup>La Mer, Max Huber Research Labs, New York, <sup>2</sup>Research & Development, The Estée Lauder Companies, NY, <sup>3</sup>APAC Innovation Lab, The Estée Lauder Companies, Shanghai

### Late Breaking Abstract

### L-01 OX40/OX40L axis associates with atopic skin inflammation through impairing IL-10 production in regulatory T [LO-01] cells

O Kazuhiko Yamamura¹², Mika Murai-Yamamura¹, Sandra Garcet³, Dante Dahabreh⁴, Juana Gonzalez³, Shunsuke Miura⁵, Hong Beom Hur³, Xuan Li³, Yael Renert-Yuval³, Yeriel Estrada⁴, Tali Czarnowicki³, Takeshi Nakahara¹², James G. Krueger³, Emma Guttman-Yassky⁴

<sup>1</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, <sup>2</sup>Research and Clinical Center for Yusho and Dioxin, Kyushu University, Fukuoka, <sup>3</sup>Laboratory of Investigative Dermatology, The Rockefeller University, New York, <sup>4</sup>Department of Dermatology, Icahn School of Medicine at the Mount Sinai Medical Center, New York, <sup>5</sup>Department of Dermatology, The University of Tokyo, Tokyo

#### L-02 Olive Leaf Extract Inhibits Sebaceous Lipogenesis by Regulating the Expression of IGF1R and SREBP1

O Jingyi Wang, Kan Tao, Hu Huang, Huailong Chang

Research and Development Department, Shanghai Chicmax Cosmetic Co., Ltd., Shanghai

#### L-03 Plasticity of skin resident memory T cells is declined in the elderly

O Rei Watanabe<sup>1,2</sup>, Yutaka Matsumura<sup>3</sup>, Hanako Koguchi-Yoshioka<sup>3</sup>, Miki Kume<sup>3</sup>, Manabu Fujimoto<sup>1,3</sup>

<sup>1</sup>Department of Medicine for Cutaneous Immunological Diseases, Osaka University, Suita, <sup>2</sup>Department of Dermatology, Juntendo University, Tokyo, <sup>3</sup>Department of Dermatology, Osaka University, Suita

#### L-04 Associations of Different Inflammatory Factors with Atherosclerosis Among Patients with Psoriasis Vulgaris

[LO-02]

ONguyen Thi Kim Huong¹, Le Huu Doanh², Bui Long¹

<sup>1</sup>Friendship Hospital, Hanoi, <sup>2</sup>Hanoi Medical University, Hanoi

#### L-05 SERUM MRGPRX2 LEVELS IN CHRONIC SPONTANEOUS URTICARIA IN VIETNAMESE PATIENTS

[LO-03]

○ Cuc Nguyen Thi Kim<sup>1,2</sup>, Minh Vu Nguyet<sup>1,2</sup>, Lan Pham Thi<sup>1,2</sup>, My Le Huyen<sup>1</sup>, Doanh Le Huu<sup>1,2</sup>

<sup>1</sup>National Hospital of Dermatology and Venereology, Hanoi, <sup>2</sup>Ha Noi Medical University, Hanoi

### L-06 "Black-Red Dot Sign" under Dermoscopy: Significance in Screening and Antifungal Efficacy Tracking in [LO-04] Subcutaneous Fungal Infection lesion

O Yuping Ran

Dermatology, West China Hospital, Sichuan University, Chengdu

#### L-07 Keratinocytes sense low ambient humidity via TRPV4 in human and mice skin

○ Mariko Hara-Chikuma, Manami Tanaka School of Medicine, Keio University, Tokyo

#### L-08 The skin-specific long non-coding RNA TEDAR regulates epidermal differentiation

[LO-05]

Kunal Das Mahapatra¹², Özge Arslan¹³, Jonathan Elton¹², Evelyn Kelemen¹³, Longlong Lou¹³, Markus Kretz⁴, Enikö Sonkoly¹³, ○ Andor Pivarcsi¹²³

<sup>1</sup>Department of Medical Biochemistry and Microbiology, Uppsala University, Uppsala, <sup>2</sup>Department of Medicine Solna, Karolinska Institute, Stockholm, <sup>3</sup>Dermatology and Venereology, Department of Medical Sciences, Uppsala University, Uppsala, <sup>4</sup>Institute of Biochemistry, Genetics and Microbiology, University of Regensburg, Regensburg

#### Biofabrication of 3D shaped skin equivalents for mechanobiology and robotic applications

L-09 [LO-06]

O Minghao Nie, Michio Kawai, Yuto Matsushima, Haruka Oda, Shoji Takeuchi

The University of Tokyo, Graduate School of Information Science and Technology, Tokyo

#### L-10 Proteasome inhibitors as potential anticancer agents for angiosarcoma cells

[LO-07]

O Che-Yuan Hsu¹², Teruki Yanagi¹², Kodai Miyamoto¹², Satoko Otsuguro³, Katsumi Maenaka³<sup>,4,5,6,7</sup>, Hiroshi Nishihara<sup>8</sup>, Hideki Nakamura<sup>9</sup>, Kenzo Takahashi², Hideyuki Ujiie¹

<sup>1</sup>Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, University of the Ryukyus, Okinawa, <sup>3</sup>Center for Research and Education on Drug Discovery, Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, <sup>4</sup>Laboratory of Biomolecular Science, Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, <sup>5</sup>Division of Pathogen, Structure, International Institute for Zoonosis Control, Hokkaido University, Sapporo, <sup>6</sup>Institute for Vaccine Research & Development, Hokkaido University, Sapporo, <sup>7</sup>Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka, <sup>8</sup>Genomics Unit, Keio Cancer Center, Keio University School of Medicine, Tokyo, <sup>9</sup>Central Research Institute, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo

#### L-11 The Therapeutic potential of Artemisia Naphta on Seborrhoeic Dermatitis

[**LO-08**]

O Ziyan Qin<sup>1,2</sup>, Huailong Chang<sup>1,2</sup>, Kan Tao<sup>1,2</sup>, Shengnan Tang<sup>1,2</sup>

<sup>1</sup>Shanghai Chicmax Cosmetic Co., Ltd., Global R&D Center, Shanghai, <sup>2</sup>Shanghai KPC Biotechnology Co., Ltd., Shanghai

#### L-12 Characterizing intratumoral heterogeneity in cutaneous squamous cell carcinoma using multi-regional wholeexome sequencing

Yeun-Jun Chung¹, ○ Yoon-Seob Kim²

<sup>1</sup>Department of Microbiology, College of Medicine, The Catholic University of Korea, Seoul, <sup>2</sup>Department of Dermatology, Bucheon St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul

#### L-13 A Comprehensive Meta-analysis of the Association Between Lipid profile and Hidradenitis Suppurativa

[LO-09]

O Yan-Han Li<sup>1</sup>, Shu-Han Chuang<sup>1</sup>, Hui-Ju Yang<sup>2,3</sup>

<sup>1</sup>Division of General Practice, Department of Medical Education, Changhua Christian Hospital, Changhua, <sup>2</sup>Department of Dermatology, Changhua Christian Hospital, Changhua, <sup>3</sup>Department of Post-Baccalaureate Medicine, College of Medicine, National Chung Hsing University, Taichung City

#### L-14 Indonesian brown algae Sargassum cristaefolium lipid extract activity against bacterial skin infection

[LO-10]

Anggit Sunarwidhi<sup>1,2</sup>, Sri Widyastuti<sup>3</sup>, Kukuh Waseso Jati Pangestu<sup>2</sup>, Farreh Alan Maulana<sup>1,2</sup>, Ervina Handayani<sup>1,2</sup>,
 Mila Mayanti Kabir<sup>1</sup>, Eka S. Prasedya<sup>2,4</sup>

<sup>1</sup>Department of Pharmacy, Faculty of Medicine and Health Sciences, Universitas Mataram, <sup>2</sup>Bioscience and Biotechnology Research Centre, Universitas Mataram, Mataram, <sup>3</sup>Faculty of Food Technology and Agroindustry, Universitas Mataram, Mataram, <sup>4</sup>Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Mataram, Mataram

#### L-15 Therapeutic Potential of Topical Cannabigerol (CBG) in the Treatment of Inflammation and Erythema in Rosacea

[LO-11] O Suji Kim<sup>1</sup>, Eun Hee Yoo<sup>2</sup>, JI hyun Lee<sup>1,2</sup>

<sup>1</sup>Department of Medical Sciences, Graduate School of The Catholic University of Korea, Seoul, <sup>2</sup>Department of Dermatology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul

#### L-16 JAK/STAT signaling pathway plays a decisive role in intractable bullous pemphigoid

○ Hsin-Yu Chung¹, Chuang-Wei Wang¹, Wen-Hung Chung¹,2,3,4,5,6

<sup>1</sup>Department of Dermatology, Drug Hypersensitivity Clinical and Research Center, Chang Gung Memorial Hospital, Linkou, Taipei, and Keelung, <sup>2</sup>Cancer Vaccine and Immune Cell Therapy Core Laboratory, Department of Medical Research, Chang Gung Memorial Hospital, Linkou, <sup>3</sup>Chang Gung Immunology Consortium, Chang Gung Memorial Hospital and Chang Gung University, <sup>4</sup>Department of Dermatology, Xiamen Chang Gung Hospital, Xiamen, <sup>5</sup>Xiamen Chang Gung Allergology Consortium, Xiamen Chang Gung Hospital, Xiamen, <sup>6</sup>College of Medicine, Chang Gung University, Taoyuan

#### L-17 Oxytocin Enhances Brain Function and Mitigates Skin Aging in Mice

O Zhan Zhi Yin<sup>1,2</sup>, Mi Hee Shin<sup>1,2</sup>, Kyeong-No Yoon<sup>1,2</sup>, Dong Hun Lee<sup>1,2</sup>, Jin Ho Chung<sup>1,2</sup>

<sup>1</sup>Department of Dermatology, Seoul National University Hospital, Seoul National University College of Medicine, Seoul, <sup>2</sup>Institute of Human-Environmental Interface Biology, Medical Research Center, Seoul National University, Seoul

#### L-18 Microbiome-implanted in vitro 3D skin models to evaluate skin-microbiome interactions

[LO-12]

○ Hai Vin Kim¹, Young Su Jang¹, Dahye Seo¹, ARam Kim², Suji Son², Jae-Sang Ryu², Dong Hyun Kim², Jung U Shin²

<sup>1</sup>Department of Biomedical Science, CHA University, Seongnam, <sup>2</sup>Department of Dermatology, CHA Bundang Medical Center, CHA University School of Medicine, Seongnam

# L-19 Inhibitory Effects of Minocycline on Neutrophil Extracellular Trap Formation in Human Neutrophils and a Mouse [LO-13] Model of Hidradenitis Suppurativa

O DaHye Seo¹, JaeSang Ryu², YoungSu Jang¹, HaiVin Kim¹, HeeJung Lee², DongHyun Kim², Yunkyung Jang², JungU Shin²

<sup>1</sup>Department of Biomedical Science, CHA University, Seongnam, <sup>2</sup>Department of Dermatology, CHA Bundang Medical Center, CHA University School of Medicine, Seongnam

### L-20 Sesamin enhances apoptosis of activated T cells by physically interacting with MCL-1 and shows therapeutic effect on allergic dermatitis

O Hee-Suk Park, Hyun-Su Lee

Department of Physiology, Daegu Catholic University School of Medicine, Daegu

#### L-21 Topical delivery of antisense oligonucleotides into lesional skin of atopic dermatitis mouse model

O Zacharias A. Dwi Pramono<sup>1</sup>, Dave Keng Boon Wee<sup>1</sup>, Hong Liang Tey<sup>2</sup>

<sup>1</sup>Institute of Molecular and Cell Biology, A\*STAR, Singapore, <sup>2</sup>National Skin Centre, Singapore

#### L-22 Genotoxicity Assessment of m-Phenylenediamine using the in vitro Bacterial Reverse Mutation Test

○ Dong Hyun Kim¹, Yong Hyun Chung³, Yong Taek Kwon³, Soo Jin Yoo¹, Jung Hun Lee¹, Ji Yeon Woo¹, Yeon Su Baek³, Su Ho Lee³, Myeong Ju Shin³, Hwi Won Jo³, Min Jung Kim², Sun Kyung Kim¹

<sup>1</sup>Dept. of Safety and Environmental Technology Convergence, Hoseo University, Asan-si, <sup>2</sup>Dept. of Safety Engineering Technology Convergence, Hoseo University, Asan-si, <sup>3</sup>H&H bio, Asan-si

#### L-23 CXCR3/CXCL10 axis mediated memory T cell activations in DRESS patients and abated by JAK inhibitors

[LO-14]

 $\circ$  Chuang-Wei Wang<sup>1,2,3</sup>, Wen-Hung Chung<sup>1,2,3</sup>

<sup>1</sup>Department of Dermatology, Drug Hypersensitivity Clinical and Research Center, Chang Gung Memorial Hospital, Linkou, <sup>2</sup>Cancer Vaccine and Immune Cell Therapy Core Laboratory, Department of Medical Research, Chang Gung Memorial Hospital, Linkou, <sup>3</sup>Chang Gung Immunology Consortium, Chang Gung Memorial Hospital and Chang Gung University, Taouan

# L-24 Efficacy of Non-cultured Epidermal Cell Suspension and Excimer Lamps Combination Therapy in Vitiligo: Results of 18 Months Follow-up

○ Tam Hoang Van¹², Davinder Parsad³, Thuong Nguyen Van¹², Phuong Hoang Thi², Son Nguyen Hong², Hien Do Thi Thu², Tan Nguyen Manh¹², Hien Le Thanh², Hien Tran Thi Thu¹, Doanh Le Huu¹²

<sup>1</sup>Hanoi Medical University, Hanoi, <sup>2</sup>National Hospital of Dermatology and Venereology, Hanoi, <sup>3</sup>Department of Dermatology, Venereology and Leprology, Postgraduate Institute of Medical Education and Research, Chandigarh