
December 3, 2021, Room A

Opening

8:20-8:30

Plenary Session I

8:30-10:00

Chairs: Kenji Kabashima, Abel Chih-Hung Lee, Oliver Dreesen

- I-1 [P06-01] CRISPR/Cas9 targeting an intronic region for retrieving Col17 expression in junctional epidermolysis bullosa model mice**
- Hong Ha Nguyen¹, Satoru Shinkuma^{1,2,3}, Ryota Hayashi¹, Shota Takashima³, Masashi Mori⁴, Masahito Ikawa⁴, Hiroshi Shimizu³, Riichiro Abe¹
- ¹Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Department of Dermatology, Nara University, Nara, Japan, ³Department of Dermatology, Hokkaido University, Sapporo, Japan, ⁴Department of Experimental Genome Research, Genome Information Research Center, Osaka University, Osaka, Japan
- I-2 [P07-01] Migration and local adaptation of integrinβ7-positive mast cell progenitors in murine allergic skin**
- Yuki H Keith¹, Tetsuya Honda², Sachiko Ono¹, Bernett Lee³, Satoshi Nakamizo¹, Sho Hanakawa³, Yoshihiro Ishida¹, Kenji Kabashima^{1,3}
- ¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan, ³Singapore Immunology Network (SigN) and Skin Research Institute of Singapore (SRIS), Agency for Science, Technology and Research (A*STAR), Biopolis, Singapore
- I-3 [P01-02] AIM2 regulates anti-tumor immunity and serves as a therapeutic target for melanoma immunotherapy**
- Keitaro Fukuda^{1,2}, Ken Okamura², Rebecca L. Riding², Xueli Fan², Sean M. McCauley³, Jeremy Luban^{3,4}, Takeru Funakoshi¹, Tomonori Yaguchi⁵, Yutaka Kawakami², Anastasia Khvorova^{6,7}, Katherine A. Fitzgerald⁸, John E. Harris²
- ¹Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ²Department of Dermatology, University of Massachusetts Medical School, Worcester, MA, ³Program in Molecular Medicine, University of Massachusetts Medical School, Worcester, MA, ⁴Department of Biochemistry and Molecular Pharmacology, University of Massachusetts Medical School, Worcester, MA, ⁵Division of Cellular Signaling, Institute for Advanced Medical Research, Keio University School of Medicine, Tokyo, Japan, ⁶RNA Therapeutics Institute, University of Massachusetts Medical School, Worcester, MA, ⁷Department of Molecular Medicine, University of Massachusetts Medical School, Worcester, MA, ⁸Department of Infectious Diseases and Immunology, University of Massachusetts Medical School, Worcester, MA.
- I-4 [P07-02] Type I IFN derived from inflammatory monocytes controls type 2 inflammation by suppressing basophil proliferation in atopic dermatitis**
- Fumi Miyagawa, Hideo Asada
- Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan
- I-5 [P02-02] Abnormally activated B cells with TLR9 up-regulation in Fli1-depleted mice: a possible predisposing condition for systemic sclerosis**
- Kentaro Awaji¹, Takuya Miyagawa¹, Takashi Yamashita¹, Yuki Fukui¹, Jun Omatsu¹, Satoshi Toyama¹, Tetsuya Ikawa¹, Yuta Norimatsu¹, Yusuke Watanabe¹, Ayumi Yoshizaki¹, Maria Trojanowska², Shinichi Sato¹, Yoshihide Asano¹
- ¹The Department of Dermatology, University of Tokyo, Tokyo, Japan, ²Arthritis Center, Boston University Medical Center, Boston, USA
- I-6 [P11-01] Skin regulatory T cells producing proenkephalin expand upon ultraviolet B exposure without ST2-IL33 axis and promote keratinocyte outgrowth**
- Sayuri Yamazaki¹, Hiroaki Shime¹, Mizuyu Odanaka¹, Makoto Tsuiji², Takuma Matoba^{1,3}, Masaki Imai¹, Yoshiaki Yasumizu⁴, Ryuta Uraki¹, Kiyoshi Minohara^{1,3}, Maiko Watanabe¹, Anthony Bonito⁵, Hidehiro Fukuyama⁶, Naganari Ohkura^{4,7}, Shimon Sakaguchi⁴, Akimichi Morita⁸
- ¹Department of Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan, ²Department of Microbiology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Shinagawa-ku, Japan, ³Department of Oto-rhinolaryngology and Head-and-neck-surgery, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan, ⁴Department of Experimental Immunology, World Premier International Research Center Initiative, Immunology Frontier Research Center, Osaka University, Osaka, Japan, ⁵Immunoassay Research & Development, Laboratory Diagnostics, Siemens Healthineers, Tarrytown, NY, USA, ⁶Laboratory for Lymphocyte Differentiation, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, ⁷Immunopharmaceutical Development Unit, Center of Medical Innovation Research, Graduate School of Medicine, Osaka University, Osaka, Japan, ⁸Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

Concurrent Oral Session 1 (Innate Immunity, Microbiology, Microbiome-I)

10:15-11:45

Chairs: Ryuhei Okuyama, Saeko Nakajima

- C01-01 [P07-03] CCL2-CCR2 signaling in the skin drives surfactant-induced irritant contact dermatitis via IL-1 β -mediated neutrophil accumulation**
○ Rintaro Shibuya¹, Yoshihiro Ishida¹, Sho Hanakawa², Tatsuki R. Kataoka³, Akihiko Kitoh², Kenji Kabashima^{1,2}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, ²Singapore Immunology Network and Skin Research Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore, ³Department of Molecular Diagnostic Pathology, Iwate Medical University
- C01-02 [P07-04] I κ B ζ -deficient epidermis mediates systemic autoimmune inflammation via skin dysbiosis**
○ Hitoshi Terui¹, Moyuka Wada-Irimada¹, Mayuko Onodera-Amagai¹, Naokazu Hatchome¹, Masato Mizuashi¹, Riu Yamashita², Setsuya Aiba¹, Kenshi Yamasaki¹
¹Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan, ²Division of Translational Informatics, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center, Chiba, Japan
- C01-03 [P07-05] T-cell receptor signaling pathways that regulate functional reprogramming of $\gamma\delta$ T cells in the perinatal epidermis**
○ Atsuko Ibusuki¹, Kazuhiro Kawai^{1,2}, Takuro Kanekura¹
¹Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima, Japan, ²Department of Dermatology, Kido Hospital, Niigata, Japan
- C01-04 [P07-06] Proteomics analysis of bacterial and fungal composition in skin and serum extracellular vesicles**
○ Toru Kawai¹, Ryota Hayashi¹, Akito Hasegawa¹, Akari Sakai¹, Osamu Ansai¹, Koichi Tomii¹, Tomoki Nishiguchi¹, Jun Adachi^{2,3}, Takeshi Tomonaga^{2,3}, Riichiro Abe¹
¹Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Laboratory of Proteome Research, National Institute of Biomedical Innovation, Health and Nutrition, ³Laboratory of Proteomics for Drug Discovery, Center for Drug Design Research, National Institute of Biomedical Innovation, Health and Nutrition
- C01-05 [P07-07] TREM2/APOE-double positive macrophages as possible pathogenic cells in sarcoidosis**
○ Satoshi Nakamizo, Yoshihiro Ishida, Gyohei Egawa, Kenji Kabashima
Department of Dermatology Kyoto University Graduate School of Medicine, Kyoto, Japan
- C01-06 [P07-09] Purinergic molecules in murine bone marrow-derived mast cells**
○ Riko Asakawa, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura
The Department of Dermatology, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan
- C01-07 [P07-10] Granzyme K cleaves protease-activated receptor-2 and induces itch**
○ Sho Hiroyasu^{1,2,3}, Matthew R. Zeglinski^{2,3}, Hongyan Zhao^{2,3}, Aoi Hiroyasu¹, Daisuke Tsuruta¹, David J. Granville^{2,3}
¹The Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ²International Collaboration On Repair Discoveries (ICORD) Centre, Vancouver, BC, Canada, ³Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, BC, Canada

Luncheon Seminar 1 "Lessons in Dermatology from Experts"

11:50-12:50

Chairs: Shinichi Sato, Yayoi Tada

- LS1-1 Beta7 integrin and cutaneous disorders**
○ Takafumi Kadono
Department of Dermatology, St. Marianna University School of Medicine
- LS1-2 Extracellular vesicles in skin aging**
○ Masatoshi Jinnin
Department of Dermatology, Wakayama Medical University Graduate School of Medicine, Wakayama, Japan

Co-sponsored by NOV division, TOKIWA Pharmaceutical Co., Ltd

Award Ceremony

12:55-13:30

Young JSID Award

Presenter: Kenji Kabashima

Satoshi Nakamizo, Department of Dermatology, Kyoto University Graduate School of Medicine
Chisa Nakashima, Department of Dermatology, Kindai University Hospital
Takashi Sakai, Department of Dermatology, Faculty of Medicine, Oita University

JSID's Fellowship Shiseido Research Grant

Presenter: Rumiko Fujiwara

Protease functions in itch associated with pemphigoid diseases

○ Sho Hiroyasu
Department of Dermatology, Osaka City University Graduate School of Medicine

Understanding the mechanism of age-associated decline of skin regenerative capacity through epidermal stem cells

○ Daisuke Nanba
Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University

Diploma of Dermatological Scientist

Presenter: Kenji Kabashima

Pawit Phadungsaksawasdi, Hamamatsu University School of Medicine

JSID Honorary Membership

Presenter: Kenji Kabashima

KSID/JSID Young Fellow Collegiality Awards

Joonho Shim, Samsung Medical Center, Sungkyunkwan University
Ji Su Lee, Seoul National University Hospital

ASDR/JSID Exchange Program

Ali Azimi, The University of Sydney
Mitchell S. Stark, The University of Queensland

Sun Pharma RISING SUN AWARD 2021

13:30-14:10

Chairs: Kenji Kabashima, Tatsuyoshi Kawamura, Manabu Fujimoto

SRA1 Neutrophils initiate and exacerbate Stevens-Johnson syndrome and toxic epidermal necrolysis

○ Youichi Ogawa
Department of Dermatology, University of Yamanashi, Yamanashi, Japan

SRA2 Role of host-microbe interactions in the pathogenesis of inflammatory skin diseases

○ Yumi Matsuoka-Nakamura
Cutaneous Immunology, Immunology Frontier Research Center, Osaka University, Osaka, Japan

SRA3 Genetic and epigenetic research of skin diseases

○ Masatoshi Jinnin
Department of Dermatology, Wakayama Medical University Graduate School of Medicine, Wakayama, Japan

Co-sponsored by Sun Pharma Japan Ltd.

State-of-the-Art Symposium of Skin Research

14:45-16:45

Chairs: Hayato Takahashi, Ken Natsuga

- SAS1** **Interclonal competition for active TGF β preferentially enrich antigen-specific tissue resident memory T cells in the epidermal niche**
○ Toshiro Hirai^{1,2}
¹BIKEN Innovative Vaccine Research Alliance Laboratories, Institute for Open and Transdisciplinary Research Initiatives/Research Institute for Microbial Diseases, Osaka University, ²Departments of Dermatology, University of Pittsburgh
- SAS2** **Tracing the origin of hair follicle stem cells**
○ Hironobu Fujiwara
RIKEN Center for Biosystems Dynamics Research, Kobe, Japan
- SAS3** **A unique mode of functional keratinocyte death, *corneoptosis* requires intracellular acidification**
○ Takeshi Matsui^{1,2}
¹School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, Japan, ²RIKEN Center for Integrative Medical Sciences
- SAS4** **Dysbiosis leads to inflammatory destruction of the hair follicles mediated by innate lymphoid cells**
○ Keisuke Nagao
Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health
- SAS5** **Stem cell-centric mechanisms of skin aging**
○ Emi K. Nishimura
Institute of Medical Science, University of Tokyo, Tokyo, Japan

Evening Seminar 1

16:50-17:50

Chair: Mamitaro Ohtsuki

- ES1** **An update on the evidence of apremilast for psoriasis from research to practice**
○ Masahiro Kamata
Department of Dermatology, Teikyo University School of Medicine, Tokyo, Japan

Co-sponsored by Medical Affairs, AMGEN K.K.

December 3, 2021, Room B

Concurrent Oral Session 2

(Patient Population Research/Pharmacology and Drug Development)

10:15-11:45

Chairs: Kazumitsu Sugiura, Yukie Yamaguchi

- C02-01 [P08-02] Plasma metabolome-wide analysis in Japanese identifies potential biomarkers of psoriasis and clinical subtypes**
 ○ Yukinori Okada^{1,2}, Toshihiro Kishikawa^{1,3}, Noriko Arase⁴, Shigeyoshi Tsuji⁵, Yuichi Maeda^{6,7}, Takuro Nii^{6,7}, Jun Hirata¹, Ken Suzuki¹, Kenichi Yamamoto^{1,8}, Shiro Ohshima⁵, Hidenori Inohara³, Atsushi Kumanogoh^{2,5}, Manabu Fujimoto^{2,4}
¹Department of Statistical Genetics, Osaka University Graduate School of Medicine, Suita, Japan, ²Immunology Frontier Research Center (WPI-IFReC), Osaka University, Suita, Japan, ³Department of Otorhinolaryngology-Head and Neck Surgery, Osaka University Graduate School of Medicine, Suita, Japan, ⁴Department of Dermatology, Osaka University Graduate School of Medicine, Suita, Japan, ⁵NHO Osaka Minami Medical Center, Kawachinagano, Osaka, Japan, ⁶Department of Respiratory Medicine and Clinical Immunology, Osaka University Graduate School of Medicine, Suita, Japan, ⁷Department of Immune Regulation, Osaka University Graduate School of Medicine, Suita, Japan, ⁸Department of Pediatrics, Osaka University Graduate School of Medicine, Suita, Japan
- C02-02 [P08-03] Prevalence, comorbidities, and treatment patterns of Japanese patients with alopecia areata: a descriptive study using JMDC claims database**
 ○ Eduardo Kawasaki¹, Tomohiro Hirose¹, Manabu Ohyama²
¹Medical Affairs, Pfizer Japan, ²Department of Dermatology, Kyorin University Faculty of Medicine
- C02-03 [P08-05] Prevalence of malignancies in Japanese psoriasis patients and selected treatments in the West Japan Psoriasis Registry**
 ○ Takuya Miyagi^{1,3}, Kenzo Takahashi^{1,3}, Noriko Tsuruta^{2,3}, Shinichi Imafuku^{2,3}
¹Department of Dermatology, University of the Ryukyus, Graduate school of medicine, Okinawa, Japan, ²Fukuoka University, ³Western Japan Inflammatory Disease Research Group
- C02-04 [P10-02] Vitamins and their derivatives synergistically promote hair shaft elongation *ex vivo* via PIGF/VEGFR-1 signaling activation**
 ○ Liuying Hu¹, Shun Kimura¹, Sayo Kashiwagi¹, Kyoko Takagi¹, Takashi Shimizu¹, Tsuyoshi Ishii¹, Manabu Ohyama²
¹Basic Research Development Division, ROHTO Pharmaceutical Co., LTD., Kyoto, Japan, ²Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, Japan
- C02-05 [P10-03] Formyl peptide receptor 1 triggers cell death signals in keratinocyte as SJS/TEN model**
 ○ Tomoki Nishiguchi, Akito Hasegawa, Riichiro Abe
 Department of dermatology, Graduate School of Medical and Dental Sciences, Niigata University, Niigata, Japan
- C02-06 [P10-04] Konjac-ceramide (kCer) induces semaphorin 3A production in normal human epidermal keratinocytes**
 ○ Mirei Fujita¹, Yayoi Kamata¹, Mitsutoshi Tominaga¹, Seigo Usuki², Katsuyuki Mukai³, Nobuaki Takahashi¹, Hideoki Ogawa¹, Yasuyuki Igarashi², Kenji Takamori^{3,4}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Lipid Biofunction Section, Faculty of Advanced Life Science, Hokkaido University, ³Daicel Corporation, ⁴Department of Dermatology, Juntendo University Urayasu Hospital
- C02-07 [P10-05] A calpain inhibitor ALLN attenuates bleomycin-induced skin fibrosis in a mice model**
 ○ Hiroshi Kasamatsu¹, Takenao Chino¹, Takumi Hasegawa¹, Natsuko Utsunomiya¹, Akira Utsunomiya¹, Noritaka Oyama¹, Masami Yamada², Minoru Hasegawa¹
¹Department of Dermatology, University of Fukui, Fukui, Japan, ²Department of Cell Biology and Biochemistry, University of Fukui, Fukui, Japan

Luncheon Seminar 2

11:50-12:50

Chair: Keiichi Yamanaka

- LS2 Recent advances in the pathogenesis and therapy of pyoderma gangrenosum and hidradenitis suppurativa**
 ○ Toshiyuki Yamamoto
 The Department of Dermatology, Fukushima Medical University, Fukushima, Japan

Co-sponsored by Eisai Co., Ltd./AbbVie GK

3 minutes presentation and discussion 1

(JSID's Fellowship Shiseido Research Grant/Tissue Regeneration and Wound Healing/Translational Studies)

14:45-15:45

Chairs: Youichi Ogawa, Sei-Ichiro Motegi

- O01-01 [SE-1]** **Observation of tight junction formation using cultured keratinocytes**
○ Hiroaki Iwata
Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan
- O01-02 [SE-2]** **Dynamics of epigenetic environment in skin inflammatory diseases**
○ Sayaka Shibata
Department of Dermatology, University of Tokyo Graduate School of Medicine
- O01-03 [P14-06]** **Calcitriol, the active form of vitamin D, regulates epidermal tight junction barrier function in diabetes**
○ Juan V. Trujillo¹, Le Thanh Hai Nguyen^{1,2}, Yoshie Umehara¹, Hainan Yue^{1,2}, Lisa Ikutama^{1,2}, Miho Takahashi^{1,2}, Ge Peng^{1,2}, Hideoki Ogawa¹, Shigaku Ikeda², Ko Okumura¹, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University, Tokyo, Japan, ²Department of dermatology and Allergology, Juntendo University, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- O01-04 [P14-07]** **Trehalose-induced senescence-associated secretory phenotype accelerates organotypic skin culture development**
○ Jun Muto¹, Shinji Fukuda², Kenji Watanabe³, Xiuju Dai¹, Teruko Tsuda¹, Hideki Mori¹, Ken Shiraishi¹, Masamoto Murakami¹, Shigeki Higashiyama^{4,5}, Yoichi Mizukami³, Koji Sayama¹
¹Department of Dermatology, Ehime University Graduate School of Medicine, Toon, Japan, ²Department of Biochemistry, School of Dentistry, Aichi Gakuin University, Nagoya, Japan, ³Institute of Gene Research, Yamaguchi University Science Research Center, Yamaguchi, Japan, ⁴Division of Cell Growth and Tumor Regulation, Proteo-Science Center, Ehime University, Toon, Japan, ⁵Department of Molecular and Cellular Biology, Osaka International Cancer Institute, Osaka, Japan
- O01-05 [P14-08]** **Antioxidant protein Peroxiredoxin 4 uniquely improved aging-related delayed wound healing in mice**
○ Reimon Yamaguchi^{1,2}, Xin Guo², Jianbo Zheng², Jing Zhang², Jia Han², Akihiro Shioya², Hidetaka Uramoto³, Takashi Mochizuki¹, Akira Shimizu¹, Sohsuke Yamada²
¹The Department of Dermatology, Kanazawa Medical University, Ishikawa, Japan, ²The Department of Pathology and Laboratory Medicine, Kanazawa Medical University, Ishikawa, Japan, ³The Department of Thoracic Surgery, Kanazawa Medical University, Ishikawa, Japan
- O01-06 [P14-09]** **AMP-IBP5, an antimicrobial peptide derived from insulin-like growth factor-binding protein 5, promotes diabetic wound healing**
○ Hainan Yue^{1,2}, Yoshie Umehara², Juan Valentin Trujillo-Paez², Ge Peng^{1,2}, Hai Le Thanh Nguyen^{1,2}, Miho Takahashi^{1,2}, Risa Ikutama^{1,2}, Ko Okumura¹, Hideoki Ogawa², Shigaku Ikeda^{1,2}, Francois Niyonsaba^{2,3}
¹Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University Graduate School of Medicine, Tokyo, Japan
- O01-07 [P14-10]** **Determination of host defense peptide inducers for their therapeutic use in diabetic foot ulcers**
○ Alan Santos¹, Bruno Rivas^{1,2}
¹Posgrado de Ciencias Químicas, Universidad Autónoma de San Luis Potosí, San Luis Potosí, Mexico, ²Unidad de Investigación Biomedica de Zacatecas, Instituto Mexicano del Seguro Social, Zacatecas, Mexico
- O01-08 [P14-11]** **Effects of antimicrobial peptide human β -defensins on the expression of angiogenin in human dermal fibroblasts**
○ Yoshie Umehara¹, Miho Takahashi^{1,2}, Hainan Yue¹, Juan Valentin Trujillo-Paez¹, Ge Peng¹, Le Thanh Hai Nguyen¹, Risa Ikutama^{1,2}, Ko Okumura¹, Hideoki Ogawa², Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- O01-09 [P15-01]** **Spinal cholecystokinin 2 receptor is involved in induction of alopecia**
○ Mitsutoshi Tominaga¹, Kotaro Honda¹, Fumiya Kusube¹, Eriko Komiya¹, Masafumi Yokota¹, Masaru Kurosawa¹, Nobuaki Takahashi¹, Sumika Toyama¹, Yayoi Kamata¹, Mirei Fujita¹, Qiao Feng Zhao¹, Yasushi Suga², Hideoki Ogawa¹, Kenji Takamori^{1,2}
¹Juntendo Itch Research Center (IIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- O01-10 [P15-04]** **The effectivity of metformin solution as a melanogenesis inhibitor: A chromameter analysis on human**
○ Ivan Kurniadi¹, Asnawi Madjid¹, Farida Tabri¹, Arifin Seweng², Husaini Umar³, Firdaus Hamid⁴
¹Department of Dermatology and Venereology, Faculty of Medicine, Hasanuddin University, Makassar, South Sulawesi, Indonesia, ²Faculty of Public Health, Hasanuddin University, Makassar, South Sulawesi, Indonesia, ³Department of Internal Medicine, Faculty of Medicine, Hasanuddin University, Makassar, South Sulawesi, Indonesia, ⁴Department of Clinical Microbiology, Faculty of Medicine, Hasanuddin University, Makassar, South Sulawesi, Indonesia

- O01-11 [P15-05] Predicting regional Eczema Area and Severity Index from the images of atopic dermatitis using deep convolutional networks**
 ○ Yutaka Kawashima¹, Daiki Ito¹, Hiroto Horikawa², Ayano Nomura², Koichi Ashizaki^{2,3}, Hiroshi Kawasaki^{2,4}, Masayuki Amagai², Yoshimitsu Aoki¹
¹Department of Engineering, Keio University School, ²Department of Dermatology, Keio University School of Medicine, ³Advanced Data Science Project, Information R&D and Strategy Headquarters, RIKEN, ⁴Laboratory for Developmental Genetics, RIKEN Center for Integrative Medical Sciences
- O01-12 [P15-06] Serum biomarkers correlate with disease response in Moderate to Severe Atopic Dermatitis patients treated with baricitinib**
 ○ Takeshi Nakahara¹, Jonathan T. Sims², Robert Bissonnette³, Stephanie Colvin², Jonathan Janes², Venkatesh Krishnan², Jason R. Chan², Ferda Cevikbas²
¹Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, ²Eli Lilly and Company, ³Innovaderm

3 minutes presentation and discussion 4 (Auto-Immunity/Pharmacology and Drug Development)

15:45-16:45

Chairs: Jun Yamagami, Takashi Nomura

- O04-01 [P02-16] Optimization of ELISAs for IgA antibodies in autoimmune bullous skin diseases**
 ○ Norito Ishii¹, Kwesi Teye¹, Hiroshi Koga¹, Takashi Hashimoto², Takekuni Nakama¹
¹Department of Dermatology, Kurume University School of Medicine, and Kurume University Institute of Cutaneous Cell Biology, Kurume, Japan, ²Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan
- O04-02 [P02-17] Relationship between treatment responsiveness and immune checkpoints in Halo nevus**
 ○ Shinji Kano, Motoki Nakamura, Maki Yoshimitsu, Tetsuya Magara, Yuka Nojiri, Akihiro Matsubara, Hiroshi Kato, Akimichi Morita
 Department of Geriatric and Environmental Dermatology, Nagoya City University
- O04-03 [P02-18] The presence of multiple epitopes within BP180 molecule in a case of dipeptidyl peptidase-4 inhibitor-related bullous pemphigoid**
 ○ Rikuma Kitao¹, Takeshi Fukumoto¹, Takashi Hashimoto², Kentaro Izumi¹, Haruki Jimbo¹, Chikako Nishigori^{1,4}
¹Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Hyogo, Japan, ²Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ³Department of Dermatology, Hokkaido University Graduate School of Medicine, Hokkaido, Japan, ⁴Department of iPS cell applications, Kobe University Graduate School of Medicine, Hyogo, Japan
- O04-04 [P02-19] Cautions for the discrepancy between CLEIA and ELISA and the presence of non-pathogenic antibodies are needed in pemphigus management**
 ○ Ai Yoshioka¹, Takeshi Fukumoto¹, Marie Ohata², Yumi Aoyama³, Koji Kamiya⁴, Takashi Hashimoto⁵, Chikako Nishigori^{1,6}
¹Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Hyogo, Japan, ²Department of Dermatology, Kobe Ekisaikai Hospital, Hyogo, Japan, ³Department of Dermatology, Kawasaki Medical School, Okayama, Japan, ⁴Department of Dermatology, Jichi Medical University, Tochigi, Japan, ⁵Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ⁶Department of iPS Cell Applications, Kobe University Graduate School of Medicine, Hyogo, Japan
- O04-05 [P02-20] Effects of decanoic acid on imiquimod-induced psoriasis-like dermatitis in mice**
 ○ Kinuko Irie, Shohei Igari, Toshiyuki Yamamoto
 Department of Dermatology, Fukushima Medical University School of Medicine
- O04-06 [P02-21] Severe skin inflammation leads to salivary gland atrophy and dysfunction**
 ○ Yoshiaki Matsushima¹, Kento Mizutani¹, Shohei Iida¹, Masako Ichishi², Takehisa Nakanishi¹, Karin Okada¹, Ai Umaoka¹, Makoto Kondo¹, Koji Habe¹, Masatoshi Watanabe², Keiichi Yamanaka¹
¹Department of Dermatology, Mie University, Graduate School of Medicine, Mie, Japan, ²Oncologic Pathology, Mie University, Graduate School of Medicine, Tsu, Mie, Japan
- O04-07 [P02-22] A new murine model of human eosinophilic fasciitis: role of IL-5 and IL-17**
 ○ Takashi Ito, Toshiyuki Yamamoto
 Fukushima Medical University School of Medicine Department of Dermatology
- O04-08 [P10-06] Spesolimab improves patient-reported outcomes (PROs) in patients with generalized pustular psoriasis (GPP) in the Effisayil 1 study**
 ○ Akimichi Morita¹, Alexander A Navarini², Manuelle Viguier³, Tsen-Fang Tsai⁴, Kristian Reich⁵, Eva Kleine⁶, Mogana Sivalingam⁶, Christian Thoma⁷, Mark G Lebwohl⁸
¹Department of Geriatric and Environmental Dermatology, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, ²Department of Dermatology, University Hospital of Basel, Basel, Switzerland, ³Department of Dermatology, Hôpital Robert Debré, Reims, France, ⁴Department of Dermatology, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, Taiwan, ⁵Center of Translational Research in Inflammatory Skin Diseases, Institute for Health Services Research in Dermatology and Nursing, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, ⁶Boehringer Ingelheim International GmbH, Ingelheim, Germany, ⁷Boehringer Ingelheim International GmbH, Biberach, Germany, ⁸Icahn School of Medicine at Mount Sinai, New York, NY, USA

- O04-09 [P10-07]** **Induction of Type XVII collagen decreases cellular senescence in Human hTert/KER-CT keratinocytes**
○ Tuba M. Ansary, Koji Kamiya, Md. Razib Hossain, Mayumi Komine, Mamitaro Ohtsuki
Department of Dermatology, Jichi Medical University, Tochigi, Japan
- O04-10 [P10-08]** **An antimicrobial peptide derived from insulin-like growth factor-binding protein 5 alleviates imiquimod-induced psoriatic skin inflammation**
○ Saori Yoshida¹, Ge Peng^{1,2}, Saya Tsukamoto^{1,2}, Ko Okumura¹, Hideoki Ogawa¹, Shigaku Ikeda², Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University
- O04-11 [P10-09]** **Difamilast, a novel PDE4B inhibitor, topically improves chronic idiopathic dermatitis induced by persisting psychological stress in mice**
○ Hidetaka Hiyama, Naoya Arichika, Masafumi Shibamori, Hiroki Urashima
Biology and Translational Research Unit, Department of Medical Innovations, New Drug Research Division, Otsuka Pharmaceutical Co., Ltd. Tokushima, Japan
- O04-12 [P10-10]** **Investigation of *in-vitro* antibacterial activity of selected plant extracts and its combination with a view of developing a face wash**
○ N. A. Sanjeewani¹, H. M. G. M. Dissanayake¹, U. H. W. De Silva¹, W. D. Ratnasooriya², P. B. V. Navaratne³
¹Department of Pharmacy, General Sir John Kotelawala Defence University, Sri Lanka, ²Department of Basic Sciences, General Sir John Kotelawala Defence University, Sri Lanka, ³Faculty of Medicine, General Sir John Kotelawala Defence University, Sri Lanka

Evening Seminar 2

"New findings in molecular mechanism and patient burden in Neutrophilic inflammatory skin diseases"

16:50-17:50

Chair: Shigaku Ikeda

- ES2-1** **Disease burden of neutrophilic dermatoses: Patients' quality of life in generalized pustular psoriasis and hidradenitis suppurativa**
○ Koremasa Hayama, Hideki Fujita
Department of Dermatology, Nihon University School of Medicine
- ES2-2** **Dynamics of inflammatory cytokines in generalized pustular psoriasis**
○ Kazumitsu Sugiura
Department of Dermatology, Fujita Health University School of Medicine

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

December 3, 2021, Room C

Concurrent Oral Session 3 (Translational Studies-I/Skin, Appendages, and Stem Cell Biology)

10:15-11:45

Chairs: Hiroyuki Murota, Daisuke Nanba, Ohsang Kwon

- C03-01 [P15-02] Early-onset female pattern hair loss: a case-control study for analyzing clinical features and genetic variants**
 ○ Jungyeon Ohn^{1,2}, Ho-Young Son^{3,4}, Kyu Han Kim^{1,2}, Ohsang Kwon^{1,2,4}, Jong-Il Kim^{3,4}
¹Department of Dermatology, Seoul National University College of Medicine, Seoul, Republic of Korea, ²Institute of Human-Environment Interface Biology, Medial Research Center, Seoul National University, Seoul, Republic of Korea, ³Department of Biochemistry and Molecular Biology, Seoul National University College of Medicine, Seoul, Republic of Korea, ⁴Genomic Medicine Institute (GMI), Medical Research Center, Seoul National University, Seoul, Republic of Korea
- C03-02 [P13-02] Antifibrotic effects and mechanisms of miR-196b-5p of mesenchymal stem cell-derived exosomes in a systemic sclerosis mouse model**
 Hritu Baral¹, ○ Akihiko Uchiyama¹, Yoko Yokoyama¹, Akiko Sekiguchi¹, Sahori Yamazaki¹, Syahla Nisaa Amalia¹, Yuta Inoue¹, Sachiko Ogino¹, Ryoko Torii¹, Mari Hosoi¹, Toshiyuki Matsuzaki², Sei-ichiro Motegi¹
¹Department of Dermatology, Gunma University Graduate School of Medicine, ²Department of Anatomy and Cell Biology, Gunma University Graduate School of Medicine
- C03-03 [P13-03] Obesity accelerates hair thinning by stem cell-centric converging mechanisms**
 ○ Hironobu Morinaga¹, Emi K. Nishimura¹, Yasuaki Mohri¹, Kyosuke Asakawa¹, Hiroyuki Matsumura¹, Andrzej_A Dlugosz², Atsushi Iwama³
¹Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ²Department of Dermatology, University of Michigan Medical School, Ann Arbor, MI, USA, ³Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- C03-04 [P13-04] Therapeutic potential of adipose-derived stem cells for the treatment of recessive dystrophic epidermolysis bullosa**
 ○ Akinori Matsuda, Toshio Hasegawa, Akino Wada, Shigaku Ikeda
 Department of Dermatology and Allergology Juntendo University Graduate School of Medicine, Tokyo, Japan
- C03-05 [P13-05] Perivascular adipose tissue in dermis induces infiltration of immune cells in the murine imiquimod (IMQ)-induced psoriasis model**
 ○ Riko Takimoto-Ito, Satoshi Nakamizo, Gyohei Egawa, Kenji Kabashima
 Department of Dermatology, Kyoto University Graduate school of medicine, Kyoto, Japan
- C03-06 [P13-06] Label-free quality control and identification of human keratinocyte stem cells by deep learning-based automated cell tracking**
 Takuya Hirose¹, Jun'ichi Kotoku¹, Fujio Toki², Emi K. Nishimura^{2,3}, ○ Daisuke Nanba²
¹Graduate School of Medical Care and Technology, Teikyo University, Tokyo, Japan, ²Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ³Division of Aging and Regeneration, Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- C03-07 [P13-07] Ahed has crucial roles as a spliceosomal protein for cell proliferation of epidermal keratinocytes**
 ○ Mikiro Takaishi¹, Tatsushi Ishimoto¹, Masahiro Tokunaga², Chikara Kokubu³, Junji Takeda⁴, Shigetoshi Sano¹
¹Department of Dermatology, Kochi Medical School, Kochi University, ²Dept. Hematol, Suita Municipal Hosp., ³Child Healthcare and Genetic Science Lab, Grad. School Med., Osaka Univ., ⁴Research Inst. Microb. Diseases, Osaka Univ.

Luncheon Seminar 3

11:50-12:50

Chair: Eiko Toichi

LS3 Diets and psoriasis

- Tetsuya Honda
 Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan

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

3 minutes presentation and discussion 2 (Genetic Disease, Gene Regulation and Gene Therapy/Cell-Cell Interactions in the Skin)

14:45-15:45

Chairs: Toshifumi Nomura, Takuya Takeichi

- O02-01 [P06-07] Aberrant keratin assembly causes impaired mitochondrial movement and function: Implications for epidermolysis bullosa simplex pathogenesis**
- Osamu Ansai¹, Ryota Hayashi¹, Satoru Shinkuma², Asuka Suto³, Hiroshi Shimizu³, Riichiro Abe¹
- ¹Division of Dermatology, Niigata University School of Medical and Dental Science, ²Department of Dermatology, Nara Medical University School of Medicine, ³Department of Dermatology, Hokkaido University Graduate School of Medicine
- O02-02 [P06-08] Mutations in SAM syndrome and palmoplantar keratoderma patients suggest genotype/phenotype correlations in DSG1 mutations**
- So Takeuchi¹, Takuya Takeichi¹, Yuta Koike², Hiroyuki Takama³, Kana Tanahashi¹, Yusuke Okuno⁴, Norito Ishii⁵, Yoshinao Muro¹, Tomoo Ogi⁶, Yasushi Suga⁷, Masashi Akiyama¹
- ¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Dermatology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, ³Department of Dermatology, Aichi Medical University, Nagakute, Japan, ⁴Medical Genomics Center, Nagoya University Hospital, Nagoya, Japan, ⁵Department of Dermatology, Kurume University School of Medicine, Fukuoka, Japan, ⁶Department of Genetics, Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan, ⁷Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu, Japan
- O02-03 [P06-09] Atypical epidermolytic palmoplantar keratoderma caused by KRT1 mutation is considered as mild type epidermolytic ichthyosis**
- Ryota Hayashi¹, Osamu Ansai¹, Rei Yokoyama¹, Tatsuya Katsumi¹, Mahoko Oginezawa¹, Tomoki Nishiguchi¹, Satoru Shinkuma², Riichiro Abe¹
- ¹Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan
- O02-04 [P06-10] Delineating the functional relevance of different lamin A domains that accelerate human ageing**
- Oliver Dreesen, Peh Fern Ong, Mattheus XR Foo
- Skin Research Institute of Singapore
- O02-05 [P06-11] Evidence for a dominant-negative effect of a missense mutation in the SERPING1 gene responsible for hereditary angioedema type I**
- Shuichiro Yasuno¹, Osamu Ansai², Sawako Nakamura¹, Yutaka Shimomura¹
- ¹The Department of Dermatology, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, ²The Division of Dermatology, Niigata University Graduate School of Medicine and Dental Sciences, Niigata, Japan
- O02-06 [P06-12] Hereditary mucoepithelial dysplasia/autosomal-dominant IFAP syndrome is a clinical spectrum due to SREBF1 variants**
- Chiaki Murase¹, Takuya Takeichi¹, Toshifumi Nomura², Tomoo Ogi³, Masashi Akiyama¹
- ¹The Department of Dermatology, Nagoya University Graduate School of Medicine, Aichi, Japan, ²Department of Dermatology, Faculty of Medicine, University of Tsukuba, ³Department of Genetics, Research Institute of Environmental Medicine, Nagoya University
- O02-07 [P06-13] Updated allele frequencies of SERPINB7 founder mutations in Asian patients with Nagashima-type palmoplantar keratosis/keratoderma**
- Yasutoshi Ito¹, Takuya Takeichi¹, Kenta Ikeda², Kana Tanahashi¹, Takenori Yoshikawa¹, Yuya Murase¹, Yoshinao Muro¹, Yoshio Kawakami³, Jun Muto⁴, Kazumitsu Sugiura⁵, Yasushi Suga⁶, Mariko Seishima⁷, Akira Kawada⁸, Tomoo Ogi⁹, Masashi Akiyama¹
- ¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan, ³Department of Dermatology, Kurashiki Medical Center, Okayama, Japan, ⁴Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan, ⁵Department of Dermatology, Fujita Health University School of Medicine, Toyoake, Japan, ⁶Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu, Japan, ⁷Department of Dermatology, Gifu University Graduate School of Medicine, Gifu, Japan, ⁸Department of Dermatology, Kinki University Faculty of Medicine, Osaka-Sayama, Japan, ⁹Department of Genetics, Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan
- O02-08 [P06-14] Bradykinin pathogenesis in hereditary angioedema based on the discovery of novel genetic mutations in ACE and SERPING7 gene**
- Takuya Omine, Takuya Miyagi, Daisuke Utumi, Sayaka Yamaguchi, Kenzo Takahashi
- University of the Ryukyus

- O02-09 [P06-15] A microchip flow-chamber assay can be a powerful tool for detecting platelet function defects in Hermansky-Pudlak syndrome**
 ○ Satoru Shinkuma¹, Hidetaka Kinoshita¹, Kenichi Ogiwara², Kengo Hamada¹, Kohei Ogawa¹, Fumi Miyagawa¹, Keiji Nogami², Hideo Asada¹
¹Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan, ²Department of Pediatrics, Nara Medical University School of Medicine
- O02-10 [P04-02] Antifibrogenic effects of sunitinib in a bleomycin-induced scleroderma model**
 ○ Masato Ishikawa, Toshiyuki Yamamoto
 Department of Dermatology, Fukushima Medical University, Fukushima, Japan
- O02-11 [P04-03] Anti-glycation properties of Carnosine in 3D skin equivalent models and its implications in prevention of premature skin aging**
 ○ Jaimie Jerome¹, Ewa Markiewicz², Olusola Idowu², Tom Mammon¹
¹Estee Lauder Companies, ²HexisLab Limited

3 minutes presentation and discussion 5 (Innate Immunity, Microbiology, Microbiome)

15:45-16:45

Chairs: Yumi Matsuoka-Nakamura, Tetsuro Kobayashi

- O05-01 [P07-08] Dysbiosis mediates inflammatory destruction of the hair follicles**
 ○ Keiko Sakamoto¹, Seon-Pil Jin¹, Shubham Goel¹, Jay-Hyun Jo², Benjamin Voisin¹, Doyoung Kim¹, Vinod Nadella¹, Hai Liang², Tetsuro Kobayashi¹, Xin Huang³, Clay Deming³, Keisuke Horiuchi⁴, Julia A Segre³, Heidi H Kong², Keisuke Nagao¹
¹Cutaneous Leukocyte Biology Section, Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, USA, ²Cutaneous Microbiome and Inflammation Section, Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, USA, ³Microbial Genomics Section, Translational and Functional Genomics Branch, National Human Genome Research Institute, National Institutes of Health, Bethesda, USA, ⁴Department of Orthopedic Surgery, National Defense Medical College, Saitama, Japan
- O05-02 [P07-12] An antimicrobial peptide cathelicidin triggers skin inflammation with other DAMPs via multiple receptors**
 ○ Ryo Amagai, Toshiya Takahashi, Taku Fujimura, Kenshi Yamasaki
 Department of dermatology, Tohoku University Graduate School of medicine, Miyagi, Japan
- O05-03 [P07-13] Potential role of neutrophil elastase (NE) in the development of nephrogenic systemic fibrosis (NSF) in an in vivo model of renal failure**
 ○ Syahla N. Amalia¹, A. Adhipatria. P Kartamihardja², Anu Bhattarai³, Akiko Sekiguchi¹, Ayako Taketomi-Takahashi², Sei-ichiro Motegi¹, Hiroshi Koyama⁴, Yoshito Tsushima^{2,5}
¹Department of Dermatology, Gunma University, Maebashi, ²Department of Diagnostic Radiology and Nuclear Medicine, Gunma University, Maebashi, Japan, ³National Academy of Medical Sciences (NAMS), Bir Hospital, Nepal, ⁴Department of Public Health, Gunma University, Maebashi, Japan, ⁵Division of Integrated Oncology Research, Gunma Initiative for Advanced Research, Japan
- O05-04 [P07-14] Coordinated expression of retrotransposon and type I interferon with distinct interferon pathways in autoimmune diseases**
 ○ Yuko Kuriyama¹, Akira Shimizu^{1,2}, Saki Kanai¹, Daisuke Oikawa³, Fuminori Tokunaga³, Osamu Ishikawa¹, Sei-ichiro Motegi¹
¹The Department of Dermatology, Gunma University Graduate School of Medicine, Gunma, Japan, ²Department of Dermatology, Kanazawa Medical University, Ishikawa, Japan, ³Department of Pathobiochemistry, Graduate School of Medicine, Osaka City University, Osaka, Japan
- O05-05 [P07-15] Macrophages express βKlotho in skin lesions of psoriasis patients and the skin of imiquimod-treated mice**
 ○ Kozo Nakai¹, Reiji Haba², Yoshio Kushida², Yasuo Kubota³, Daisuke Tsuruta¹
¹Department of Dermatology, Osaka City University Graduate School of Medicine, ²Department of Diagnostic Pathology, Kagawa University, ³Department of Dermatology, Kagawa University
- O05-06 [P07-16] Skin Inflammation and Testicular Function**
 ○ Ai Umaoka¹, Hiroki Takeuchi², Kento Mizutani¹, Naohiro Seo³, Yoshiaki Matsushima¹, Shohei Lida¹, Makoto Kondo¹, Koji Habe¹, Tomoaki Ikeda², Keiichi Yamanaka¹
¹Department of Dermatology Mie University, Graduate School of Medicine, Japan, ²Obstetrics and Gynecology, Mie University Graduate School of Medicine, ³Immuno-Gene Therapy, Mie University Graduate School of Medicine
- O05-07 [P07-17] Roles of interferon regulatory factor 3 in murine models of allergic and irritant dermatitis**
 ○ Risa Tamagawa-Mineoka¹, Mayumi Ueta², Yukiyasu Arakawa¹, Mari Nakanishi¹, Hiromi Nishigaki¹, Risa Yasuie¹, Norito Katoh¹
¹Departments of Dermatology, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, ²Departments of Ophthalmology, Graduate School of Medical Science, Kyoto Prefectural University of Medicine

- O05-08 [P07-18] Internalization of live atopic dermatitis-derived Staphylococcus aureus into HaCaT cells and inhibition by Staphylococcus epidermidis**
○ Tomofumi Numata, Kazumasa Iwamoto, Ryu Miyake, Michihiro Hide, Akio Tanaka
Department of Dermatology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima
- O05-09 [P07-19] Low heterogeneity among isolates of *Cutibacterium modestum*: Resident of human skin with possible infectious nature**
○ Itaru Dekio^{1,2}, Ken-ichi Okuda³, Masako Nishida⁴, Susumu Hamada-Tsutsumi⁵, Hiroto Tamura³, Kenichiro Ohnuma⁴, Yoshiyuki Murakami², Yuki Kinjo³, Akihiko Asahina¹
¹Department of Dermatology, The Jikei University, Tokyo, Japan, ²Seikakai Mildix Skin Clinic, Tokyo, Japan, ³Department of Bacteriology, The Jikei University, Tokyo, Japan, ⁴Kobe University Hospital, Kobe, Japan, ⁵Department of Environmental Bioscience, Meijo University, Nagoya, Japan
- O05-10 [P07-20] Cutaneous adverse events caused by EGFR inhibitors may result from reduced expression of human β -defensins induced by staphylococci**
○ Rie Ommori, Yuki Nishimura, Fumi Miyagawa, Chinatsu Shobatake, Kohei Ogawa, Satoru Shinkuma, Hideo Asada
The Department of Dermatology, Nara Medical University, Nara, Japan
- O05-11 [P07-21] Alternation of the cutaneous microbiome of herpes zoster lesion in a patient with severe coronavirus disease 2019**
○ Makoto Kondo^{1,2}, Asami Ito², Yoshiaki Matsushima¹, Shohei Iida¹, Ai Umaoka¹, Takehisa Nakanishi¹, Hiroshi Imai², Keiichi Yamanaka¹
¹Department of Dermatology Mie University, Graduate School of Medicine, Japan, ²Emergency Critical Care Center, University of Mie, Mie, Japan
- O05-12 [P07-22] Postbiotics power in supporting skin**
○ Nadine Pernodet¹, Don Collins³, Yulan Qu², Nan Frank Huang², Jian Richard Cao²
¹Research & Development, The Estee Lauder Companies, Estee Lauder Research Laboratories, ²Asia Innovation Center, the Estee Lauder Companies, ³Research & Development, The Estee Lauder Companies

Evening Seminar 3 "Cutaneous T-Cell Lymphoma"

16:50-17:50

Chair: Makoto Sugaya

- ES3-1 Therapeutic approaches for the treatment of cutaneous T-cell lymphoma: an update 2021**
○ Toshihisa Hamada
Department of Dermatology, Takamatsu Red Cross Hospital, Takamatsu, Japan
- ES3-2 Photo(chemo)therapy for cutaneous T-cell lymphoma in combination with bexarotene**
○ Akimichi Morita
Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

Co-sponsored by Minophagen Pharmaceutical Co., Ltd.

December 3, 2021, Room D

3 minutes presentation and discussion 3 (Photobiology/Pigmentation and Melanoma)

14:45-15:45

Chairs: Yukiko Kiniwa, Satoshi Fukushima

- O03-01 [P11-12] Excimer light downregulates interleukin-17 production and induces regulatory T cells in imiquimod-induced psoriasisform dermatitis**
 ○ Shota Egawa, Masahiro Kamata, Hideaki Uchida, Teruo Shimizu, Makoto Ito, Ryosuke Takeshima, Itsumi Mizukawa, Ayu Watanabe, Yayoi Tada
 Department of Dermatology, Teikyo University School of Medicine, Tokyo, Japan
- O03-02 [P11-13] Characterization of the DNA damage response in human skin cell types**
 ○ Chin Yee Ho¹, A.L Soon¹, C Tan², P.F Ong¹, M Ehrman³, J Oblong⁴, S Bellanger², O Dreesen¹
¹Skin Research Institute of Singapore, A*STAR, Singapore, ²Stemness, Differentiation and Aging in Human Epidermis, Skin Research Institute of Singapore, A*STAR, Singapore, ³Procter & Gamble International Operations SA, Singapore, ⁴Beauty Technology Division, The Procter & Gamble Company, Cincinnati, Ohio, USA
- O03-03 [P11-14] A role of elastogenic factors in the pathogenesis of Solar Elastosis**
 ○ Teruhiko Makino¹, Ko Kagoyama¹, Chisato Murabe², Tomoyuki Nakamura², Tadamichi Shimizu¹
¹Department of Dermatology, University of Toyama, Toyama, Japan, ²Department of Pharmacology, Kansai Medical University, Osaka, Japan
- O03-04 [P11-15] Photodynamic therapy using portable devices**
 ○ Rie Teranishi¹, Toshiyuki Ozawa¹, Tsuyoshi Goya², Kenji Kuwada³, Katsuyuki Morii^{3,4}, Takahiro Nishimura², Kunio Awazu², Daisuke Tsuruta¹
¹The Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ²Department of Quantum Energy Engineering, Graduate School of Engineering, Osaka University, ³Innovation and Business Division, Nippon Shokubai Co, ⁴Nippon Shokubai Research Alliance Laboratories, Osaka University
- O03-05 [P11-16] Usefulness of UVA lamps for the diagnosis of green nail syndrome with or without onychomycosis**
 ○ Tomotaka Sato, Kazuhiro Aoyama, Norihito Fukada, Akihiko Kinjo
 The Department of Dermatology, Teikyo University Chiba Medical Center
- O03-06 [P12-12] Attenuation of melanocyte reoccupation in long-lasting rhododendrol-induced guinea pig model of vitiligo**
 ○ Yasutaka Kuroda^{1,2}, Lingli Yang¹, Fei Yang^{1,2}, Sylvia Lai¹, Tetsuya Sayo^{1,2}, Yoshito Takahashi^{1,2}, Daisuke Tsuruta³, Ichiro Katayama¹
¹Department of Pigmentation Research and Therapeutics, Osaka City University Graduate school of medicine, ²Biological Science Research Laboratories, Kao Corporation, ³Department of Dermatology, Osaka City University Graduate school of medicine
- O03-07 [P12-13] Methyl-CpG binding domain protein 3 is a new diagnostic marker and potential therapeutic target of melanoma**
 ○ Takayuki Ishibashi¹, Ikko Kajihara¹, Satoru Mizuhashi¹, Haruka Kuriyama¹, Toshihiro Kimura¹, Hisashi Kanemaru¹, Katsunari Makino¹, Azusa Miyashita¹, Jun Aoi¹, Takamitsu Makino¹, Satoshi Fukushima¹, Kanako Kita², Hironobu Ihn¹
¹Department of Dermatology and Plastic Surgery, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan, ²Department of Molecular Pathology, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan
- O03-08 [P12-14] NUA2 is an important factor in acral melanomas development and progression**
 ○ Kohei Nojima¹, Masahiro Hayashi², Masakazu Kawaguchi², Tamio Suzuki², Masashi Ishikawa³, Yasuhiko Kaneko⁴, Atsushi Tanemura⁵, Ichiro Katayama⁶, Taisuke Mori⁷, Naoya Yamazaki⁸, Hiroki Mori⁹, Hiroo Yokozeki¹, Takeshi Namiki¹
¹Department of Dermatology, Tokyo Medical and Dental University, ²Department of Dermatology, Yamagata University, ³Department of Dermatology, Saitama Cancer Center, ⁴Research Institute for Clinical Oncology, Saitama Cancer Center, ⁵Department of Dermatology, Osaka University, ⁶Department of Dermatology, Osaka City University, ⁷Department of Pathology, National Cancer Center Hospital, ⁸Department of Dermatologic Oncology, National Cancer Center Hospital, ⁹Department of Plastic Surgery, Tokyo Medical and Dental University
- O03-09 [P12-15] Protective efficacy of Sanqi-derived compound K on melanocytes against oxidative stress: in vitro and in vivo evaluation**
 ○ Suwei Tang^{1,5}, Lingli Yang¹, Yasutaka Kuroda², Sylvia Lai¹, Shaoqiong Xie⁵, Huimin Zhang⁴, Daisuke Tsuruta³, Ichiro Katayama¹
¹Department of Pigmentation Research and Therapeutics, Graduate School of Medicine, Osaka City University, Osaka, Japan, ²Biological Science Laboratories, Kao Corporation, Kanagawa, Japan, ³Department of dermatology, Graduate School of Medicine, Osaka City University, Osaka, Japan, ⁴Department of Dermatology, Shuguang Hospital affiliated with Shanghai University of Traditional Chinese Medicine, Shanghai, China, ⁵Department of Dermatology, Shanghai Skin Disease Hospital, Tongji University School of Medicine, Shanghai, China
- O03-10 [P12-16] Genipin contained in gardenia fruit enhanced melanogenesis**
 ○ Megumi Mizawa¹, Tsugunobu Andoh², Tadamichi Shimizu¹
¹Department of Dermatology, Faculty of Medicine, Academic Assembly, University of Toyama, Toyama, Japan, ²Department of Pharmacology and Pathophysiology, College of Pharmacy, Kinjo Gakuin University, Aichi, Japan

3 minutes presentation and discussion 6 (Patient-Targeted Research)

15:45-16:45

Chairs: Takeshi Nakahara, Akihiko Uchiyama

- O06-01 [P09-11] Investigation of the involvement of TIF1 γ expression in tumors in the pathogenesis of cancer-associated dermatomyositis**
○ Mai Ishikawa, Akiko Sekiguchi, Yuko Kuriyama, Yukie Endo, Sei-ichiro Motegi
The Department of Dermatology, University of Gunma, Gunma, Japan
- O06-02 [P09-12] Identification of serum biomarkers predicting the therapeutic effect of dupilumab in atopic dermatitis by a targeted metabolomics approach**
○ Shoko Miyamoto¹, Shin Nishiumi², Masako Matsutani¹, Makoto Nagai¹, Kiyofumi Yamanishi¹, Nobuo Kanazawa¹, Yasutomo Imai¹
¹Department of Dermatology, Hyogo College of Medicine, ²Department of Omics Medicine, Hyogo College of Medicine
- O06-03 [P09-13] Predicting RNA sequences of small patch image for Treatment of Atopic Skin Disease by Deep Convolutional Neural Networks**
○ Daiki Ito¹, Yutaka Kawashima¹, Hiroto Horikawa², Koichi Ashizaki³, Hiroshi Kawasaki², Yoshimitsu Aoki¹
¹Department of Engineering, Keio University School, ²Department of Dermatology, Keio University School of Medicine, ³Medical Sciences Innovation Hub Program, RIKEN
- O06-04 [P09-14] Dermoscopic diagnostic performance of non-dermatologists for skin tumor is improved by a computer-aided diagnosis system**
○ Akane Minagawa¹, Hiroshi Koga¹, Kazuhisa Matsunaga², Yuya Hayashi², Akira Hamada², Yoshiharu Houjou², Ryuhei Okuyama¹
¹The Department of Dermatology, Shinshu University School of Medicine, Matsumoto, Japan, ²Casio Computer Co., Ltd., Tokyo, Japan
- O06-05 [P09-15] A possible role of surgical deroofing procedure to cover the disadvantage of adalimumab treatment for hidradenitis suppurativa**
○ Natsuko Sasaki, Yu Sawada, Etsuko Okada, Motonobu Nakamura
The Department of Dermatology, University of Occupational and Environmental health, Kitakyusyu, Japan
- O06-06 [P09-16] Dermcidin is a prognostic factor in patients with extramammary Paget's disease**
○ Yu Sawada, Shun Ohmori, Motonobu Nakamura
Department of Dermatology, University of Occupational and Environmental Health
- O06-07 [P09-17] Immediate impact of granulocyte and monocyte adsorption apheresis on generalized pustular psoriasis**
○ Masahiro Kamata, Hideaki Uchida, Shota Egawa, Mayumi Nagata, Saki Fukaya, Kotaro Hayashi, Atsuko Fukuyasu, Takamitsu Tanaka, Takeko Ishikawa, Takamitsu Ohnishi, Yayoi Tada
Department of Dermatology, Teikyo University School of Medicine, Tokyo, Japan
- O06-08 [P09-18] Safety and efficacy of bexarotene for Japanese patients with CTCL: Real-world experience from a result of post marketing survey**
○ Toshihisa Hamada¹, Akimichi Morita², Hiraku Suga³, Hikari Boki³, Taku Fujimura⁴, Yoji Hirai⁵, Takatoshi Shimauchi⁶, Chiharu Tateishi⁷, Eiji Kiyohara⁸, Ikko Muto⁹, The Japanese Bexarotene Study Group¹⁰
¹Department of Dermatology, Takamatsu Red Cross Hospital, Takamatsu, Japan, ²Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, ³Department of Dermatology, The University of Tokyo Graduate School of Medicine, Tokyo, ⁴Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, ⁵Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, ⁶Department of Dermatology, Hamamatsu University School of Medicine, Shizuoka, ⁷Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, ⁸Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Suita, ⁹Department of Dermatology, Kurume University School of Medicine, Kurume, ¹⁰the Japanese Bexarotene Study Group
- O06-09 [P09-19] MicroRNAs in neutrophils as markers of psoriasis**
○ Yuko Higashi¹, Munekazu Yamakuchi², Tomoko Fukushige¹, Teruto Hashiguchi², Takuro Kanekura¹
¹Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, ²Department of Laboratory and Vascular Medicine, Kagoshima University Graduate School of Medical and Dental Sciences
- O06-10 [P09-20] Chronic hepatitis B virus infection in dupilumab-treated atopic dermatitis patients**
○ Masako Matsutani
Department of Dermatology, Hyogo College of Medicine, Nishinomiya, Japan
- O06-11 [P09-21] Comparison of treatment goals between users of biological and non-biological therapies for treatment of psoriasis in Japan**
○ Yukari Okubo¹, Ann_Chao Tang², Sachie Inoue³, Hitoe_Toritsu Itakura², Mamitaro Ohtsuki⁴
¹Department of Dermatology, Tokyo Medical University, Tokyo, Japan, ²Eli Lilly Japan K.K., Tokyo, Japan, ³Crecon Medical Assessment INC., Tokyo, Japan, ⁴Department of Dermatology, Jichi Medical University, Shimotsuke, Tochigi, Japan

O06-12
[P09-22]

A patient with atopic dermatitis and psoriasis vulgaris presenting an unusual reaction for dupilumab

○ Yudai Tsukamoto, Toshifumi Takahashi, Miho Kabuto, Akihiko Yamaguchi, Noriki Fujimoto
Department of dermatology, Shiga university of medical science, Shiga, Japan

December 4, 2021, Room A

Morning Seminar 1

"Mechanism of Chronic Urticaria and Treatment Tips"

8:00-9:00

Chair: Shinichi Imafuku

MS1-1 Chronic spontaneous urticaria and itch: a "Cinderella" disease with the Devil's itch

○ Takashi Hashimoto
Department of Dermatology, National Defense Medical College, Tokorozawa, Japan

MS1-2 Tips for the treatment of chronic spontaneous urticaria

○ Naotomo Kambe
Department of Dermatology, Kyoto University Graduate School of Medicine

Co-sponsored by Mitsubishi Tanabe Pharma Corporation/Teikoku Seiyaku Co., Ltd.

Plenary Session II

9:10-10:40

Chairs: Manabu Fujimoto, Qianjin Lu, Kiarash Khosrotehrani

II-1 [P01-01] Lymphotoxin β from T cells mediates the formation of high endothelial venule-like vessels in atopic dermatitis-like skin lesions in mice

○ Shuto Kanameishi¹, Sachiko Ono¹, Yuki Honda-Keith¹, Ryota Asahina¹, Tetsuya Honda², Kenji Kabashima^{1,3}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Department of Dermatology, Hamamatsu University School of Medicine, Japan, ³Singapore Immunology Network (SIgN) and Skin Research Institute of Singapore, Agency for Science, Technology and Research, Biopolis, Singapore

II-2 [P02-01] Autoantigen-specific B cells targeted single-cell RNA-seq reveals the functional heterogeneity in pemphigus patients

○ Shohei Egami^{1,2}, Takashi Watanabe², Ayano Nomura-Fukushima¹, Hisashi Nomura¹, Hayato Takahashi¹, Jun Yamagami¹, Osamu Ohara³, Masayuki Amagai^{1,2}
¹The Department of Dermatology, Keio University of Medicine, Tokyo, Japan, ²Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences, ³Laboratory for integrative genomics, RIKEN Center for Integrative Medical Sciences

II-3 [P03-01] Keratinocyte Regnase-1, a down-modulator of skin inflammation, contributes to protection from carcinogenesis through regulating COX2

○ Hiroyuki Morisaka¹, Mikiro Takaishi¹, Shizuo Akira^{2,3}, Shigetoshi Sano¹
¹Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan, ²Laboratory of Host Defense, World Premier Institute Immunology Frontier Research Center (WPI-IFReC), Osaka University, Osaka, Japan, ³Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan

II-4 [P12-01] A mechanism of cooling hot tumors: lactate and its induced EGR1 are novel key factors that turn hot tumors into cold tumors

○ Hisashi Kanemaru, Yukari Mizukami, Akira Kaneko, Hidemi Tagawa, Toshihiro Kimura, Haruka Kuriyama, Soichiro Sawamura, Ikko Kajihara, Katsunari Makino, Jun Aoi, Satoshi Fukushima
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University

II-5 [P09-01] Basal sweating as unrecognized machinery to maintain skin hydration in the finger: a long-standing paradox in dry skin resolved

○ Tetsuko Sato, Chieko Katayama, Yuki Hayashida, Yumiko Asanuma, Yumi Aoyama
Department of dermatology, Kawasaki Medical School, Okayama, Japan

II-6 [P09-02] Increased serum levels of CCL2 and IL-8 in patients with toxic epidermal necrolysis accompanied by acute respiratory distress syndrome

○ Tomoya Watanabe, Yuko Watanabe, Michiko Aihara, Yukie Yamaguchi
Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan

JSID Kisaragi Award

10:40-10:45

Chair and Presenter: Kenji Kabashima

JKA The role of Ninjurin-1 in pericytes during skin wound healing: effects on capillary maturation

○ Risa Matsuo
Department of Dermatology, Graduate School of Medicine, Asahikawa Medical University, Japan

JSID Award Lecture

10:45-11:15

Chair and Presenter: Kenji Kabashima

JAL Autoimmune mechanisms in dermatology

○ Naoko Okiyama

Department of Dermatology, Faculty of Medicine, University of Tsukuba

Luncheon Seminar 4 "The Cutting Edge of Psoriasis Research"

11:25-12:25

Chairs: Kenzo Takahashi, Norito Kato

LS4-1 A Novel Ultra-Low Level Cytokine Assay as a Potential Tool for Selecting Biologics for Psoriasis

○ Ayumi Yoshizaki

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

LS4-2 Pathophysiology of Psoriasis and the effect of IL-23 inhibition

○ Mayumi Komine

Department of Dermatology, Jichi Medical University

Co-sponsored by Sun Pharma Japan Ltd.

The 22nd Maruho Research Award Presentations by award winners and award ceremony

12:30-13:30

Chairs: Masayuki Amagai, Shinichi Sato, Kenji Kabashima

MRA1 Glucose-6-Phosphate Dehydrogenase Correlates with Tumor Immune Activity and Programmed Death Ligand-1 Expression in Merkel Cell Carcinoma

○ Motoki Nakamura¹, Kotaro Nagase², Maki Yoshimitsu¹, Tetsuya Magara¹, Yuka Nojiri¹, Hiroshi Kato¹, Tadahiro Kobayashi³, Yukiko Teramoto⁴, Masahito Yasuda⁵, Hidefumi Wada⁶, Toshiyuki Ozawa⁷, Yukie Umemori⁸, Dai Ogata⁹, Akimichi Morita¹¹Departments of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Aichi, Japan, ²Division of Dermatology, Department of Internal Medicine, Faculty of Medicine, Saga University, Saga, Japan, ³Department of Molecular Pathology of Skin, Faculty of Medicine, Kanazawa University, Kanazawa, Ishikawa, Japan, ⁴Department of Skin Oncology/Dermatology, Saitama Medical University International Medical Center, Hidaka, Saitama, Japan, ⁵Department of Dermatology, Gunma University, Maebashi, Gunma, Japan, ⁶Environmental Immuno-Dermatology, Yokohama City University, Yokohama, Kanagawa, Japan, ⁷Department of Dermatology, Osaka City University, Abeno-ku, Osaka, Japan, ⁸Division of Dermatology, Nagaoka Red Cross Hospital, Nagaoka, Niigata, Japan, ⁹Department of Dermatology, Saitama Medical University, Iruma-gun, Saitama, Japan

MRA2 Inhibition of endoglin exerts antitumor effects through the regulation of non-Smad TGF-β signaling in angiosarcoma

○ Ryoko Sakamoto¹, Ikko Kajihara¹, Hitomi Miyauchi¹, Saki Maeda-Otsuka¹, Saori Yamada-Kanazawa¹, Katsunari Makino¹, Jun Aoi¹, Takamitsu Makino¹, Satoshi Fukushima¹, Mamiko Masuzawa², Mikio Masuzawa³, Yasuyuki Amoh⁴, Daichi Hoshina⁴, Riichiro Abe⁵, Hironobu Ihn¹¹Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan, ²Department of Dermatology, Kitasato University School of Medicine, Kanagawa, Japan, ³Department of Molecular Diagnostics, School of Allied Health Sciences, Kitasato University, Kanagawa, Japan, ⁴Department of Dermatology, Hokkaido University Graduate School of Medicine, Hokkaido, Japan, ⁵Department of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

MRA3 Extramammary Paget's disease patient-derived xenografts harboring ERBB2 S310F mutation show sensitivity to HER2-targeted therapies

○ Takuya Maeda¹, Shinya Kitamura¹, Hiroshi Nishihara², Teruki Yanagi¹¹Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Genomics Unit, Keio Cancer Center, Keio University School of Medicine, Tokyo, Japan

MRA4 Clinical characteristics and treatment of 50 cases of Blau syndrome in Japan confirmed by genetic analysis of the NOD2 mutation

○ Tomoko Matsuda¹, Yoko Ueki¹, Nobuo Kanazawa², Naotomo Kambe^{1,3}¹Department of Dermatology, Kansai Medical University, Hirakata, Osaka, Japan, ²Department of Dermatology, Hyogo Medical University, Nishinomiya, Hyogo, Japan, ³Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Kyoto, Japan

Co-sponsored by Maruho Co., Ltd.

Concurrent Oral Session 4 (Auto-Immunity)

13:40-15:10

Chairs: Yumi Aoyama, Hideyuki Ujii

- C04-01 [P02-03] Blockade of CD122 on skin resident memory T cells suppresses the development of mucocutaneous graft-versus-host disease**
- Noriko Kubota¹, Ryota Tanaka¹, Yuki Ichimura¹, Risa Konishi¹, J Yun Tso², Naoya Tsurushita², Toshifumi Nomura¹, Naoko Okiyama¹
¹The Department of Dermatology, University of Tsukuba, Ibaraki, Japan, ²JN Biosciences LLC
- C04-02 [P02-06] Activation of TNF/NF-κB signaling by linear ubiquitination specifically exacerbates a murine imiquimod-induced psoriasis model**
- Ken I. Kosaka, Satoshi Nakamizo, Gyohei Egawa, Kenji Kabashima
Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan
- C04-03 [P02-07] Possible involvement of IL-22-producing CD8⁺CD103⁺ T cells in the epidermal hyperplasia of atopic dermatitis**
- Kazuo Kurihara¹, Toshiharu Fujiyama¹, Pawit Phadungsaksawasdi¹, Yoshiki Tokura^{1,2}, Tetsuya Honda¹
¹The Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan, ²Allergic Disease Research Center and Department of Dermatology, Chutoen General Medical Center, Kakegawa, Japan
- C04-04 [P02-08] The role of FcγRIIB in a murine bleomycin-induced scleroderma model**
- Kaori Sawada¹, Yasuhito Hamaguchi¹, Kie Mizumaki¹, Kyosuke Oishi¹, Shintaro Maeda¹, Yuka Ikawa¹, Akito Komuro^{1,2}, Kazuhiko Takehara¹, Takashi Matsushita¹
¹Department of Dermatology, Kanazawa University, Kanazawa, Japan, ²Department of Plastic Surgery, Kanazawa University, Kanazawa, Japan
- C04-05 [P02-09] Serine protease inhibitor A3n, an endogenous granzyme B inhibitor, alleviates graft-versus-host disease reaction in human skin**
- Yuki Ichimura¹, Risa Konishi¹, Ryota Tanaka¹, Noriko Kubota¹, Shoichiro Ishitsuki¹, Katsuhito Sasaki¹, Yasuyuki Nakamura¹, Yasuhiro Fujisawa¹, Toshifumi Nomura¹, Hideki Watanabe², Naoko Okiyama¹
¹Department of Dermatology, University of Tsukuba, Tsukuba, Japan, ²Pharmacology Research Group, Research Department, Maruho Co., Ltd.
- C04-06 [P02-10] Occurrence of immune reconstitution inflammatory syndrome can be predicted by cytokine profiles in DPP-4i-associated bullous pemphigoid**
- Seiko Sugiyama, Takenobu Yamamoto, Yumi Aoyama
Department of Dermatology, Kawasaki Medical School
- C04-07 [P02-11] Persistent dermatitis resulted in the gastro-intestinal amyloidosis, reduced absorption of nutrients, and hypoalbuminemia**
- Takehisa Nakanishi, Kento Mizutani, Shohei Iida, Yoshiaki Matsushima, Ai Umaoka, Makoto Kondo, Koji Habe, Keiichi Yamanaka
The Department of Dermatology, Mie University Graduate School of Medicine

3 minutes presentation and discussion 7 (Adaptive Immunity)

15:20-16:20

Chairs: Rei Watanabe, Takashi Matsushita

- O07-01 [P01-11] Chronological classification of alopecia areata based on PD-1 expression revealed by scRNA-seq analysis-assisted immunohistochemistry**
- Akiyoshi Senda, Toshiaki Kogame, Satoshi Nakamizo, Takashi Nomura, Naotomo Kambe, Kenji Kabashima
Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- O07-02 [P01-12] Treating pemphigus vulgaris (PV) and foliaceus (PF) by inhibiting the neonatal Fc receptor: phase 2 open-label trial with efgartigimod**
- Matthias Goebeler¹, Zsuzsanna Bata-Csorgo², Clara De Simone³, Biagio Didona⁴, Eva Remenyik⁵, Nataliya Reznichenko⁶, Enno Schmidt⁷, Johanna Stoevesandt¹, E. Sally Ward⁸, Wim Parys⁹, Hans de Haard⁹, Patrick Dupuy⁹, Peter Verheesen⁹, Pascal Joly¹⁰
¹Department of Dermatology, Venereology and Allergology, University Hospital Wuerzburg, Wuerzburg, Germany, ²Department of Dermatology and Allergology, University of Szeged, Szeged, Hungary, ³Catholic University Policlinic A. Gemelli, Rome, Italy, ⁴Dermatopathic Institute of the Immaculate, Rome, Italy, ⁵University of Debrecen, Debrecen, Hungary, ⁶Zaporizhzhya State Medical University, Zaporizhzhya, Ukraine, ⁷Department of Dermatology, University of Luebeck, Luebeck, Germany, ⁸Centre for Cancer Immunology, University of Southampton, Southampton, UK, ⁹argenx, Ghent, Belgium, ¹⁰Department of Dermatology, Rouen University Hospital, Rouen, France

- O07-03 [P01-13] Elucidating the role of CARD14 signaling in Type 2 immune response**
 ○ Alshimaa Mostafa¹, Teruasa Murata¹, Teruki Dainichi², Ken Ishii³, Kenji Kabashima^{1,4}
¹The Department Of dermatology, Kyoto University, Kyoto, Japan, ²Department of Dermatology, Graduate school of Medicine, Kagawa university, Japan, ³Institute of Medical Science, Division of Vaccine Science, Department of Microbiology and Immunology, The University of Tokyo, Japan, ⁴The Singapore Immunology Network (SIgN) and Skin Research Institute of Singapore (SRIS), Agency for Science, Technology and Research (A*STAR), Singapore
- O07-04 [P01-14] The effect of topical 5-azacytidine in irritant and allergic contact dermatitis**
 ○ Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura
 Department of Dermatology, University of Yamanashi, Yamanashi, Japan
- O07-05 [P01-15] Molecular mechanisms of mucosal mast cell differentiation**
 ○ Nobuhiro Nakano¹, Jiro Kitaura¹, Ko Okumura¹, Hideoki Ogawa^{1,2}, Shigaku Ikeda^{1,2}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan
- O07-06 [P01-16] iSALT structures in B-cell type pseudolymphoma and their potential for local plasmacytoid differentiation in the skin**
 ○ Kosei Nanya¹, Toshiaki Kogame¹, Masahiro Hirata², Riko Takimoto-Ito¹, Masakazu Fujimoto², Takashi Nomura¹, Naotomo Kambe¹, Kenji Kabashima¹
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Department of Diagnostic Pathology, Kyoto University Hospital, Kyoto, Japan
- O07-07 [P01-17] Hyaluronan regulates murine irritant contact dermatitis model via Langerhans cell activation**
 ○ Mayuko Amagai, Hitoshi Terui, Naokazu Hatchome, Setsuya Aiba, Kenshi Yamasaki
 Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan
- O07-08 [P01-18] A possible niche for B-cell development in the skin in primary cutaneous plasmacytosis suggesting the presence of a functional unit as iSALT**
 ○ Keigo Takase¹, Toshiaki Kogame², Riko Takimoto-ito², Takayoshi Komatsu-Fujii¹, Rintaro Shibuya², Takashi Nomura², Naotomo Kambe², Kenji Kabashima²
¹Department of Dermatology, Tenri Hospital, Tenri, Nara, ²Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- O07-09 [P01-19] Optimal methods for human skin T-cell analysis**
 ○ Takuya Sato, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura
 Department of Dermatology, University of Yamanashi, Chuo, Japan
- O07-10 [P01-20] Differentially expressed circulating exosomal microRNAs as biomarkers for disease severity in psoriasis patients**
 ○ Dong Chan Kim¹, Young Joon Park¹, So Min Kim¹, Ji Young Park¹, Mi Jin Park¹, Jae Youn Cheong², Eun-So Lee¹
¹Department of Dermatology, Ajou University School of Medicine, Suwon, Korea, ²Ajou Translational Omics Center, Ajou University Medical Center, Suwon, Korea
- O07-11 [P01-21] Anti-inflammation effects of decanoic acid in a mouse of contact hypersensitivity: on a possible new drug for inflammatory skin disease**
 ○ Shohei Igari¹, Youichi Akama², Toshiyuki Yamamoto¹
¹The Department of Dermatology, Fukushima Medical University, Fukushima, Japan, ²Department of Emergency, Minami Tohoku Hospital, Iwanuma, Miyagi

3 minutes presentation and discussion 10 (Carcinogenesis and Cancer)

16:20-17:20

Chairs: Jun Asai, Takeshi Namiki

- O10-01 [P03-09] Combination treatment of topical imiquimod plus anti-programmed cell death 1 antibody exerts significantly potent antitumor effect**
 ○ Kazumasa Oya¹, Yoshiyuki Nakamura¹, Yasuhiro Fujisawa¹, Naoko Okiyama¹, Manabu Fujimoto², Toshifumi Nomura¹
¹The Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki, Japan, ²Department of Dermatology, Integrated Medicine, Graduate School of Medicine, Osaka University, Suita, Osaka
- O10-02 [P03-10] Skin liquid biopsy method for assessing the lesional environment of cutaneous T-cell lymphoma**
 ○ Kan Torii¹, Yukinori Okada², Akimichi Morita¹
¹Department of Geriatric and Environmental Dermatology, Nagoya City University, Aichi, Japan, ²Department of Statistical Genetics, Osaka University Graduate School of Medicine, Osaka, Japan

- O10-03 [P03-11] Global tyrosine kinome profiling revealed Src pathway as a novel therapeutic target in combination with HDAC inhibitors for CTCL**
○ Kazuyasu Fujii^{1,2}, Nozomi Jimura^{1,2}, Ryuto Tsuchiya², Yuki Yoshimatsu², Tadashi Kondo², Takuro Kanekura¹
¹The Department of Dermatology, Kagoshima University, Kagoshima, Japan, ²Division of Rare Cancer Research, National Cancer Center Research Institute, Tokyo, Japan
- O10-04 [P03-12] Matrin-3 is involved in cell cycle and apoptosis for survival in melanoma**
○ Haruka Kuriyama¹, Toshihiro Kimura¹, Etsuko Okada¹, Takayuki Ishibashi¹, Satoru Mizuhashi¹, Hisashi Kanemaru¹, Ikko Kajihara¹, Katsunari Makino¹, Azusa Miyashita¹, Jun Aoi¹, Kanako Kita^{1,2}, Hironobu Ihn¹, Satoshi Fukushima¹
¹Department of Dermatology and Plastic Surgery, Kumamoto University, Kumamoto, Japan, ²Department of Molecular Pathology, Graduate School of Medical Sciences, Kumamoto University
- O10-05 [P03-13] Frequent *FGFR3* and ras gene mutations in skin tags/acrochordons**
○ Satomi Aoki¹, Hisato Suzuki², Yoshiko Hirata¹, Tomoko Kawai³, Kazuhiko Nakabayashi³, Kenichiro Hata³, Kenjiro Kosaki², Masayuki Amagai¹, Akiharu Kubo¹
¹Department of Dermatology, Keio University School of Medicine, ²Center for Medical Genetics, Keio University School of Medicine, ³Department of Maternal-Fetal Biology, National Center for Child Health and Development
- O10-06 [P03-14] Two opposite effects of desmoglein 3 on the growth of oral squamous cell carcinoma between anchorage-dependent and -independent conditions**
○ Michiyoshi Kouno¹, Junichiro Inada², Masaki Minabe², Yurie Akiyama², Kazunari Higa³, Tetsuhiko Tachikawa⁴, Takeshi Nomura², Shinichi Takahashi¹
¹The Department of Dermatology, Tokyo Dental College Ichikawa General Hospital, Chiba, Japan, ²The Department of Oral Oncology, Oral and Maxillofacial Surgery, Tokyo Dental College, ³Cornea Center Eye bank, Tokyo Dental College Ichikawa General Hospital, ⁴Division of Molecular Diagnosis and Cancer Prevention, Saitama Cancer Center
- O10-07 [P03-15] AID expression of B cells in the tertiary lymphoid structures implies an immunoglobulin class switching in tumor immunity**
○ Tomoya Takegami, Toshiaki Kogame, Takashi Nomura, Naotomo Kambe, Takaya Komatsu, Kenji Kabashima
Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- O10-08 [P03-16] Serum Cytokeratin 18 as a Potential Prognostic, Diagnostic and Therapeutic Marker for Extramammary Paget's Disease**
○ Mariko Takaoka, Hayakazu Sumida, Takuya Miyagawa, Shinichi Sato
Department of Dermatology, Faculty of Medicine, The University of Tokyo, Tokyo, Japan
- O10-09 [P03-17] The MIF-CD74 interaction regulates the expression of PD-L1 in melanoma cells**
○ Keiji Tanese^{1,2}, Masako Imaoka², Yohei Masugi², Mutsumi Hayashi², Michiie Sakamoto²
¹The Department of Dermatology, Keio University, Tokyo, Japan, ²The Department of Pathology, Keio University, Tokyo, Japan
- O10-10 [P03-18] Functional analysis of Rap2 in tumor microenvironment**
○ Kimiko Takei^{1,2}, Masato Umikawa², Tsuyoshi Asato², Ken-ichi Kariya²
¹Department of Dermatology, Faculty of Medicine, University of the Ryukyus, ²Department of Medical Chemistry, Graduate School of Medicine, University of the Ryukyus
- O10-11 [P03-19] Clinicopathological parameters to predict prognosis in cutaneous angiosarcoma -a retrospective analysis**
○ Satoru Yonekura, Yuichiro Endo, Hiroko Fujii, Gyohei Egawa, Kenji Kabashima
The Department of Dermatology, Kyoto University, Kyoto, Japan
- O10-12 [P03-21] Evaluating the efficacy of cetuximab, avelumab and cetuximab plus avelumab in treating perineural invasion of cutaneous SCC**
○ Priscila Oliveira de Lima¹, Benedict Lum¹, Shannon Joseph¹, Brian Tse², Kamil Sokolowski², Ian Brown³, Glen Boyle⁴, Benedict Panizza⁵, Fiona Simpson¹
¹The University of Queensland Diamantina Institute, Woolloongabba, QLD, Australia, ²Translational Research Institute, Woolloongabba, QLD, Australia, ³Envoi Pathology, Kelvin Grove QLD, Australia, ⁴Cancer Drug Mechanisms Group, QIMR Berghofer Medical Research Institute, Herston, QLD, Australia, ⁵Otolaryngology-Head and Neck Surgery Department, Princess Alexandra Hospital, Brisbane, QLD, Australia

Evening Seminar 4

"What's Next in Psoriasis ? "

17:25-18:25

Chair: Takashi Matsushita

ES4-1 The roles of Interferon Regulatory Factor-8 in psoriasis pathogenesis

○ Tomoya Watanabe

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

ES4-2 Personalized nutrition for disease management in psoriasis patients

○ Yuki Hashimoto

Department of Dermatology, faculty of Medicine, Toho University, Tokyo, Japan

Co-sponsored by AbbVie GK

December 4, 2021, Room B

Morning Seminar 2 "Autoimmune bullous diseases"

8:00-9:00

Chair: Masayuki Amagai

MS2 Elucidating pathomechanism and finding treatment of bullous pemphigoid, our target for research

○ Daisuke Tsuruta

Department of Dermatology, Osaka City University Graduate School of Medicine

Co-sponsored by Japan Blood Products Organization

Luncheon Seminar 5 "Managing hyperpigmentation: Exploring multiple biological pathways and modulating melanogenesis"

11:25-12:25

Chair: Chikako Nishigori

LS5-1 Melanogenesis connection with toll-like receptor signals

○ Kenshi Yamasaki

Tohoku University Hospital

LS5-2 A multi-prong understanding of hyperpigmentation

○ Tom Mammone

Estee Lauder Companies

Co-sponsored by ELC JAPAN K.K.

Concurrent Oral Session 5 (Pigmentation and Melanoma)

13:40-15:10

Chairs: Atsushi Otsuka, Takafumi Kadono

C05-01 [P12-02] TIGIT/CD155 axis mediates resistance to immunotherapy in cancer patients with the inflamed tumor microenvironment

○ Shusuke Kawashima^{1,2}, Takashi Inozume^{1,2,3}, Masahito Kawazu⁴, Toshihide Ueno⁴, Etsuko Tanji¹, Tatsuyoshi Kawamura³, Yasuhiro Nakamura⁵, Tomonori Kawasaki⁶, Yukiko Kiniwa⁷, Hiroyoshi Nishikawa^{8,9}, Hiroyuki Matsue², Yosuke Togashi^{1,8,10}

¹Chiba Cancer Center, Research Institute, Chiba, Japan, ²Department of Dermatology, Graduate School of Medicine, Chiba University, Chiba, Japan, ³Department of Dermatology, University of Yamanashi, Yamanashi, Japan, ⁴Division of Cellular Signaling, National Cancer Center Research Institute, Tokyo, Japan, ⁵Department of Skin Oncology/Dermatology, Saitama Medical University International Medical Center, Saitama, Japan, ⁶Department of Pathology, Saitama Medical University International Medical Center, Saitama, Japan, ⁷Department of Dermatology, Shinshu University School of Medicine, Nagano, Japan, ⁸Division of Cancer Immunology, Research Institute/Exploratory Oncology Research and Clinical Trial Center (EPOC), National Cancer Center, Tokyo/Kashiwa, Japan, ⁹Department of Immunology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ¹⁰Department of Tumor Microenvironment, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan

C05-02 [P12-03] IPS cell-derived myeloid cells expressing OX40 ligand amplify tumor-infiltrating T cells in advanced melanoma

○ Toshihiro Kimura¹, Haruka Kuriyama¹, Hisashi Kanemaru¹, Yosuke Kubo¹, Satoshi Nakahara¹, Azusa Miyashita¹, Jun Aoi¹, Hirotake Tsukamoto², Yasuharu Nishimura^{3,4}, Takashi Inozume⁵, Rong Zhang⁶, Yasushi Uemura⁶, Satoru Senju³, Hironobu Ihn¹, Satoshi Fukushima¹

¹Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan, ²Division of Clinical Immunology and Cancer Immunotherapy, Center for Cancer Immunotherapy and Immunobiology, Graduate School of Medicine, Kyoto University, Kyoto, Japan, ³Department of Immunogenetics, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan, ⁴Nishimura Project Laboratory, Institute of Resource Development and Analysis, Kumamoto University, Kumamoto, Japan, ⁵Department of Dermatology, Graduate School of Medicine, Chiba University, Chiba, Japan, ⁶Division of Cancer Immunotherapy, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center (NCC), Chiba, Japan

- C05-03 [P12-04] Impact of a *SLC24A5* novel mutation identified in the first Japanese patient with oculocutaneous albinism 6 on retinal pigment epithelium**
 ○ Toru Saito¹, Ken Okamura¹, Rika Kosaki², Kazumasa Wakamatsu³, Shosuke Ito³, Osamu Nakajima⁴, Hidetoshi Yamashita⁵, Yutaka Hozumi¹, Tamio Suzuki¹
¹Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan, ²Division of Medical Genetics, National Center for Child Health and Development, Tokyo, Japan, ³Institute for Melanin Chemistry, Fujita Health University, Toyoake, Japan, ⁴Research Center for Molecular genetics, Institute for Promotion of Medical Science Research, Yamagata University Faculty of Medicine, Yamagata, Japan, ⁵Department of Ophthalmology, Yamagata University Faculty of Medicine, Yamagata, Japan
- C05-04 [P12-05] Molecular and functional characterization of melanocyte subpopulations in the human hairy skin epidermis based on single-cell RNA sequencing**
 ○ Fumihito Noguchi, Peinan Zhao, Mark Shackleton
 Cancer Development and Treatment Group, Department of Medicine Research Laboratories, Alfred Hospital, Monash University, Melbourne, Victoria, Australia
- C05-05 [P12-06] Melanocyte stem cell dynamics underlie de novo melanomagenesis**
 ○ Sally Eshiba¹, Takeshi Namiki², Yasuaki Mohri¹, Tomomi Aida^{3,4}, Naotaka Serizawa¹, Takakazu Shibata⁵, Hironobu Morinaga¹, Daisuke Nanba¹, Keiko Miura⁶, Masaru Tanaka⁷, Hisashi Uhara⁸, Hiroo Yokozeki², Toshiaki Saida⁹, Emi K. Nishimura^{1,10}
¹Department of Stem cell biology Tokyo medical and dental university, ²Department of Dermatology, Tokyo Medical and Dental University Graduate School and Faculty of Medicine, Tokyo, Japan, ³Department of Molecular Neuroscience, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ⁴Laboratory of Genome Editing for Biomedical Research, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ⁵Medical Corporation Shibata Dermatology Clinic, Osaka, Japan, ⁶Department of Pathology, Tokyo Medical and Dental University Graduate School and Faculty of Medicine, Tokyo, Japan, ⁷Department of Dermatology, Tokyo Women's Medical University Medical Center East, Tokyo, Japan, ⁸Department of Dermatology, Sapporo Medical University School of Medicine, Hokkaido, Japan, ⁹Shinshu University, Professor Emeritus, Saitama, Japan, ¹⁰Division of Aging and Regeneration, Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- C05-06 [P12-07] Liquid biopsy-based analysis by CAPP-Seq and ddPCR in patients with melanoma**
 ○ Akira Kaneko, Hisashi Kanemaru, Ikko Kajihara, Haruka Kuriyama, Toshihiro Kimura, Soichiro Sawamura, Katsunari Makino, Azusa Miyashita, Jun Aoi, Takamitsu Makino, Shinichi Masuguchi, Satoshi Fukushima
 Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- C05-07 [P12-17] Genome-scale DNA methylation analysis identifies regulatory region and repeat element alterations that modulate the genomic stability of melanocytic nevi**
 Meghan E. Muse¹, Drew T. Bergman¹, Lucas A. Salas¹, Lisa N. Tom², Jean-Marie Tan², Antonia Laino², Duncan Lambie^{3,4}, Richard A. Sturm², Helmut Schaidler^{2,5}, H. Peter Soyer^{2,6}, Brock C. Christensen^{1,7,8}, ○ Mitchell S. Stark²
¹Department of Epidemiology, Geisel School of Medicine at Dartmouth, Hanover, NH, USA, ²The University of Queensland Diamantina Institute, The University of Queensland, Dermatology Research Centre, Brisbane, QLD 4102, Australia., ³IQ Pathology, Brisbane, Queensland, Australia, ⁴Pathology Queensland, Princess Alexandra Hospital, Brisbane, Queensland, Australia, ⁵Department of Dermatology, Sunshine Coast Hospital and Health Service, Birtinya, Queensland, Australia, ⁶Department of Dermatology, Princess Alexandra Hospital, Brisbane, Queensland, Australia, ⁷Department of Molecular & Systems Biology, Dartmouth Geisel School of Medicine, Hanover, NH, USA Department of Molecular & Systems Biology, Dartmouth Geisel School of Medicine, Hanover, NH, USA, ⁸Department of Community & Family Medicine, Dartmouth Geisel School of Medicine, Hanover, NH, USA

3 minutes presentation and discussion 8 (Skin, Appendages, and Stem Cell Biology)

15:20-16:20

Chairs: Yukiteru Oji, Misaki Kinoshita

- O08-01 [P13-08] Dynamic stem cell selection safeguards the genomic integrity of the epidermis**
 ○ Tomoki Kato¹, Nan Liu¹, Kyosuke Asakawa¹, Taichi Muraguchi¹, Yuko Muroyama¹, Hironobu Morinaga¹, Mariko Shimokawa¹, Yuriko Nishimori¹, Li Jing Tan¹, Yasuaki Mohri¹, Emi K. Nishimura^{1,2}
¹Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ²Division of Aging and Regeneration, Institute of Medical Science, The University of Tokyo, Japan
- O08-02 [P13-09] Impaired holocrine cell rupture of sebocytes in comedo: Revisiting the mechanism of comedo formation in the study with excised human skins**
 ○ Toru Atsugi¹, Takashi Teramura², Hiroki Ota³, Tomoko Aida³, Mika Yamashita³, Mathieu Lacroix⁴, Anne-Laure Desroches⁴, Nico Forraz⁴, Colin McGuckin⁵, Eiji Naru¹
¹Dermatology and Cosmeceutical Research Laboratories, KOSÉ Corporation, ²KOSÉ R&D France, KOSÉ Corporation, ³Safety and Analytical Research Laboratories, KOSÉ Corporation, ⁴CTI BIOTECH
- O08-03 [P13-10] Immunological Properties of Atopic Dermatitis-Associated Alopecia Areata**
 ○ Reiko Kageyama¹, Taisuke Ito¹, Shiho Hanai², Naomi Morishita¹, Shinsuke Nakazawa¹, Toshiharu Fujiyama¹, Tetsuya Honda¹, Yoshiki Tokura³
¹Department of Dermatology, Hamamatsu University School of Medicine, ²Seirei Hamamatsu General Hospital, ³Chutoen General Medical Center

- O08-04 [P13-11] Time course changes in peripheral blood mononuclear cell subsets during intravenous corticosteroid pulse therapy for severe alopecia areata**
○ Ryo Takahashi¹, Yohei Sato², Momoko Kimishima², Manabu Ohyama^{1,2}
¹Flow Cytometry Core Facility, Kyorin University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, Japan
- O08-05 [P13-12] Distinct types of stem cell divisions orchestrate organ regeneration and aging in hair follicles**
○ Hiroyuki Matsumura¹, Nan Liu¹, Daisuke Nanba¹, Shizuko Ichinose², Aki Takada¹, Sotaro Kurata³, Hironobu Morinaga¹, Yasuaki Mohri¹, Adèle De Arcangelis⁴, Shigeo Ohno⁵, Emi K. Nishimura¹
¹The Department of Stem cell medicine, Medical Research Institute, Tokyo Medical and Dental University, Japan, ²Research Center for Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan, ³Beppu Garden-Hill Clinic, Kurata Clinic, Beppu City, Japan, ⁴Institut de Génétique et de Biologie Moléculaire et Cellulaire, Department of Development and Stem Cells, Université de Strasbourg, Illkirch, France, ⁵Department of Molecular Biology, Yokohama City University School of Medicine, Yokohama, Kanagawa, Japan
- O08-06 [P13-13] Mu-opioid ligand endomorphin induces alopecia at the periphery**
○ Eriko Komiya¹, Mitsutoshi Tominaga^{1,2}, Ryo Hatano³, Takumi Itoh³, Kotaro Honda¹, Sumika Toyama¹, Yayoi Kamata^{1,2}, Haruna Otsuka³, Kei Ohnuma³, Chikao Morimoto³, Kenji Takamori^{1,2,4}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Graduate School of Medicine, Juntendo University, Chiba, Japan, ²Anti-Aging Skin Research Laboratory, Juntendo University Graduate School of Medicine, Chiba, Japan, ³Department of Therapy Development and Innovation for Immune Disorders and Cancers, Graduate School of Medicine, Juntendo University, Tokyo, Japan, ⁴Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- O08-07 [P13-14] Monocytic lineage cells distributed along sweat glands modulate sweat function**
○ Tadatsune Iida¹, Daisuke Kobayashi², Tomoki Tamura², Hiroo Yokozeki¹, Takeshi Namiki¹
¹Department of dermatology, Tokyo Medical and Dental University, Tokyo, ²Department of human pathology, Tokyo Medical and Dental University, Tokyo
- O08-08 [P13-15] The potential of hair-follicle-associated pluripotent (HAP) stem cells to treat Parkinson's disease**
○ Michiko Yamane¹, Nanako Takaoka^{1,2}, Koya Obara², Kyoumi Shirai², Yuko Hamada², Nobuko Arakawa², Ryoichi Aki², Robert M. Hoffman^{3,4}, Yasuyuki Amoh²
¹The Department of Dermatology, Department of Dermatology, Kitasato University Grad Sch Med Sci, Kanagawa, Japan, ²Department of Dermatology, Kitasato University School of Medicine, Kanagawa, Japan, ³AntiCancer, Inc., ⁴Department of Surgery, University of California San Diego
- O08-09 [P13-16] The potential of hair-follicle-associated pluripotent (HAP) stem cells for heart regeneration**
○ Nanako Takaoka^{1,2}, Michiko Yamane¹, Koya Obara², Kyoumi Shirai², Yuko Hamada², Nobuko Arakawa², Ryoichi Aki², Robert M. Hoffman^{3,4}, Yasuyuki Amoh²
¹Department of Dermatology, Kitasato University Graduate School of Medical Science, Kanagawa, Japan, ²Department of Dermatology, Kitasato University School of Medicine, Kanagawa, Japan, ³AntiCancer, Incorporated, California, USA, ⁴Department of Surgery, University of California San Diego, California, USA
- O08-10 [P13-17] Exploring the impact of ovariectomy on hair growth; Is ovariectomized mouse a model for investigating female pattern hair loss in human?**
○ Sayaka Togo, Hisayoshi Imanishi, Koji Sugawara, Daisuke Tsuruta
Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan

3 minutes presentation and discussion 11 (Patient Population Research/Pigmentation and Melanoma)

16:20-17:20

Chairs: Ayumi Yoshizaki, Taku Fujimura

- O11-01 [P08-04] Pork allergies in Japanese urban areas are predominantly classified as pork-cat syndrome**
○ Naoko Inomata, Nobuko Sagawa, Fumi Sawada, Saori Sano, Michiko Aihara
Dept. of Environmental Immuno-Dermatology Yokohama City University Graduate School of Medicine
- O11-02 [P08-06] The Clinical Significance of a Shortened Activated Partial Thromboplastin Time in Patients with Connective Tissue Disease**
○ Koji Habe¹, Hideo Wada², Kento Mizutani¹, Yoshiaki Matsushima¹, Makoto Kondo¹, Keiichi Yamanaka¹
¹Department of Dermatology, Mie University Graduate School of Medicine, Mie, Tsu, Japan, ²Department of General and Laboratory Medicine, Mie Prefectural General Medical Center
- O11-03 [P08-07] Prevalence and Characteristics of Prurigo Nodules in Adults With Moderate-to-severe Atopic Dermatitis in Japan: a 2-year Observational Study**
○ Norito Katoh¹, Hidehisa Saeki², Yoko Kataoka³, Takafumi Etoh⁴, Satoshi Teramukai⁵, Yuki Tajima⁶, Parul Shah⁷, Kazuhiko Arima⁶
¹Kyoto Prefectural University of Medicine Graduate School of Medical Science, Kyoto, Japan, ²Nippon Medical School, Tokyo, Japan, ³Osaka Habikino Medical Care Center, Osaka, Japan, ⁴Tokyo Teishin Postal Services Agency Hospital, Tokyo, Japan, ⁵Kyoto Prefectural University of Medicine, Kyoto, Japan, ⁶Sanofi, K.K., Tokyo, Japan, ⁷Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA

- O11-04 [P08-08] Withdrawn**
- O11-05 [P08-09] Psoriasis Epidemiology Screening Tool (PEST) is a useful tool for psoriatic arthritis in the Japanese population**
 ○ Ayako Setoyama, Yu Sawada, Motonobu Nakamura
 The Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- O11-06 [P08-10] The impact of atopic dermatitis on health-related quality of life in Bangladeshi adults**
 ○ Abir Majbauddin¹, Taheruzzaman Kazi¹, Zubaida Akter², Shigeki Inui¹
¹Department of Regenerative Dermatology, Graduate School of Medicine, Osaka University, Osaka, Japan, ²Department of Dermatology & Venereology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh
- O11-07 [P08-11] A clinical investigation for superficial type atypical lipomatous tumor**
 ○ Emi Mashima, Yu Sawada, Motonobu Nakamura
 The Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- O11-08 [P08-12] A single-center survey of psoriasis patients on biologics during the COVID-19 pandemic**
 ○ Koji Kamiya, Soichiro Kado, Megumi Kishimoto, Takeo Maekawa, Aya Kuwahara, Junichi Sugai, Mayumi Komine, Mamitaro Ohtsuki
 Department of Dermatology, Jichi Medical University, Shimotsuke, Japan
- O11-09 [P12-08] NUMB inhibits melanoma migration, invasion, and metastasis**
 ○ Takeshi Fukumoto¹, Denitsa M Hristova², Xia Hua², Haruki Jimbo³, Chihiro Takemori¹, Chikako Nishigori^{1,3}, Zhi Wei⁴, Rajasekharan Somasundaram², Mizuho Fukunaga-Kalabis², Meenhard Herlyn²
¹Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, ²The Wistar Institute, ³Department of iPS cell applications, Graduate School of Medicine, Kobe University, ⁴Department of Computer Science, New Jersey Institute of Technology
- O11-10 [P12-09] Nucleosome assembly protein 1-like 4, a new therapeutic target for melanoma**
 ○ Satoru Mizuhashi¹, Takayuki Ishibashi¹, Haruka Kuriyama¹, Toshihiro Kimura¹, Hisashi Kanemaru¹, Ikko Kajihara¹, Katsunari Makino¹, Azusa Miyashita¹, Jun Aoi¹, Kanako Kita², Hironobu Ihn¹, Satoshi Fukushima¹
¹Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan, ²Department of Comprehensive Molecular Medicine, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- O11-11 [P12-10] Investigation the mechanism of novel lncRNAs, lncRNA00094, involved in metformin-inducing inhibition of melanoma cells**
 ○ Hui-Wen Tseng^{1,2}, Kuo-Wang Tsai³
¹The Department of Dermatology, Kaohsiung Veterans General Hospital, ²Institute of Biomedical Sciences, National SunYet-sen University, ³Department of Research, Taipei Tzu Chi Hospital, NewTaipei, Taiwan
- O11-12 [P12-11] Increased expression of SPARC and TIMP3 in epidermotropic melanoma metastasis**
 ○ Maureen.T Meling, Yukiko Kiniwa, Eisaku Ogawa, Yuki Sato, Ryuhei Okuyama
 Department of Dermatology, Shinshu University School of Medicine, Matsumoto, Japan

Evening Seminar 5

"Immunopathology and Holistic care of Psoriasis"

17:25-18:25

Chairs: Yoshihide Asano, Hideki Fujita

- ES5-1 Psoriasis and the metabolic syndrome**
 ○ Rei Watanabe
 Department of Integrative Medicine for Allergic and Immunological Diseases, Graduate School of Medicine/Faculty of Medicine, Osaka University, Osaka, Japan
- ES5-2 Immunological aspects of psoriasis and significance of TNF- α inhibition**
 ○ Hideki Nakajima
 Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan

Co-sponsored by UCB Japan Co. Ltd.

December 4, 2021, Room C

Morning Seminar 3 "Therapeutic biomarker in melanoma"

8:00-9:00

Chair: Atsushi Otsuka

- MS3-1** **Significance of tumor-associated macrophages to predict the efficacy and immune-related adverse events by anti-PD1 antibodies**
○ Taku Fujimura
Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan
- MS3-2** **Monitoring of genetic biomarkers for BRAF-mutated melanoma**
○ Yukiko Kuniwa
The Department of Dermatology, Shinshu University, Nagano

Co-sponsored by ONO PHARMACEUTICAL CO., LTD.

Luncheon Seminar 6 "The latest research on psoriasis 2021"

11:25-12:25

Chairs: Sei-Ichiro Motegi, Masatoshi Jinnin

- LS6-1** **More than skin deep in psoriasis —IL17 and obesity/atherosclerosis—**
○ Yukie Yamaguchi
Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan
- LS6-2** **Understanding of the pathogenesis of psoriasis from the perspective of female hormones**
○ Tetsuya Honda
Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan

Co-sponsored by Kyowa Kirin Co., Ltd

Concurrent Oral Session 6 (Cell-Cell Interactions in the Skin/Epidermal Structure and Barrier Function-I)

13:40-15:10

Chairs: Yoshihide Asano, Hironobu Fujiwara, John Common

- C06-01** **Antibodies to desmocollin (Dsc) 3, but not Dsc1, in pemphigus sera directly block heterophilic transinteraction between desmoglein and Dsc**
[P04-01]
○ Ken Ishii¹, Norito Ishii², Akira Ishiko¹, Takashi Hashimoto³
¹Department of Dermatology, Toho University School of Medicine, Tokyo, Japan, ²Department of Dermatology, Kurume University School of Medicine, Kurume, Japan, ³Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan
- C06-02** **A skin-derived antimicrobial peptide human beta defensin-3-induced autophagy activation improves the skin barrier in atopic dermatitis**
[P05-03]
○ Ge Peng¹, Yoshie Umehara², Juan Valentin Trujillo-Paez², Hainan Yue^{1,2}, Le Thanh Hai Nguyen^{1,2}, Risa Ikutama^{1,2}, Miho Takahashi^{1,2}, Masaaki Komatsu³, Ko Okumura², Hideoki Ogawa², Shigaku Ikeda^{1,2}, Francois Niyonsaba^{2,4}
¹Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Atopic Research Center, Juntendo University Graduate School of Medicine, Tokyo, ³Physiology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ⁴Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- C06-03** **Wnt/β-catenin signaling stabilizes hemidesmosomes in keratinocytes**
[P05-04]
○ Hideyuki Kosumi¹, Mika Watanabe^{1,2}, Satoru Shinkuma³, Yu Fujimura¹, Tadasuke Tsukiyama⁴, Giacomo Donati², Hiroaki Iwata¹, Hideyuki Ujiie¹, Ken Natsuga¹
¹The Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Department of Life Sciences and Systems Biology, Molecular Biotechnology Centre, University of Turin, Turin, Italy, ³Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan, ⁴Department of Biochemistry, Hokkaido University Graduate School of Medicine, Sapporo, Japan

- C06-04 [P05-06] New transparent three-dimension and deep imaging for skin epidermal structure using a novel fluorescent solvatochromic pyrene probe**
 ○ Masamoto Murakami¹, Ryosuke Kawakami², Yosuke Niko³, Kazuki Yatsuzuka¹, Hideki Mori¹, Jun Muto¹, Ken Shiraishi¹, Takeshi Imamura², Koji Sayama¹
¹Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan, ²Department of Molecular Medicine for Pathogenesis, Ehime University Graduate School of Medicine, Ehime, Japan, ³Research and Education Faculty, Multidisciplinary Science Cluster, Interdisciplinary Science Unit, Kochi University, Kochi, Japan
- C06-05 [P05-07] IL-33 is a negative regulator in skin barrier homeostasis**
 ○ Md. Razib Hossain, Tuba M. Ansary, Mayumi Komine
 Department of Dermatology, Jichi Medical University, Tochigi, Japan
- C06-06 [P05-08] Loricrin maintains Langerhans cell homeostasis and protects against cutaneous chemical carcinogenesis**
 ○ Tatsuya Ogawa¹, Yosuke Ishitsuka², Manabu Fujimoto², Dennis R Roop³, Toshifumi Nomura¹
¹Department of Dermatology, University of Tsukuba, Tsukuba, Japan, ²Department of Dermatology, Osaka University, Osaka, Japan, ³Department of Dermatology and Charles C. Gates Center for Regenerative Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO
- C06-07 [P05-09] Effect of ceramide chirality on the lipid lamellar structure in stratum corneum**
 ○ Yasuko Obata¹, Rie Arai¹, Takayuki Furuishi¹, Kaori Fukuzawa¹, Etsuo Yonemochi¹, Kenya Ishida²
¹Hoshi University, ²Takasago International Corporation

3 minutes presentation and discussion 9 (Photobiology/Epidermal Structure and Barrier Function)

15:20-16:20

Chairs: Teruki Yanagi, Takeshi Matsui

- O09-01 [P11-05] Deficiency of epidermal ferroportin enhances UV dermatitis in mice**
 ○ Naokazu Hatchome, Hitoshi Terui, Mayuko Onodera-Amagai, Masayuki Asano, Kenshi Yamasaki, Setsuya Aiba
 The Department of Dermatology, University of Tohoku, Miyagi, Japan
- O09-02 [P11-08] Effect of M1 and M2 Macrophages on Production and Degradation of Extracellular Matrix in Dermal Fibroblasts**
 ○ Munetaka Kawamoto, Ryota Kami, Satoshi Horiba
 MIRAI Technology Institute, Shiseido Co.,Ltd
- O09-03 [P11-09] Downregulation of IL-34 Associated with the Skewing of M1/M2 Balance of Macrophages Induces Senescence in Human dermal fibroblasts**
 ○ Satoshi Horiba, Ryota Kami, Taiki Tsutsui, Junichi Hosoi
 Shiseido Co., Ltd MIRAI Technology Institute
- O09-04 [P11-11] Non-invasive assessment of diameter-dependent cutaneous vascular alterations with age using Optical Coherence Tomography Angiography**
 ○ Takuma Hoshino¹, Yusuke Hara¹, Masato Ninomiya¹, Toyonobu Yamashita¹, Motoki Oguri¹, Masako Katsuyama¹, Chika Katagiri¹, Yuandong J. Li², Yuxuan Cheng², Nhan M. Le², Ruikang Wang²
¹MIRAI Technology Institute, Shiseido Corporation Limited, ²Department of Bioengineering, University of Washington, Seattle, United States
- O09-05 [P05-18] Antimicrobial peptide AG30/5C modulates tight junction barrier function in keratinocytes via EGFR, aPKC, GSK-3 and Rac1 pathways**
 ○ Risa Ikutama^{1,2}, Ge Peng^{1,2}, Yoshie Umehara¹, Juan V. Trujillo Paez¹, Hainan Yue^{1,2}, Hai Le Thanh Nguyen^{1,2}, Miho Takahashi^{1,2}, Shun Kageyama³, Masaaki Komatsu³, Ko Okumura¹, Hideoki Ogawa¹, Shigaku Ikeda^{1,2}, François Niyonsaba^{1,4}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Physiology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ⁴Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- O09-06 [P05-19] Mechanisms underlying the suppression of semaphorin 3A expression in atopic dermatitis**
 ○ Yayoi Kamata^{1,2}, Mitsutoshi Tominaga^{1,2}, Yasushi Suga^{2,3}, Hideoki Ogawa¹, Kenji Takamori^{1,2,3}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Anti-Aging Skin Research Laboratory, Juntendo University Graduate School of Medicine, Chiba, Japan, ³Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- O09-07 [P05-20] A skin-derived antimicrobial peptide AMP-IBP5 regulates epidermal barrier function**
 ○ Hai L.T. Nguyen^{1,2}, Juan V. Trujillo P.¹, Ge Peng^{1,2}, Hainan Yue^{1,2}, Risa Ikutama^{1,2}, Miho Takahashi^{1,2}, Yoshie Umehara¹, Hideoki Ogawa^{1,2}, Ko Okumura¹, Shigaku Ikeda^{1,2}, François Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan

- O09-08 [P05-21] Spatial distribution of KLK, SPINK, and SERPIN family proteins contributes to dense stratum corneum of normal sole skin and PPK phenotypes**
○ Aoi Ohira, Takuya Omine, Daisuke Utsumi, Sayaka Yamaguchi, Kenzo Takahashi
Department of Dermatology, University of the Ryukyus, Graduate School of Medicine, Okinawa, Japan
- O09-09 [P05-22] Detergent-induced skin inflammation and itch in a mast cell-independent and antihistamine-resistant manner in C57BL/6 mice**
○ Yurie Masutani^{1,2}, Toshiro Takai¹, Seiji Kamijo¹, Toru Kimitsu^{1,2}, Tomoko Yoshimura^{1,2}, Ko Okumura¹, Hideoki Ogawa², Shigaku Ikeda^{1,2}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine
- O09-10 [P05-23] Possible roles of advanced glycated end-products in pathogenesis of acquired perforating dermatosis**
○ Yuya Murase¹, Takuya Takeichi¹, Kana Tanahashi¹, Hiroyuki Takama², Masashi Akiyama¹
¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Dermatology, Aichi Medical University Graduate School of Medicine
- O09-11 [P05-24] Functional analysis of BCL6 in epidermal cells**
○ Kaori Kanemaru¹, Kento Nagasawa¹, Asahi Tanaka¹, Yohsuke Harada², Yoshikazu Nakamura¹
¹Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science, Chiba, Japan, ²Laboratory of Pharmaceutical Immunology, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Chiba, Japan

3 minutes presentation and discussion 12 (Epidermal Structure and Barrier Function/Auto-Immunity)

16:20-17:20

Chairs: Ken Ishii, Yu Sawada

- O12-01 [P05-05] Relationship between regulatory T cell distribution and interleukin -33 in a mouse model of skin barrier disruption**
○ Sumika Toyama¹, Catharina Sagita Moniaga¹, Mitsutoshi Tominaga¹, Hideoki Ogawa¹, Kenji Takamori^{1,2}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- O12-02 [P05-12] Upregulation of the NMF producing enzyme PAD1 by low humidity and low temperature climate gives the skin adaptability to dry environments**
○ Daichi Murata^{1,2}, Masashi Miyai¹, Toari Hirakawa¹, Hiroko Manabe¹, Katsuyuki Maeno¹, Akira Motoyama¹, Christopher_T Knight¹, Akihito Ishigami², Chika Katagiri¹
¹Shiseido Co., Ltd MIRAI Technology Institute, Kanagawa, Japan, ²Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan
- O12-03 [P05-13] The sweating disturbance aggravates contact hypersensitivity reaction in mice footpads**
○ Hironobu Ishimaru¹, Yasuo Okamoto¹, Yumi Aoyama²
¹Department of Pharmacology, Kawasaki Medical School, Okayama, Japan, ²Department of Dermatology, Kawasaki Medical School, Okayama, Japan
- O12-04 [P05-14] TSLP impairs epidermal barrier integrity by the formation of nuclear IL-33/phosphorylated STAT3 complex in human keratinocytes**
○ Xiuju Dai, Jun Muto, Ken Shiraishi, Ryo Utsunomiya, Hideki Mori, Masamoto Murakami, Koji Sayama
Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan
- O12-05 [P05-16] The contribution of single nucleotide polymorphisms of AKR1C3 to susceptibility of psoriasis**
○ Yuka Nojiri¹, Motoki Nakamura¹, Kyoko Ikumi¹, Haruna Nishihara¹, Aya Nakada¹, Emi Nishida¹, Thomas Haarmann-Stemann², Akimichi Morita¹
¹Departments of Geriatric and Environmental Dermatology, Nagoya City University, Nagoya, Japan, ²Leibniz Research Institute for Environmental Medicine, Dusseldorf, Germany
- O12-06 [P05-17] Sphingosine 1-phosphate receptor 1 (S1PR1) negatively regulates epidermal barrier function**
○ Satomi Igawa¹, Manae Takahashi¹, Risa Matsuo¹, Mari Kishibe¹, Akemi Ishida-Yamamoto¹, Anna Di Nardo²
¹The Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, ²The Department of Dermatology, School of Medicine, University of California, San Diego, La Jolla, USA
- O12-07 [P02-04] IFN- γ signaling has both pro-inflammatory and immunoregulatory roles depending on the cell types in interface dermatitis in mouse**
○ Miho Mukai¹, Hayato Takahashi¹, Masayuki Amagai^{1,2}
¹The Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ²Laboratory for Skin Homeostasis, RIKEN IMS, Yokohama

- O12-08 [P02-05]** **IL-9 promotes skin inflammation via Pyy in imiquimod-induced psoriasis-like dermatitis**
○ Shiori Kamiya^{1,2}, Ippei Ikegami², Ryuta Kamekura², Keijyu Kobayashi^{1,2}, Takafumi Kamiya¹, Shingo Ichimiya², Hisashi Uhara¹
¹Department of Dermatology, Sapporo Medical University School of Medicine, Sapporo, Japan, ²Department of Human Immunology, Research Institute for Frontier Medicine, Sapporo Medical University School of Medicine, Sapporo, Japan
- O12-09 [P02-12]** **Periostin may act on monocytes to be differentiated into macrophages with fibrotic phenotype in patients with systemic sclerosis**
○ Mao Suzuki, Asami Akita-Enoki, Miho Asami, Yasushi Ototake, Noriko Komitsu-Ikeda, Yukie Yamaguchi
Department of Environmental Immuno-Dermatology Yokohama City University Graduate School of Medicine, Yokohama, Japan
- O12-10 [P02-13]** **Apremilast downregulates IL-17 production and induces splenic regulatory B and T cells in imiquimod-induced psoriasis**
○ Hideaki Uchida, Masahiro Kamata, Teruo Shimizu, Shota Egawa, Makoto Ito, Ryosuke Takeshima, Itsumi Mizukawa, Ayu Watanabe, Yayoi Tada
Department of Dermatology, Teikyo University, School of Medicine
- O12-11 [P02-14]** **Withdrawn**
- O12-12 [P02-15]** **Establishment of nail psoriasis mouse model by topical application of imiquimod**
○ Kana Yamada, Hisayoshi Imanishi, Daisuke Tsuruta
The Department of Dermatology, University of Osaka city, Osaka, Japan

Evening Seminar 6 "Proper use of MTX in dermatology"

17:25-18:25

Chair: Nobuo Kanazawa

- ES6-1** **The Proper Use of Methotrexate for PsA**
○ Akihiko Asahina
Department of Dermatology, The Jikei University School of Medicine
- ES6-2** **Let's think about the appropriate use of methotrexate for psoriasis**
○ Yayoi Tada
Department of Dermatology, Teikyo University School of Medicine

Co-sponsored by Pfizer Japan Inc.

December 4, 2021, Room D

JDS Symposium

13:40-15:40

Chair: Riichiro Abe

- JDS1 Introduction of Journal of Dermatological Science Symposium**
○ Riichiro Abe
Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Japan
- JDS2 What we can do to patch the “leaky pipeline”: Issues revealed by the first national survey**
○ Mari Kishibe
Department of Dermatology, Asahikawa Medical University
- JDS3 Dissecting the molecular mechanism of acne keloidalis by single-cell transcriptomics**
○ Chao-Kai Hsu
Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Chinese Taipei
- JDS4 How to publish our work in a decent journal**
○ Shuai Shao, Gang Wang
Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, China
- JDS5 How age and sex shape the skin cancer landscape**
○ Amaya Viros Usandizaga^{1,2}
¹Cancer Research UK Manchester Institute, ²Salford Royal NHS Foundation Trust
- JDS6 Revertant mosaicism in inherited disorders of keratinization**
○ Toshifumi Nomura
Department of Dermatology, University of Tsukuba, Ibaraki, Japan
- JDS7 An Update on Scholarly Publishing in the Wake of the Pandemic in its Second Year**
○ Helen Habernickel
Executive Publisher, Health & Medical Sciences Elsevier, Berlin, Germany

December 5, 2021, Room A

Morning Seminar 4

"What does "itch" mean ? - in atopic dermatitis and urticaria -"

7:50-8:50

Chairs: Masashi Akiyama, Manabu Fujimoto

- MS4-1 Itching mechanism in Atopic Dermatitis -from basic to clinical**
 ○ Gyohei Egawa
 Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan
- MS4-2 Itch of urticaria**
 ○ Michihiro Hide
 Hiroshima City Hiroshima Citizens Hospital, Hiroshima, Japan

Co-sponsored by Maruho Co., Ltd.

Plenary Session III

9:00-10:30

Chairs: Manabu Ohyama, Sung-Jan (Jerry) Lin, Jin Ho Cung

- III-1 [P05-01] An important role of Syntaxin-4 in nuclear degradation in corneoptosis, a unique cell death of keratinocytes**
 ○ Nanako Maekubo-Kadono¹, Keitaro Fukuda^{1,2}, Takeshi Matsui^{1,2,3}, Masayuki Amagai^{1,2}
¹Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, ²Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ³Laboratory for Evolutionary Cell Biology of the Skin, School of Bioscience and Biotechnology, Tokyo University of Technology, Hachioji, Japan
- III-2 [P14-01] CCL5/CCR5 feedforward loop by FLI1 deficiency in microvascular endothelial cells contributes to SSc vasculopathy**
 ○ Tetsuya Ikawa, Takuya Miyagawa, Yuki Fukui, Satoshi Toyama, Jun Omatsu, Kentaro Awaji, Yuta Norimatsu, Yusuke Watanabe, Ayumi Yoshizaki, Shinichi Sato, Yoshihide Asano
 The Department of Dermatology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan
- III-3 [P13-01] Development of molecular atlas of the human nail unit and hair follicle with spatially resolved transcriptomics**
 Dongyoun Lee, ○ Joonho Shim, Ji-Hye Park, Gulimila Abudureyimu, Jong Hee Lee
 Department of Dermatology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea
- III-4 [P05-02] Type XVII collagen contributes to epidermal patterning**
 ○ Yunan Wang¹, Hiroyuki Kitahata², Hideyuki Kosumi¹, Mika Watanabe^{1,3}, Yu Fujimura¹, Shota Takashima¹, Shin-Ichi Osada⁴, Tomonori Hirose⁵, Wataru Nishie⁶, Masaharu Nagayama⁶, Hideyuki Ujiie¹, Hiroshi Shimizu¹, Ken Natsuga¹
¹Department of Dermatology, Hokkaido University Faculty of Medicine and Graduate School of Medicine, Sapporo, Japan, ²Department of Physics, Graduate School of Science, Chiba University, Chiba, Japan, ³Department of Life Sciences and Systems Biology, Molecular Biotechnology Centre, University of Turin, Turin, Italy, ⁴Department of Dermatology, Nippon Medical School, Tokyo, Japan, ⁵Department of Molecular Biology, Yokohama City University Graduate School of Medical Science, Yokohama, Japan, ⁶Research Institute for Electronic Science, Hokkaido University, Sapporo, Japan
- III-5 [P08-01] Estimation of cutaneous squamous cell carcinoma incidence attributable to arsenic in U.S. water supplies**
 ○ Masaaki Kawasumi
 Division of Dermatology, Department of Medicine, University of Washington, Seattle, WA, United States
- III-6 [P10-01] Blockade of CX3CL1-CX3CR1 pathway inhibits mouse sclerodermatous chronic graft-versus-host disease model**
 ○ Akira Utsunomiya¹, Vu Huy Luong¹, Takenao Chino¹, Noritaka Oyama¹, Takashi Matsushita², Naoto Ishii³, Hideaki Ogasawara³, Toshio Imai³, Minoru Hasegawa¹
¹Dermatology, University of Fukui, ²Dermatology, Kanazawa University, ³KAN Research Institute. Inc.

Tanioku Kihei Memorial Lecture

10:30-11:00

Chair: Masayuki Amagai

- TML RNA origin of sex biased immunity**
 ○ Howard Y. Chang
 Stanford University School of Medicine

Concurrent Oral Session 7 (Epidermal Structure and Barrier Function-II/Tissue Regeneration and Wound Healing)

11:05-12:35

Chairs: Norito Katoh, Masatoshi Jinnin, Eung Ho Choi

- C07-01 [P05-10] Development of a novel skin model combining SNF and collagen**
○ Mizuki Iijima¹, Kazutoshi Iijima²
¹Graduate School of Engineering Science, Yokohama National University, Yokohama, Japan, ²Faculty of Engineering, Yokohama National University, Yokohama, Japan
- C07-02 [P05-11] Nuclear factor erythroid 2-related factor 2 regulates epidermal keratinization under psoriatic skin inflammation**
○ Yosuke Ishitsuka^{1,2}, Tatsuya Ogawa², Manabu Fujimoto¹
¹Department of Dermatology, Osaka University Graduate School of Medicine, Suita, Japan, ²University of Tsukuba
- C07-03 [P05-15] The ligand of epidermal growth factor receptor, betacellulin, improves Th2 cytokine-mediated impairment of tight junction barrier**
○ Saya Tsukamoto¹, Ge Peng^{1,2}, Saori Yoshida¹, Ko Okumura¹, Shigaku Ikeda^{1,2}, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University
- C07-04 [P14-02] Ninjurin-1 contributes to skin wound healing through the formation of functional blood vessels**
○ Risa Matsuo, Mari Kishibe, Shin Inuma, Mizue Fujii, Satomi Igawa, Masaru Homma, Akemi Ishida-Yamamoto
The Department of Dermatology, Asahikawa Medical University, Hokkaido, Japan
- C07-05 [P14-03] Odorant-dependent Merkel cell chemosensation: implications for wound healing**
Ilaria Piccini¹, Jeremy Cheret^{1,2}, Moe Tsutsumi³, S Sakaguchi³, Leslie Ponce¹, Luis Almeida¹, K Funk⁴, Max Kueckelhaus⁵, Kentaro Kajiyama³, Ralf Paus^{1,2,6}, ○ Marta Bertolini¹
¹Monasterium Laboratory, Skin and Hair Research Solutions GmbH, Muenster, Germany, ²Dr. Phillip Frost Dept. of Dermatology & Cutaneous Surgery, University of Miami Miller School of Medicine, Miami, FL, USA, ³MIRAI Technology Institute, Shiseido Co., Ltd. Yokohama, Japan, ⁴Clinic for Plastic, Aesthetic and Reconstructive Surgery, Munich, Germany, ⁵Fachklinik Hornheide, Muenster, Germany, ⁶Centre for Dermatology Research, University of Manchester, MAHSC, and Manchester NIHR Biomedical Research Centre, Manchester, UK
- C07-06 [P14-04] Adipose derived stem cells inhibits fibrotic effect of keloid derived dermal fibroblasts**
○ Yuki Nukui, Toshio Hasegawa, Akino Wada, Shigaku Ikeda
Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine
- C07-07 [P14-05] Skin-derived human β -defensin-3 promotes wound healing and angiogenesis**
○ Miho Takahashi^{1,2}, Yoshie Umehara¹, Hainan Yue^{1,2}, Juan Valentin Trujillo¹, Ge Peng^{1,2}, Hai Le Thanh Nguyen^{1,2}, Risa Ikutama^{1,2}, Ko Okumura¹, Hideoki Ogawa¹, Shigaku Ikeda¹, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan

Luncheon Seminar 7 "Treatment of atopic dermatitis~To the next step~"

12:45-13:45

Chairs: Makoto Sugaya, Hideyuki Ujiie

- LS7-1 Novel pathogenesis and therapeutics on atopic dermatitis**
○ Kenji Kabashima
Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- LS7-2 Neural mechanisms of itch and the role of JAK in atopic dermatitis**
○ Yozo Ishiiji
Department of Dermatology, Jikei University School of Medicine, Tokyo, Japan

Co-sponsored by Eli Lilly Japan K. K.

Concurrent Oral Session 10 (Adaptive Immunity)

13:50-15:30

Chairs: Tatsuyoshi Kawamura, Sayuri Yamazaki

- C10-01 [P01-03] Skin immune memory can be compensated by circulating CD4 T cells when the resident memory CD8 T cells are unfunctional**
 ○ Shuichi Nakai^{1,2}, Rei Watanabe², Kiyoshi Hirahara³, Toshinori Nakayama³, Manabu Fujimoto²
¹Research Department, Maruho Co., Ltd., Kyoto, Japan, ²Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, Japan, ³Department of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan
- C10-02 [P01-04] Neutrophil extracellular traps are involved in enhanced contact hypersensitivity response in IL-36 receptor antagonist-deficient mice**
 ○ Yurie Hasegawa¹, Yohei Iwata¹, Hidehiko Fukushima¹, Yoshihito Tanaka¹, Soichiro Watanabe¹, Kenta Saito¹, Hiroyuki Ito¹, Mizuki Sugiura¹, Masashi Akiyama², Kazumitsu Sugiura¹
¹Department of Dermatology, Fujita Health University School of Medicine, Aichi, Japan, ²Department of Dermatology, Nagoya University Graduate School of Medicine
- C10-03 [P01-05] Tumor necrosis factor-alpha plays crucial role in both the induction and maintenance of cytotoxic T lymphocyte-induced dermatitis**
 ○ Toshiya Miyake, Satoshi Nakamizo, Gyohei Egawa, Kenji Kabashima
 Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan
- C10-04 [P01-06] IL-31, a major pruritogen in a mouse model of atopic dermatitis, is generated through the macrophage/TSLP/periostin axis**
 ○ Takashi Hashimoto, Takahiro Satoh
 Department of Dermatology, National Defense Medical College, Tokorozawa, Japan
- C10-05 [P01-07] Attenuation of DTH by oral tolerance depends on regulatory T cells in the sensitization phase**
 ○ Arisa Akagi¹, Akihiko Kitoh², Sho Hanakawa², Kenji Kabashima^{1,2}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Singapore Immunology Network and Skin Research Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore
- C10-06 [P01-08] IL-10 production potency in peripheral blood B cells predicts prognosis of alopecia areata**
 ○ Yutaka Matsumura^{1,2}, Rei Watanabe¹, Yuumi Nakamura¹, Manabu Fujimoto¹
¹Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, ²Department of Dermatology, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan
- C10-07 [P01-09] New epicutaneous sensitization model to protease antigen: itch-associated skin inflammation, a variety of Th subsets and IgE**
 ○ Tomoko Yoshimura^{1,2}, Toshiro Takai¹, Seiji Kamijo¹, Toru Kimitsu^{1,2}, Yurie Masutani^{1,2}, Takasuke Ogawa², Ko Okumura¹, Hideoki Ogawa², Shigaku Ikeda^{1,2}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine
- C10-08 [P01-10] Revisiting the dogma of contact dermatitis; even single hapten application can induce allergic contact dermatitis in situ**
 ○ Gyohei Egawa, Kenji Kabashima
 Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

December 5, 2021, Room B

Morning Seminar 5

"The novel mechanism of itch in atopic dermatitis"

7:50-8:50

Chair: Kenji Kabashima

MS5-1 The role of basophils and IL-4R α in itch in Atopic Dermatitis

○ Atsushi Fukunaga

Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Japan

MS5-2 New Mechanisms of Itch in Atopic Dermatitis

○ Brian S. Kim^{1,2,3,4}

¹Department of Medicine, Division of Dermatology, ²Center for the Study of Itch and Sensory Disorders, ³Department of Anesthesiology, ⁴Department of Pathology and Immunology, Division of Biology and Biomedical Sciences, Washington University School of Medicine, St. Louis, MO, USA

Co-sponsored by Sanofi K.K.

Concurrent Oral Session 8

(Innate Immunity, Microbiology, Microbiome-II/Genetic Disease, Gene Regulation and Gene Therapy)

11:05-12:20

Chairs: Mayumi Komine, Yukinori Okada

C08-01 [P07-11] Involvement of V δ 1+ epithelial type of $\gamma\delta$ T cells in the systemic form of hydroa vacciniforme-like lymphoproliferative disorders

○ Yoji Hirai¹, Tomoko Miyake¹, Takahide Takahashi², Keiji Iwatsuki^{1,3,4}, Shin Morizane¹

¹Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan, ²Division of Medical Support, Okayama University Hospital, Okayama, Japan, ³Division of Dermatology, Fukushima Rosai Hospital, Iwaki, Japan, ⁴Division of Dermatology, Okazaki Medical Center, Fujita Health University, Okazaki, Japan

C08-02 [P06-02] Altered replication stress response due to *CARD14* mutations induces somatic genetic reversion

○ Toshinari Miyauchi¹, Shotaro Suzuki¹, Masae Takeda¹, Jin Teng Peh¹, Masayuki Aiba¹, Ken Natsuga¹, Yasuyuki Fujita¹, Takuya Takeichi², Taiko Sakamoto³, Masashi Akiyama², Hiroshi Shimizu¹, Hideyuki Ujiie³, Toshifumi Nomura^{1,4}

¹Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan,

²Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ³Sakamoto Clinic, Fujieda, Japan,

⁴Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan

C08-03 [P06-03] A novel keratin 14 mutation in epidermolysis bullosa induces more morphological abnormalities in keratin fiber than a hotspot mutation

○ Mari Kishibe¹, Risa Matsuo¹, Satomi Igawa¹, Akiharu Kubo², Akemi Ishida-Yamamoto¹

¹Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, ²Department of Dermatology, Keio University School of Medicine, Tokyo, Japan

C08-04 [P06-04] Diversity of Mechanisms Underlying Dysregulating TGF- β Signaling in Recessive Dystrophic Epidermolysis Bullosa

○ Eijiro Akasaka¹, Alexander Nyström², Leena Bruckner-Tuderman², Hajime Nakano¹, Daisuke Sawamura¹

¹Department of Dermatology, Hirosaki University Graduate School of Medicine, Hirosaki, Japan, ²Department of Dermatology, Faculty of Medicine and Medical Center - University of Freiburg, Germany

C08-05 [P06-05] Psoriasis-like skin lesions in a patient carrying *MEFV* variants

○ Takenori Yoshikawa¹, Takuya Takeichi¹, Tomoo Ogi², Masashi Akiyama¹

¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Genetics, Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan

C08-06 [P06-06] Transcriptional and translational interference of laminin-332 subunits in junctional epidermolysis bullosa with LAMB3 mutations

○ Ping-Chen Hou^{1,2,3}, Ken Natsuga⁴, Wei-Ting Tu^{1,3}, Hsin-Yu Huang¹, Brandon Chen³, Liang-Yu Chen^{2,3}, Wan-Rung Chen¹, Yi-Kai Hong^{1,3}, Yen-An Tang^{5,6}, Julia Yu-Yun Lee¹, Peng-Chieh Chen^{7,8}, H. Sunny Sun^{5,6}, John A. McGrath⁹, Chao-Kai Hsu^{1,3,7,10}

¹Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ²School of Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ³International Center for Wound Repair and Regeneration (iWRR), National Cheng Kung University, Tainan, Taiwan, ⁴Department of Dermatology, Hokkaido University Faculty of Medicine and Graduate School of Medicine, Sapporo, Japan, ⁵Institute of Molecular Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁶Center for Genomic Medicine, Innovation Headquarters, National Cheng Kung University, Tainan, Taiwan, ⁷Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁸Center of Clinical Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁹St John's Institute of Dermatology, King's College London (Guy's Campus), London, UK, ¹⁰Department of Genomic Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan

Luncheon Seminar 8

12:45-13:45

Chair: Norito Katoh

LS8 Mechanism and future prospects of IL-4/13 in the treatment of atopic dermatitis

○ Gaku Tsuji^{1,2}

¹Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, ²Research and Clinical Center for Yusho and Dioxin, Kyushu University Hospital, Fukuoka, Japan

Co-sponsored by Sanofi K.K.

Concurrent Oral Session 11 (Carcinogenesis and Cancer)

13:50-15:30

Chairs: Makoto Sugaya, Michihiro Kono

C11-01 [P03-02] Frequent driver mutations of FOXA1 in extramammary Paget's disease

○ Takuya Takeichi¹, Yusuke Okuno², Takaaki Matsumoto¹, Nobuyuki Tsunoda³, Kyogo Suzuki¹, Kana Tanahashi¹, Michihiro Kono^{1,5}, Toyone Kikumori³, Yoshinao Muro¹, Masashi Akiyama¹

¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Medical Genomics Center, Nagoya University Hospital, Nagoya, Japan, ³Department of Breast and Endocrine Surgery, Nagoya University Graduate School of Medicine, Nagoya, Japan, ⁴Department of Pediatrics, Nagoya University Graduate School of Medicine, Nagoya, Japan, ⁵Akita University Graduate School of Medicine, Akita, Japan

C11-02 [P03-03] Clonal expansion of somatically-mutated keratinocytes in KID syndrome

○ Yoshihiro Ishida, Mitsua Murata, Kenji Kabashima
Department of Dermatology, Kyoto University

C11-03 [P03-04] Next-generation sequencing revealed tumor immunity-related factors interacting with tertiary lymphoid structures in cutaneous angiosarcoma

○ Tetsuya Magara, Motoki Nakamura, Yuka Nojiri, Maki Yoshimitsu, Shinji Kano, Akihiro Matsubara, Hiroshi Kato, Akimichi Morita
Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Science, Japan

C11-04 [P03-05] Loss of FAM83H plays a promoting role for cell migration and invasion in cutaneous squamous cell carcinoma via altered keratin distribution

○ Keiko Tokuchi¹, Shinya Kitamura¹, Takuya Maeda¹, Masashi Watanabe², Shigetsugu Hatakeyama², Hideyuki Ujiie¹, Teruki Yanagi¹
¹The Department of Dermatology, Hokkaido University, Sapporo, Japan, ²Department of Biochemistry, Hokkaido University, Sapporo, Japan

C11-05 [P03-06] Blockade of glucose-6-phosphate dehydrogenase induces immunogenic cell death in malignant melanoma and Merkel cell carcinoma

○ Motoki Nakamura, Tetsuya Magara, Maki Yoshimitsu, Yuka Nojiri, Shinji Kano, Akihiro Matsubara, Hiroshi Kato, Akimichi Morita
Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

C11-06 [P03-07] DUSP4 positively controls the proliferation and infiltration ability of melanoma cells by activating ERK1/2 via downregulation of DUSP6

○ Hirofumi Kamada^{1,2}, Shinji Yasuhira², Masahiko Shibazaki², Hiroo Amano¹, Chihaya Maesawa²

¹Department of Dermatology, School of Medicine, Iwate Medical University, Iwate, Japan, ²Department of Tumor Biology, Institute of Biomedical Science, Iwate Medical University, Iwate, Japan

C11-07 [P03-08] Tumor suppressive effect of anti-PD-1 antibody against angiosarcoma in a mouse model

○ Akiko Sekiguchi, Mai Ishikawa, Chisako Fujiwara, Yuta Inoue, Sahori Yamazaki, Akihiko Uchiyama, Sei-ichiro Motegi
Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Japan

C11-08 **Investigating Proteome Changes Between Primary and Metastatic Cutaneous Squamous Cell Carcinoma Using**
[P03-20] **Mass Spectrometry**

○ Ali Azimi^{1,2}, Kitty Lo³, Jennifer Kim⁴, Pablo Fernandez-Penas^{1,2}

¹Westmead Clinical School, Faculty of Medicine and Health, The University of Sydney, Westmead, New South Wales, Australia,

²Department of Dermatology, Westmead Hospital, Westmead, New South Wales, Australia, ³School of Mathematics and Statistics, The University of Sydney, Camperdown, New South Wales, Australia, ⁴Department of Tissue Pathology and Diagnostic Oncology, Westmead Hospital, Westmead, New South Wales, Australia

December 5, 2021, Room C

Concurrent Oral Session 9 (Translational Studies-II/Photobiology)

11:05-12:35

Chairs: Tetsuya Honda, Naoko Okiyama

- C09-01 [P15-03] A deep learning framework enables prompt and objective scoring of Nail Psoriasis Severity Index**
 ○ Hiroto Horikawa, Keiji Tanese, Ryoko Hosokawa, Julia Miyamoto, Kaori Murakami, Risa Kakuta, Hitomi Matsuzaki, Yuhei Kawashima, Masayuki Amagai, Masataka Saito
 Department of Dermatology, Keio University School of Medicine, Tokyo, Japan
- C09-02 [P11-02] Analysis of anti-inflammatory effects and the underlying mechanisms of CO2 on skin**
 ○ Keimon Sayama^{1,2}, Katsuyuki Yuki¹, Keiichi Sugata¹, Satoko Fukagawa¹, Tetsuji Yamamoto¹, Natsumi Nagamori¹, Takayoshi Inoue¹, Shigaku Ikeda², Takatoshi Murase¹
¹Biological Science Research, Kao Corporation, Tochigi, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan
- C09-03 [P11-03] Epigenetic regulation in melanocytes differentiated from induced pluripotent stem cells originated from xeroderma pigmentosum**
 ○ Chihiro Takemori¹, Takeshi Fukumoto¹, Michiyo Koyanagi-Aoi^{2,3}, Makoto Kunisada¹, Chieko Hosaka¹, Takashi Aoi^{2,3}, Chikako Nishigori^{1,3}
¹Division of Dermatology, Department of Internal Related, Graduate School of Medicine, Kobe University, Kobe, Japan, ²Division of Advanced Medical Science, Graduate School of Science, Technology and Innovation, Kobe University, Kobe, Japan, ³Department of iPS cell applications, Graduate School of Medicine, Kobe University, Kobe, Japan
- C09-04 [P11-04] Identification and Quantification of Senescent Cells In UV-induced Skin Pathologies**
 ○ Audrey Wang¹, Satoshi Nakamizo², Yoshihiro Ishida², Genevieve Klassen³, Priscilla Chong³, John Lim⁴, Graham Wright⁴, Oliver Dreesen¹, Kenji Kabashima^{1,2}
¹Skin Research Institute Singapore, ²Kyoto University Graduate School of Medicine, Japan, ³School of Biological Sciences, Nanyang Technology University, ⁴A*STAR Microscopy Platform
- C09-05 [P11-06] Rapid pustule fixation of palmoplantar pustulosis by UVA1-LED phototherapy**
 ○ Kyoko Ikumi¹, Tomohiko Kio², Kan Torii¹, Hideyuki Masuda², Akimichi Morita¹
¹Department of Geriatric and Environmental Dermatology Nagoya City University Graduate School of Medical Sciences, ²R&D Group, Biomedical Division, USHIO INC, Tokyo, Japan
- C09-06 [P11-07] Switching the light source of phototherapy from a lamp to a deep ultraviolet light-emitting diodes**
 ○ Hideyuki Masuda^{1,2}, Akimichi Morita¹
¹Department of Geriatric and Environmental Dermatology, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, ²Ushio Inc. Tokyo, Japan
- C09-07 [P11-10] Bath-PUVA therapy targets keratinocytes to suppress the secretion of pathogenic chemokines**
 ○ Yoshifumi Kanayama, Kan Torii, Kyoko Ikumi, Akimichi Morita
 Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

Luncheon Seminar 9 "Trigger to elucidate the pathophysiology in psoriatic disease"

12:45-13:45

Chairs: Ken Igawa, Toshiyuki Yamamoto

- LS9-1 Molecular and cellular dynamics after anti-IL-17 mAb treatment for psoriasis**
 ○ Toshiharu Fujiyama
 Department of Dermatology, Hamamatsu University School of Medicine
- LS9-2 Psoriasis as a systemic inflammation disease and an impact of IL-17A inhibition on it**
 ○ Masahiro Kamata
 Department of Dermatology, Teikyo University School of Medicine

Co-sponsored by Novartis Pharma K.K. Medical Division/Maruho Co., Ltd. Medical Affairs Dept.

Concurrent Oral Session 12 (Patient-Targeted Research)

13:50-15:30

Chairs: Yutaka Shimomura, Satoru Shinkuma

- C12-01 [P09-03] Decomposition of skin RNA-seq data by Non-negative matrix factorization reveals various pathways in pathogenesis of Atopic dermatitis**
○ Ayano Fukushima-Nomura¹, Hiroshi Kawasaki^{1,2}, Kiyoshi Yashiro¹, Keiji Tanese¹, Eiryō Kawakami³, Masayuki Amagai¹
¹Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ²RIKEN Center for Integrative Medical Sciences, ³RIKEN Advanced Data Science Project
- C12-02 [P09-04] Automated assessment of the severity of psoriasis by AI**
○ Takashi Okamoto¹, Masataka Kawai², Shinji Shimada¹, Tatsuyoshi Kawamura¹
¹The Department of Dermatology, University of Yamanashi, Yamanashi, Japan, ²The Department of Human Pathology, University of Yamanashi, Yamanashi, Japan
- C12-03 [P09-05] Stimulator of IFN genes (STING) expression is a prognostic marker in patients with Merkel cell carcinoma**
○ Sayaka Sato, Yu Sawada, Etsuko Okada, Motonobu Nakamura
Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- C12-04 [P09-06] Ultra high-frequency ultrasound provides a novel noninvasive diagnostic method for hair diseases complementing conventional modalities**
○ Misaki Kinoshita-Ise^{1,2,3}, Manabu Ohyama¹, Stuart Foster^{4,5}, Shachar Sade⁶, Neil H. Shear³
¹The Department of Dermatology, Kyorin University Faculty of Medicine, ²The Division of Dermatology, Department of Medicine, Sunnybrook Health Sciences Centre, ³The Division of Dermatology, Department of Medicine, University of Toronto, ⁴Sunnybrook Research Institute, ⁵The Department of Medical Biophysics, University of Toronto, ⁶The Division of Pathology, Department of Medicine, Sunnybrook Health Sciences Centre
- C12-05 [P09-07] Persistent HHV-6 infection has an increased risk of autoimmune disorders in patients with DIHS**
○ Yuki Nishimura¹, Chinatsu Shobatake¹, Fumi Miyagawa¹, Satoru Shinkuma¹, Hideaki Watanabe², Masahiro Kira³, Saeko Nakajima⁴, Yuko Higashi⁵, Hideo Asada¹
¹Department of Dermatology, Nara Medical University School of Medicine, Nara, Japan, ²Department of Dermatology, Showa University School of Medicine, Tokyo, Japan, ³Department of Dermatology, Ikeda City Hospital, Ikeda, Japan, ⁴Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ⁵Department of Dermatology, Kagoshima University, Kagoshima, Japan
- C12-06 [P09-08] S100A2 is a potent biomarker of severe drug reaction**
○ Manabu Yoshioka, Yu Sawada, Motonobu Nakamura
Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- C12-07 [P09-09] Inflammatory type of acquired idiopathic generalized anhidrosis is characterized by dysregulation of sweat gland immune privilege**
○ Yurie Shimoda, Yoshimi Yamazaki, Yoshiko Mizukawa, Manabu Ohyama
Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, Japan
- C12-08 [P09-10] Lymphocyte count and neutrophil-to-lymphocyte ratio at the onset of herpes zoster are useful biomarker for predicting life prognosis**
○ Takenobu Yamamoto^{1,2}, Takuya Ohyama¹, Mariko Yamane¹, Yumi Aoyama¹
¹Department of Dermatology, Kawasaki Medical School, Kurashiki, Japan, ²Department of Dermatology, Kawasaki Medical School General Medical Center, Okayama, Japan

December 5, 2021, Room D

JSID-Asia-Oceania-Forum "Skin inflammation and autoimmunity"

13:50-16:10

Chairs: Hideyuki Ujiie, Rei Watanabe

- JAOF1 Metabolic Control of Epithelial-Immune Interaction in Skin Inflammation**
○ Srikala Raghavan
A*Star Skin Research Lab (ASRL), Agency for Science, Technology and Research (A*STAR)
- JAOF2 IKK/NF- κ B signaling in keratinocytes regulates necroptosis-mediated skin inflammation**
○ Snehlata Kumari^{1,2}, Trieu-My Van², Manolis Pasparakis²
¹The University of Queensland Diamantina Institute, Translational Research Institute, Brisbane, Australia, ²CECAD Research Center, University of Cologne, Cologne, Germany
- JAOF3 Immune mechanism of immune checkpoint inhibitors-induced Stevens-Johnson syndrome and toxic epidermal necrolysis**
○ Chun-Bing Chen
The Department of Dermatology, Chang Gung Memorial Hospital
- JAOF4 Mechanisms of melanocyte death in vitiligo**
○ Chunying Li
Department of Dermatology, Xijing Hospital, Fourth Military Medical University, China
- JAOF5 The Significance of CD4⁺ T cells in the Pathogenesis of Pemphigus**
○ Jong Hoon Kim
Yonsei University College of Medicine, Gangnam Severance Hospital, Seoul, Korea

December 3, 8:30 - January 11, 10:00, on-demand service

World Showcase of Investigative Dermatology

- WS1 Early Life Imprinting of a Th2-Stromal Cell Niche in Skin**
○ Michael D. Rosenblum
UCSF, Department of Dermatology
- WS2 Neuronal control of cutaneous inflammation**
○ Daniel Kaplan
University of Pittsburgh, Department of Dermatology/Secondary Appointment Department of Immunology/Cutaneous Biology Research Center/Dermatology Medical Student Research
- WS3 Neuroimmune Regulation of Itch**
○ Brian S. Kim
Department of Medicine, Division of Dermatology, Center for the Study of Itch and Sensory Disorders, Department of Anesthesiology, Department of Pathology and Immunology, Division of Biology and Biomedical Sciences, Washington University School of Medicine
- WS4 Cell therapy for pemphigus: entering the precision medicine era**
○ Aimee Payne
Dermatology, University of Pennsylvania
- WS5 Translational research in vitiligo: Launching a new era of targeted treatments**
○ John E. Harris^{1,2,3}
¹Department of Dermatology UMass Medical School, Worcester, MA, ²Vitiligo Clinic and Research Center, ³Autoimmune Therapeutics Institute
- WS6 Computational systems medicine approach towards personalised treatment design of atopic dermatitis**
○ Reiko J Tanaka
Department of Bioengineering, Imperial College London
- WS7 The ultrastructure of a novel and dynamic endoplasmic reticulum-desmosome complex: Implications for skin disease**
Bharathan NK¹, Giang W¹, Aaron J², Khuon S², Chew TL², ○ Kowalczyk Andrew P.¹
¹Departments of Dermatology and Cellular and Molecular Physiology, Pennsylvania State College of Medicine, Hershey, PA, USA, ²Advanced Imaging Center, Janelia Research Campus, Howard Hughes Medical Institute, Ashburn, Virginia
- WS8 Chromatin Dynamics for Diagnosis and Therapy**
Annie Collier, Angela Liu, Hanson Zhen, Jessica Torkelson, Kelly McCarthy, Tiffany Patel, ○ Anthony Oro
Program in Epithelial Biology Stanford University School of Medicine, Stanford, CA
- WS9 Scaling the Impact of Research-Based Innovation**
○ William Ju
Advancing Innovation in Dermatology, Inc.
- WS10 Principles of regeneration captured by imaging the skin of live mice**
○ Greco Valentina
Department of Genetics, Cell Biology and Dermatology, Yale University
- WS11 Skin regeneration during wound healing**
○ Mayumi Ito
The Ronald O. Perelman Department of Dermatology and Cell Biology, NYU Grossman School of Medicine, New York, USA
- WS12 Developmental cell programs in inflammatory skin disease**
○ Muzlifah Haniffa
Dermatology and Immunology, Newcastle University
- WS13 SARS-CoV2-driven immunopathology: lessons learned from the skin**
○ Michel Gilliet
Lausanne University Hospital CHUV, Switzerland
- WS14 Potency and activity of endovascular progenitors in wound healing and scarring**
○ Kiarash Khosrotehrani
The University of Queensland Diamantina Institute, Brisbane, Australia

December 3, 8:30 - January 11, 10:00, Digital Poster

Poster Presentation

2020 JSID's Fellowship Shiseido Research Grant

- SE-1**
[O01-01] **Observation of tight junction formation using cultured keratinocytes**
○ Hiroaki Iwata
Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan
- SE-2**
[O01-02] **Dynamics of epigenetic environment in skin inflammatory diseases**
○ Sayaka Shibata
Department of Dermatology, University of Tokyo Graduate School of Medicine

Category 1 (P01): Adaptive Immunity

- P01-01**
[II-1] **Lymphotoxin β from T cells mediates the formation of high endothelial venule-like vessels in atopic dermatitis-like skin lesions in mice**
○ Shuto Kanameishi¹, Sachiko Ono¹, Yuki Honda-Keith¹, Ryota Asahina¹, Tetsuya Honda², Kenji Kabashima^{1,3}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Department of Dermatology, Hamamatsu University School of Medicine, Japan, ³Singapore Immunology Network (SigN) and Skin Research Institute of Singapore, Agency for Science, Technology and Research, Biopolis, Singapore
- P01-02**
[I-3] **AIM2 regulates anti-tumor immunity and serves as a therapeutic target for melanoma immunotherapy**
○ Keitaro Fukuda^{1,2}, Ken Okamura², Rebecca L. Riding², Xueli Fan², Sean M. McCauley³, Jeremy Luban^{3,4}, Takeru Funakoshi¹, Tomonori Yaguchi⁵, Yutaka Kawakami², Anastasia Khvorova^{6,7}, Katherine A. Fitzgerald⁸, John E. Harris²
¹Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ²Department of Dermatology, University of Massachusetts Medical School, Worcester, MA, ³Program in Molecular Medicine, University of Massachusetts Medical School, Worcester, MA, ⁴Department of Biochemistry and Molecular Pharmacology, University of Massachusetts Medical School, Worcester, MA, ⁵Division of Cellular Signaling, Institute for Advanced Medical Research, Keio University School of Medicine, Tokyo, Japan, ⁶RNA Therapeutics Institute, University of Massachusetts Medical School, Worcester, MA, ⁷Department of Molecular Medicine, University of Massachusetts Medical School, Worcester, MA, ⁸Department of Infectious Diseases and Immunology, University of Massachusetts Medical School, Worcester, MA.
- P01-03**
[C10-01] **Skin immune memory can be compensated by circulating CD4 T cells when the resident memory CD8 T cells are unfunctional**
○ Shuichi Nakai^{1,2}, Rei Watanabe², Kiyoshi Hirahara³, Toshinori Nakayama³, Manabu Fujimoto²
¹Research Department, Maruho Co., Ltd., Kyoto, Japan, ²Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, Japan, ³Department of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan
- P01-04**
[C10-02] **Neutrophil extracellular traps are involved in enhanced contact hypersensitivity response in IL-36 receptor antagonist-deficient mice**
○ Yurie Hasegawa¹, Yohei Iwata¹, Hidehiko Fukushima¹, Yoshihito Tanaka¹, Soichiro Watanabe¹, Kenta Saito¹, Hiroyuki Ito¹, Mizuki Sugiura¹, Masashi Akiyama², Kazumitsu Sugiura¹
¹Department of Dermatology, Fujita Health University School of Medicine, Aichi, Japan, ²Department of Dermatology, Nagoya University Graduate School of Medicine
- P01-05**
[C10-03] **Tumor necrosis factor-alpha plays crucial role in both the induction and maintenance of cytotoxic T lymphocyte-induced dermatitis**
○ Toshiya Miyake, Satoshi Nakamizo, Gyohei Egawa, Kenji Kabashima
Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan
- P01-06**
[C10-04] **IL-31, a major pruritogen in a mouse model of atopic dermatitis, is generated through the macrophage/TSLP/periostin axis**
○ Takashi Hashimoto, Takahiro Satoh
Department of Dermatology, National Defense Medical College, Tokorozawa, Japan
- P01-07**
[C10-05] **Attenuation of DTH by oral tolerance depends on regulatory T cells in the sensitization phase**
○ Arisa Akagi¹, Akihiko Kitoh², Sho Hanakawa², Kenji Kabashima^{1,2}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Singapore Immunology Network and Skin Research Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore
- P01-08**
[C10-06] **IL-10 production potency in peripheral blood B cells predicts prognosis of alopecia areata**
○ Yutaka Matsumura^{1,2}, Rei Watanabe¹, Yuumi Nakamura¹, Manabu Fujimoto¹
¹Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, ²Department of Dermatology, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan

- P01-09 [C10-07] New epicutaneous sensitization model to protease antigen: itch-associated skin inflammation, a variety of Th subsets and IgE**
○ Tomoko Yoshimura^{1,2}, Toshiro Takai¹, Seiji Kamijo¹, Toru Kimitsu^{1,2}, Yurie Masutani^{1,2}, Takasuke Ogawa², Ko Okumura¹, Hideoki Ogawa², Shigaku Ikeda^{1,2}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine
- P01-10 [C10-08] Revisiting the dogma of contact dermatitis; even single hapten application can induce allergic contact dermatitis in situ**
○ Gyohei Egawa, Kenji Kabashima
Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan
- P01-11 [O07-01] Chronological classification of alopecia areata based on PD-1 expression revealed by scRNA-seq analysis-assisted immunohistochemistry**
○ Akiyoshi Senda, Toshiaki Kogame, Satoshi Nakamizo, Takashi Nomura, Naotomo Kambe, Kenji Kabashima
Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P01-12 [O07-02] Treating pemphigus vulgaris (PV) and foliaceus (PF) by inhibiting the neonatal Fc receptor: phase 2 open-label trial with efgartigimod**
○ Matthias Goebeler¹, Zsuzsanna Bata-Csorgo², Clara De Simone³, Biagio Didona⁴, Eva Remenyik⁵, Nataliya Reznichenko⁶, Enno Schmidt⁷, Johanna Stoevesandt¹, E. Sally Ward⁸, Wim Parys⁹, Hans de Haard⁹, Patrick Dupuy⁹, Peter Verheesen⁹, Pascal Joly¹⁰
¹Department of Dermatology, Venereology and Allergology, University Hospital Wuerzburg, Wuerzburg, Germany, ²Department of Dermatology and Allergology, University of Szeged, Szeged, Hungary, ³Catholic University Policlinic A. Gemelli, Rome, Italy, ⁴Dermatopathic Institute of the Immaculate, Rome, Italy, ⁵University of Debrecen, Debrecen, Hungary, ⁶Zaporizhzhya State Medical University, Zaporizhzhya, Ukraine, ⁷Department of Dermatology, University of Luebeck, Luebeck, Germany, ⁸Centre for Cancer Immunology, University of Southampton, Southampton, UK, ⁹argenx, Ghent, Belgium, ¹⁰Department of Dermatology, Rouen University Hospital, Rouen, France
- P01-13 [O07-03] Elucidating the role of CARD14 signaling in Type 2 immune response**
○ Alshimaa Mostafa¹, Teruasa Murata¹, Teruki Dainichi², Ken Ishii³, Kenji Kabashima^{1,4}
¹The Department Of dermatology, Kyoto University, Kyoto, Japan, ²Department of Dermatology, Graduate school of Medicine, Kagawa university, Japan, ³Institute of Medical Science, Division of Vaccine Science, Department of Microbiology and Immunology, The University of Tokyo, Japan, ⁴The Singapore Immunology Network (SIgN) and Skin Research Institute of Singapore (SRIS), Agency for Science, Technology and Research (A*STAR), Singapore
- P01-14 [O07-04] The effect of topical 5-azacytidine in irritant and allergic contact dermatitis**
○ Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura
Department of Dermatology, University of Yamanashi, Yamanashi, Japan
- P01-15 [O07-05] Molecular mechanisms of mucosal mast cell differentiation**
○ Nobuhiro Nakano¹, Jiro Kitaura¹, Ko Okumura¹, Hideoki Ogawa^{1,2}, Shigaku Ikeda^{1,2}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan
- P01-16 [O07-06] iSALT structures in B-cell type pseudolymphoma and their potential for local plasmacytoid differentiation in the skin**
○ Kosei Nanya¹, Toshiaki Kogame¹, Masahiro Hirata², Riko Takimoto-Ito¹, Masakazu Fujimoto², Takashi Nomura¹, Naotomo Kambe¹, Kenji Kabashima¹
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Department of Diagnostic Pathology, Kyoto University Hospital, Kyoto, Japan
- P01-17 [O07-07] Hyaluronan regulates murine irritant contact dermatitis model via Langerhans cell activation**
○ Mayuko Amagai, Hitoshi Terui, Naokazu Hatchome, Setsuya Aiba, Kenshi Yamasaki
Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan
- P01-18 [O07-08] A possible niche for B-cell development in the skin in primary cutaneous plasmacytosis suggesting the presence of a functional unit as iSALT**
○ Keigo Takase¹, Toshiaki Kogame², Riko Takimoto-ito², Takayoshi Komatsu-Fujii¹, Rintaro Shibuya², Takashi Nomura², Naotomo Kambe², Kenji Kabashima²
¹Department of Dermatology, Tenri Hospital, Tenri, Nara, ²Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P01-19 [O07-09] Optimal methods for human skin T-cell analysis**
○ Takuya Sato, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura
Department of Dermatology, University of Yamanashi, Chuo, Japan
- P01-20 [O07-10] Differentially expressed circulating exosomal microRNAs as biomarkers for disease severity in psoriasis patients**
○ Dong Chan Kim¹, Young Joon Park¹, So Min Kim¹, Ji Young Park¹, Mi Jin Park¹, Jae Youn Cheong², Eun-So Lee¹
¹Department of Dermatology, Ajou University School of Medicine, Suwon, Korea, ²Ajou Translational Omics Center, Ajou University Medical Center, Suwon, Korea

- P01-21 [O07-11] Anti-inflammation effects of decanoic acid in a mouse of contact hypersensitivity: on a possible new drug for inflammatory skin disease**
 ○ Shohei Igari¹, Youichi Akama², Toshiyuki Yamamoto¹
¹The Department of Dermatology, Fukushima Medical University, Fukushima, Japan, ²Department of Emergency, Minami Tohoku Hospital, Iwanuma, Miyagi

Category 2 (P02): Auto-Immunity

- P02-01 [I1-2] Autoantigen-specific B cells targeted single-cell RNA-seq reveals the functional heterogeneity in pemphigus patients**
 ○ Shohei Egami^{1,2}, Takashi Watanabe², Ayano Nomura-Fukushima¹, Hisashi Nomura¹, Hayato Takahashi¹, Jun Yamagami¹, Osamu Ohara¹, Masayuki Amagai^{1,2}
¹The Department of Dermatology, Keio University of Medicine, Tokyo, Japan, ²Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences, ³Laboratory for integrative genomics, RIKEN Center for Integrative Medical Sciences
- P02-02 [I-5] Abnormally activated B cells with TLR9 up-regulation in Fli1-depleted mice: a possible predisposing condition for systemic sclerosis**
 ○ Kentaro Awaji¹, Takuya Miyagawa¹, Takashi Yamashita¹, Yuki Fukui¹, Jun Omatsu¹, Satoshi Toyama¹, Tetsuya Ikawa¹, Yuta Norimatsu¹, Yusuke Watanabe¹, Ayumi Yoshizaki¹, Maria Trojanowska², Shinichi Sato³, Yoshihide Asano¹
¹The Department of Dermatology, University of Tokyo, Tokyo, Japan, ²Arthritis Center, Boston University Medical Center, Boston, USA
- P02-03 [C04-01] Blockade of CD122 on skin resident memory T cells suppresses the development of mucocutaneous graft-versus-host disease**
 ○ Noriko Kubota¹, Ryota Tanaka¹, Yuki Ichimura¹, Risa Konishi¹, J Yun Tso², Naoya Tsurushita², Toshifumi Nomura¹, Naoko Okiyama¹
¹The Department of Dermatology, University of Tsukuba, Ibaraki, Japan, ²JN Biosciences LLC
- P02-04 [O12-07] IFN- γ signaling has both pro-inflammatory and immunoregulatory roles depending on the cell types in interface dermatitis in mouse**
 ○ Miho Mukai¹, Hayato Takahashi¹, Masayuki Amagai^{1,2}
¹The Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ²Laboratory for Skin Homeostasis, RIKEN IMS, Yokohama
- P02-05 [O12-08] IL-9 promotes skin inflammation via Pyy in imiquimod-induced psoriasis-like dermatitis**
 ○ Shiori Kamiya^{1,2}, Ippei Ikegami², Ryota Kamekura², Keijyu Kobayashi^{1,2}, Takafumi Kamiya¹, Shingo Ichimiya², Hisashi Uhara¹
¹Department of Dermatology, Sapporo Medical University School of Medicine, Sapporo, Japan, ²Department of Human Immunology, Research Institute for Frontier Medicine, Sapporo Medical University School of Medicine, Sapporo, Japan
- P02-06 [C04-02] Activation of TNF/NF- κ B signaling by linear ubiquitination specifically exacerbates a murine imiquimod-induced psoriasis model**
 ○ Ken I. Kosaka, Satoshi Nakamizo, Gyohei Egawa, Kenji Kabashima
 Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan
- P02-07 [C04-03] Possible involvement of IL-22-producing CD8⁺CD103⁺ T cells in the epidermal hyperplasia of atopic dermatitis**
 ○ Kazuo Kurihara¹, Toshiharu Fujiyama¹, Pawit Phadungsaksawasdi¹, Yoshiki Tokura^{1,2}, Tetsuya Honda¹
¹The Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan, ²Allergic Disease Research Center and Department of Dermatology, Chutoen General Medical Center, Kakegawa, Japan
- P02-08 [C04-04] The role of Fc γ RIIB in a murine bleomycin-induced scleroderma model**
 ○ Kaori Sawada¹, Yasuhito Hamaguchi¹, Kie Mizumaki¹, Kyosuke Oishi¹, Shintaro Maeda¹, Yuka Ikawa¹, Akito Komuro^{1,2}, Kazuhiko Takehara¹, Takashi Matsushita¹
¹Department of Dermatology, Kanazawa University, Kanazawa, Japan, ²Department of Plastic Surgery, Kanazawa University, Kanazawa, Japan
- P02-09 [C04-05] Serine protease inhibitor A3n, an endogenous granzyme B inhibitor, alleviates graft-versus-host disease reaction in human skin**
 ○ Yuki Ichimura¹, Risa Konishi¹, Ryota Tanaka¹, Noriko Kubota¹, Shoichiro Ishitsuki¹, Katsuhito Sasaki¹, Yasuyuki Nakamura¹, Yasuhiro Fujisawa¹, Toshifumi Nomura¹, Hideki Watanabe², Naoko Okiyama¹
¹Department of Dermatology, University of Tsukuba, Tsukuba, Japan, ²Pharmacology Research Group, Research Department, Maruho Co., Ltd.
- P02-10 [C04-06] Occurrence of immune reconstitution inflammatory syndrome can be predicted by cytokine profiles in DPP-4i-associated bullous pemphigoid**
 ○ Seiko Sugiyama, Takenobu Yamamoto, Yumi Aoyama
 Department of Dermatology, Kawasaki Medical School

- P02-11 [O04-07] Persistent dermatitis resulted in the gastro-intestinal amyloidosis, reduced absorption of nutrients, and hypoalbuminemia**
○ Takehisa Nakanishi, Kento Mizutani, Shohei Iida, Yoshiaki Matsushima, Ai Umaoka, Makoto Kondo, Koji Habe, Keiichi Yamanaka
The Department of Dermatology, Mie University Graduate School of Medicine
- P02-12 [O12-09] Periostin may act on monocytes to be differentiated into macrophages with fibrotic phenotype in patients with systemic sclerosis**
○ Mao Suzuki, Asami Akita-Enoki, Miho Asami, Yasushi Otake, Noriko Komitsu-Ikeda, Yukie Yamaguchi
Department of Environmental Immuno-Dermatology Yokohama City University Graduate School of Medicine, Yokohama, Japan
- P02-13 [O12-10] Apremilast downregulates IL-17 production and induces splenic regulatory B and T cells in imiquimod-induced psoriasis**
○ Hideaki Uchida, Masahiro Kamata, Teruo Shimizu, Shota Egawa, Makoto Ito, Ryosuke Takeshima, Itsumi Mizukawa, Ayu Watanabe, Yayoi Tada
Department of Dermatology, Teikyo University, School of Medicine
- P02-14 [O12-11] Withdrawn**
- P02-15 [O12-12] Establishment of nail psoriasis mouse model by topical application of imiquimod**
○ Kana Yamada, Hisayoshi Imanishi, Daisuke Tsuruta
The Department of Dermatology, University of Osaka city, Osaka, Japan
- P02-16 [O04-01] Optimization of ELISAs for IgA antibodies in autoimmune bullous skin diseases**
○ Norito Ishii¹, Kwesi Teye¹, Hiroshi Koga¹, Takashi Hashimoto², Takekuni Nakama¹
¹Department of Dermatology, Kurume University School of Medicine, and Kurume University Institute of Cutaneous Cell Biology, Kurume, Japan, ²Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan
- P02-17 [O04-02] Relationship between treatment responsiveness and immune checkpoints in Halo nevus**
○ Shinji Kano, Motoki Nakamura, Maki Yoshimitsu, Tetsuya Magara, Yuka Nojiri, Akihiro Matsubara, Hiroshi Kato, Akimichi Morita
Department of Geriatric and Environmental Dermatology, Nagoya City University
- P02-18 [O04-03] The presence of multiple epitopes within BP180 molecule in a case of dipeptidyl peptidase-4 inhibitor-related bullous pemphigoid**
○ Rikuma Kitao¹, Takeshi Fukumoto¹, Takashi Hashimoto², Kentaro Izumi³, Haruki Jimbo¹, Chikako Nishigori^{1,4}
¹Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Hyogo, Japan, ²Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ³Department of Dermatology, Hokkaido University Graduate School of Medicine, Hokkaido, Japan, ⁴Department of iPS cell applications, Kobe University Graduate School of Medicine, Hyogo, Japan
- P02-19 [O04-04] Cautions for the discrepancy between CLEIA and ELISA and the presence of non-pathogenic antibodies are needed in pemphigus management**
○ Ai Yoshioka¹, Takeshi Fukumoto¹, Marie Ohata², Yumi Aoyama³, Koji Kamiya⁴, Takashi Hashimoto⁵, Chikako Nishigori^{1,6}
¹Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Hyogo, Japan, ²Department of Dermatology, Kobe Ekisaikai Hospital, Hyogo, Japan, ³Department of Dermatology, Kawasaki Medical School, Okayama, Japan, ⁴Department of Dermatology, Jichi Medical University, Tochigi, Japan, ⁵Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ⁶Department of iPS Cell Applications, Kobe University Graduate School of Medicine, Hyogo, Japan
- P02-20 [O04-05] Effects of decanoic acid on imiquimod-induced psoriasis-like dermatitis in mice**
○ Kinuko Irie, Shohei Igari, Toshiyuki Yamamoto
Department of Dermatology, Fukushima Medical University School of Medicine
- P02-21 [O04-06] Severe skin inflammation leads to salivary gland atrophy and dysfunction**
○ Yoshiaki Matsushima¹, Kento Mizutani¹, Shohei Iida¹, Masako Ichishi², Takehisa Nakanishi¹, Karin Okada¹, Ai Umaoka¹, Makoto Kondo¹, Koji Habe¹, Masatoshi Watanabe², Keiichi Yamanaka¹
¹Department of Dermatology, Mie University, Graduate School of Medicine, Mie, Japan, ²Oncologic Pathology, Mie University, Graduate School of Medicine, Tsu, Mie, Japan
- P02-22 [O04-07] A new murine model of human eosinophilic fasciitis: role of IL-5 and IL-17**
○ Takashi Ito, Toshiyuki Yamamoto
Fukushima Medical University School of Medicine Department of Dermatology

Category 3 (P03): Carcinogenesis and Cancer

- P03-01 [II-3] Keratinocyte Regnase-1, a down-modulator of skin inflammation, contributes to protection from carcinogenesis through regulating COX2**
 ○ Hiroyuki Morisaka¹, Mikiro Takaishi¹, Shizuo Akira^{2,3}, Shigetoshi Sano¹
¹Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan, ²Laboratory of Host Defense, World Premier Institute Immunology Frontier Research Center (WPI-IFReC), Osaka University, Osaka, Japan, ³Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan
- P03-02 [C11-01] Frequent driver mutations of FOXA1 in extramammary Paget's disease**
 ○ Takuya Takeichi¹, Yusuke Okuno², Takaaki Matsumoto¹, Nobuyuki Tsunoda³, Kyogo Suzuki⁴, Kana Tanahashi¹, Michihiro Kono^{1,5}, Toyone Kikumori³, Yoshinao Muro¹, Masashi Akiyama¹
¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Medical Genomics Center, Nagoya University Hospital, Nagoya, Japan, ³Department of Breast and Endocrine Surgery, Nagoya University Graduate School of Medicine, Nagoya, Japan, ⁴Department of Pediatrics, Nagoya University Graduate School of Medicine, Nagoya, Japan, ⁵Akita University Graduate School of Medicine, Akita, Japan
- P03-03 [C11-02] Clonal expansion of somatically-mutated keratinocytes in KID syndrome**
 ○ Yoshihiro Ishida, Mitsua Murata, Kenji Kabashima
 Department of Dermatology, Kyoto University
- P03-04 [C11-03] Next-generation sequencing revealed tumor immunity-related factors interacting with tertiary lymphoid structures in cutaneous angiosarcoma**
 ○ Tetsuya Magara, Motoki Nakamura, Yuka Nojiri, Maki Yoshimitsu, Shinji Kano, Akihiro Matsubara, Hiroshi Kato, Akimichi Morita
 Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Science, Japan
- P03-05 [C11-04] Loss of FAM83H plays a promoting role for cell migration and invasion in cutaneous squamous cell carcinoma via altered keratin distribution**
 ○ Keiko Tokuchi¹, Shinya Kitamura¹, Takuya Maeda¹, Masashi Watanabe², Shigetsugu Hatakeyama², Hideyuki Ujii¹, Teruki Yanagi¹
¹The Department of Dermatology, Hokkaido University, Sapporo, Japan, ²Department of Biochemistry, Hokkaido University, Sapporo, Japan
- P03-06 [C11-05] Blockade of glucose-6-phosphate dehydrogenase induces immunogenic cell death in malignant melanoma and Merkel cell carcinoma**
 ○ Motoki Nakamura, Tetsuya Magara, Maki Yoshimitsu, Yuka Nojiri, Shinji Kano, Akihiro Matsubara, Hiroshi Kato, Akimichi Morita
 Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan
- P03-07 [C11-06] DUSP4 positively controls the proliferation and infiltration ability of melanoma cells by activating ERK1/2 via downregulation of DUSP6**
 ○ Hirofumi Kamada^{1,2}, Shinji Yasuhira², Masahiko Shibazaki², Hiroo Amano¹, Chihaya Maesawa²
¹Department of Dermatology, School of Medicine, Iwate Medical University, Iwate, Japan, ²Department of Tumor Biology, Institute of Biomedical Science, Iwate Medical University, Iwate, Japan
- P03-08 [C11-07] Tumor suppressive effect of anti-PD-1 antibody against angiosarcoma in a mouse model**
 ○ Akiko Sekiguchi, Mai Ishikawa, Chisako Fujiwara, Yuta Inoue, Sahori Yamazaki, Akihiko Uchiyama, Sei-ichiro Motegi
 Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Japan
- P03-09 [O10-01] Combination treatment of topical imiquimod plus anti-programmed cell death 1 antibody exerts significantly potent antitumor effect**
 ○ Kazumasa Oya¹, Yoshiyuki Nakamura¹, Yasuhiro Fujisawa¹, Naoko Okiyama¹, Manabu Fujimoto², Toshifumi Nomura¹
¹The Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki, Japan, ²Department of Dermatology, Integrated Medicine, Graduate School of Medicine, Osaka University, Suita, Osaka
- P03-10 [O10-02] Skin liquid biopsy method for assessing the lesional environment of cutaneous T-cell lymphoma**
 ○ Kan Torii¹, Yukinori Okada², Akimichi Morita¹
¹Department of Geriatric and Environmental Dermatology, Nagoya City University, Aichi, Japan, ²Department of Statistical Genetics, Osaka University Graduate School of Medicine, Osaka, Japan
- P03-11 [O10-03] Global tyrosine kinase profiling revealed Src pathway as a novel therapeutic target in combination with HDAC inhibitors for CTCL**
 ○ Kazuyasu Fujii^{1,2}, Nozomi Jimura^{1,2}, Ryuto Tsuchiya², Yuki Yoshimatsu², Tadashi Kondo², Takuro Kanekura¹
¹The Department of Dermatology, Kagoshima University, Kagoshima, Japan, ²Division of Rare Cancer Research, National Cancer Center Research Institute, Tokyo, Japan

- P03-12**
[O10-04] **Matrin-3 is involved in cell cycle and apoptosis for survival in melanoma**
○ Haruka Kuriyama¹, Toshihiro Kimura¹, Etsuko Okada¹, Takayuki Ishibashi¹, Satoru Mizuhashi¹, Hisashi Kanemaru¹, Ikko Kajihara¹, Katsunari Makino¹, Azusa Miyashita¹, Jun Aoi¹, Kanako Kita^{1,2}, Hironobu Ihn¹, Satoshi Fukushima¹
¹Department of Dermatology and Plastic Surgery, Kumamoto University, Kumamoto, Japan, ²Department of Molecular Pathology, Graduate School of Medical Sciences, Kumamoto University
- P03-13**
[O10-05] **Frequent *FGFR3* and ras gene mutations in skin tags/acrochordons**
○ Satomi Aoki¹, Hisato Suzuki², Yoshiko Hirata¹, Tomoko Kawai³, Kazuhiko Nakabayashi³, Kenichiro Hata³, Kenjiro Kosaki², Masayuki Amagai¹, Akiharu Kubo¹
¹Department of Dermatology, Keio University School of Medicine, ²Center for Medical Genetics, Keio University School of Medicine, ³Department of Maternal-Fetal Biology, National Center for Child Health and Development
- P03-14**
[O10-06] **Two opposite effects of desmoglein 3 on the growth of oral squamous cell carcinoma between anchorage-dependent and -independent conditions**
○ Michiyoshi Kouno¹, Junichiro Inada², Masaki Minabe², Yurie Akiyama², Kazunari Higa³, Tetsuhiko Tachikawa⁴, Takeshi Nomura², Shinichi Takahashi¹
¹The Department of Dermatology, Tokyo Dental College Ichikawa General Hospital, Chiba, Japan, ²The Department of Oral Oncology, Oral and Maxillofacial Surgery, Tokyo Dental College, ³Cornea Center Eye bank, Tokyo Dental College Ichikawa General Hospital, ⁴Division of Molecular Diagnosis and Cancer Prevention, Saitama Cancer Center
- P03-15**
[O10-07] **AID expression of B cells in the tertiary lymphoid structures implies an immunoglobulin class switching in tumor immunity**
○ Tomoya Takegami, Toshiaki Kogame, Takashi Nomura, Naotomo Kambe, Takaya Komatsu, Kenji Kabashima
Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P03-16**
[O10-08] **Serum Cytokeratin 18 as a Potential Prognostic, Diagnostic and Therapeutic Marker for Extramammary Paget's Disease**
○ Mariko Takaoka, Hayakazu Sumida, Takuya Miyagawa, Shinichi Sato
Department of Dermatology, Faculty of Medicine, The University of Tokyo, Tokyo, Japan
- P03-17**
[O10-09] **The MIF-CD74 interaction regulates the expression of PD-L1 in melanoma cells**
○ Keiji Tanese^{1,2}, Masako Imaoka², Yohei Masugi², Mutsumi Hayashi², Michiie Sakamoto²
¹The Department of Dermatology, Keio University, Tokyo, Japan, ²The Department of Pathology, Keio University, Tokyo, Japan
- P03-18**
[O10-10] **Functional analysis of Rap2 in tumor microenvironment**
○ Kimiko Takei^{1,2}, Masato Umikawa², Tsuyoshi Asato², Ken-ichi Kariya²
¹Department of Dermatology, Faculty of Medicine, University of the Ryukyus, ²Department of Medical Chemistry, Graduate School of Medicine, University of the Ryukyus
- P03-19**
[O10-11] **Clinicopathological parameters to predict prognosis in cutaneous angiosarcoma -a retrospective analysis**
○ Satoru Yonekura, Yuichiro Endo, Hiroko Fujii, Gyohei Egawa, Kenji Kabashima
The Department of Dermatology, Kyoto University, Kyoto, Japan
- P03-20**
[C11-08] **Investigating Proteome Changes Between Primary and Metastatic Cutaneous Squamous Cell Carcinoma Using Mass Spectrometry**
○ Ali Azimi^{1,2}, Kitty Lo³, Jennifer Kim⁴, Pablo Fernandez-Penas^{1,2}
¹Westmead Clinical School, Faculty of Medicine and Health, The University of Sydney, Westmead, New South Wales, Australia, ²Department of Dermatology, Westmead Hospital, Westmead, New South Wales, Australia, ³School of Mathematics and Statistics, The University of Sydney, Camperdown, New South Wales, Australia, ⁴Department of Tissue Pathology and Diagnostic Oncology, Westmead Hospital, Westmead, New South Wales, Australia
- P03-21**
[O10-12] **Evaluating the efficacy of cetuximab, avelumab and cetuximab plus avelumab in treating perineural invasion of cutaneous SCC**
○ Priscila Oliveira de Lima¹, Benedict Lum¹, Shannon Joseph¹, Brian Tse², Kamil Sokolowski², Ian Brown³, Glen Boyle⁴, Benedict Panizza⁵, Fiona Simpson¹
¹The University of Queensland Diamantina Institute, Woolloongabba, QLD, Australia, ²Translational Research Institute, Woolloongabba, QLD, Australia, ³Envoi Pathology, Kelvin Grove QLD, Australia, ⁴Cancer Drug Mechanisms Group, QIMR Berghofer Medical Research Institute, Herston, QLD, Australia, ⁵Otolaryngology-Head and Neck Surgery Department, Princess Alexandra Hospital, Brisbane, QLD, Australia

Category 4 (P04): Cell-Cell Interactions in the Skin

- P04-01**
[C06-01] **Antibodies to desmocollin (Dsc) 3, but not Dsc1, in pemphigus sera directly block heterophilic transinteraction between desmoglein and Dsc**
○ Ken Ishii¹, Norito Ishii², Akira Ishiko¹, Takashi Hashimoto³
¹Department of Dermatology, Toho University School of Medicine, Tokyo, Japan, ²Department of Dermatology, Kurume University School of Medicine, Kurume, Japan, ³Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan

- P04-02**
[O02-10] **Antifibrogenic effects of sunitinib in a bleomycin-induced scleroderma model**
○ Masato Ishikawa, Toshiyuki Yamamoto
Department of Dermatology, Fukushima Medical University, Fukushima, Japan
- P04-03**
[O02-11] **Anti-glycation properties of Carnosine in 3D skin equivalent models and its implications in prevention of premature skin aging**
○ Jaimie Jerome¹, Ewa Markiewicz², Olusola Idowu², Tom Mammon¹
¹Estee Lauder Companies, ²HexisLab Limited

Category 5 (P05): Epidermal Structure and Barrier Function

- P05-01**
[III-1] **An important role of Syntaxin-4 in nuclear degradation in corneoptosis, a unique cell death of keratinocytes**
○ Nanako Maekubo-Kadono¹, Keitaro Fukuda^{1,2}, Takeshi Matsui^{1,2,3}, Masayuki Amagai^{1,2}
¹Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, ²Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ³Laboratory for Evolutionary Cell Biology of the Skin, School of Bioscience and Biotechnology, Tokyo University of Technology, Hachioji, Japan
- P05-02**
[III-4] **Type XVII collagen contributes to epidermal patterning**
○ Yunan Wang¹, Hiroyuki Kitahata², Hideyuki Kosumi¹, Mika Watanabe^{1,3}, Yu Fujimura¹, Shota Takashima¹, Shin-Ichi Osada⁴, Tomonori Hirose⁵, Wataru Nishie⁶, Masaharu Nagayama⁶, Hideyuki Ujiie¹, Hiroshi Shimizu¹, Ken Natsuga¹
¹Department of Dermatology, Hokkaido University Faculty of Medicine and Graduate School of Medicine, Sapporo, Japan, ²Department of Physics, Graduate School of Science, Chiba University, Chiba, Japan, ³Department of Life Sciences and Systems Biology, Molecular Biotechnology Centre, University of Turin, Turin, Italy, ⁴Department of Dermatology, Nippon Medical School, Tokyo, Japan, ⁵Department of Molecular Biology, Yokohama City University Graduate School of Medical Science, Yokohama, Japan, ⁶Research Institute for Electronic Science, Hokkaido University, Sapporo, Japan
- P05-03**
[C06-02] **A skin-derived antimicrobial peptide human beta defensin-3-induced autophagy activation improves the skin barrier in atopic dermatitis**
○ Ge Peng¹, Yoshie Umehara², Juan Valentin Trujillo-Paez², Hainan Yue^{1,2}, Le Thanh Hai Nguyen^{1,2}, Risa Ikutama^{1,2}, Miho Takahashi^{1,2}, Masaaki Komatsu³, Ko Okumura³, Hideoki Ogawa², Shigaku Ikeda^{1,2}, Francois Niyonsaba^{2,4}
¹Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Atopic Research Center, Juntendo University Graduate School of Medicine, Tokyo, ³Physiology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ⁴Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- P05-04**
[C06-03] **Wnt/ β -catenin signaling stabilizes hemidesmosomes in keratinocytes**
○ Hideyuki Kosumi¹, Mika Watanabe^{1,2}, Satoru Shinkuma³, Yu Fujimura¹, Tadasuke Tsukiyama⁴, Giacomo Donati², Hiroaki Iwata¹, Hideyuki Ujiie¹, Ken Natsuga¹
¹The Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Department of Life Sciences and Systems Biology, Molecular Biotechnology Centre, University of Turin, Turin, Italy, ³Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan, ⁴Department of Biochemistry, Hokkaido University Graduate School of Medicine, Sapporo, Japan
- P05-05**
[O12-01] **Relationship between regulatory T cell distribution and interleukin -33 in a mouse model of skin barrier disruption**
○ Sumika Toyama¹, Catharina Sagita Moniaga¹, Mitsutoshi Tominaga¹, Hideoki Ogawa¹, Kenji Takamori^{1,2}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- P05-06**
[C06-04] **New transparent three-dimension and deep imaging for skin epidermal structure using a novel fluorescent solvatochromic pyrene probe**
○ Masamoto Murakami¹, Ryosuke Kawakami², Yosuke Niko³, Kazuki Yatsuzuka¹, Hideki Mori¹, Jun Muto¹, Ken Shiraishi¹, Takeshi Imamura², Koji Sayama¹
¹Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan, ²Department of Molecular Medicine for Pathogenesis, Ehime University Graduate School of Medicine, Ehime, Japan, ³Research and Education Faculty, Multidisciplinary Science Cluster, Interdisciplinary Science Unit, Kochi University, Kochi, Japan
- P05-07**
[C06-05] **IL-33 is a negative regulator in skin barrier homeostasis**
○ Md. Razib Hossain, Tuba M. Ansary, Mayumi Komine
Department of Dermatology, Jichi Medical University, Tochigi, Japan
- P05-08**
[C06-06] **Loricrin maintains Langerhans cell homeostasis and protects against cutaneous chemical carcinogenesis**
○ Tatsuya Ogawa¹, Yosuke Ishitsuka², Manabu Fujimoto², Dennis R Roop³, Toshifumi Nomura¹
¹Department of Dermatology, University of Tsukuba, Tsukuba, Japan, ²Department of Dermatology, Osaka University, Osaka, Japan, ³Department of Dermatology and Charles C. Gates Center for Regenerative Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO
- P05-09**
[C06-07] **Effect of ceramide chirality on the lipid lamellar structure in stratum corneum**
○ Yasuko Obata¹, Rie Arai¹, Takayuki Furuishi¹, Kaori Fukuzawa¹, Etsuo Yonemochi¹, Kenya Ishida²
¹Hoshi University, ²Takasago International Corporation

- P05-10 [C07-01] Development of a novel skin model combining SNF and collagen**
○ Mizuki Iijima¹, Kazutoshi Iijima²
¹Graduate School of Engineering Science, Yokohama National University, Yokohama, Japan, ²Faculty of Engineering, Yokohama National University, Yokohama, Japan
- P05-11 [C07-02] Nuclear factor erythroid 2-related factor 2 regulates epidermal keratinization under psoriatic skin inflammation**
○ Yosuke Ishitsuka^{1,2}, Tatsuya Ogawa², Manabu Fujimoto¹
¹Department of Dermatology, Osaka University Graduate School of Medicine, Suita, Japan, ²University of Tsukuba
- P05-12 [O12-02] Upregulation of the NMF producing enzyme PAD1 by low humidity and low temperature climate gives the skin adaptability to dry environments**
○ Daichi Murata^{1,2}, Masashi Miyai¹, Toari Hirakawa¹, Hiroko Manabe¹, Katsuyuki Maeno¹, Akira Motoyama¹, Christopher_T Knight¹, Akihito Ishigami², Chika Katagiri¹
¹Shiseido Co., Ltd MIRAI Technology Institute, Kanagawa, Japan, ²Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan
- P05-13 [O12-03] The sweating disturbance aggravates contact hypersensitivity reaction in mice footpads**
○ Hironobu Ishimaru¹, Yasuo Okamoto¹, Yumi Aoyama²
¹Department of Pharmacology, Kawasaki Medical School, Okayama, Japan, ²Department of Dermatology, Kawasaki Medical School, Okayama, Japan
- P05-14 [O12-04] TSLP impairs epidermal barrier integrity by the formation of nuclear IL-33/phosphorylated STAT3 complex in human keratinocytes**
○ Xiuju Dai, Jun Muto, Ken Shiraishi, Ryo Utsunomiya, Hideki Mori, Masamoto Murakami, Koji Sayama
Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan
- P05-15 [C07-03] The ligand of epidermal growth factor receptor, betacellulin, improves Th2 cytokine-mediated impairment of tight junction barrier**
○ Saya Tsukamoto¹, Ge Peng^{1,2}, Saori Yoshida¹, Ko Okumura¹, Shigaku Ikeda^{1,2}, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University
- P05-16 [O12-05] The contribution of single nucleotide polymorphisms of AKR1C3 to susceptibility of psoriasis**
○ Yuka Nojiri¹, Motoki Nakamura¹, Kyoko Ikumi¹, Haruna Nishihara¹, Aya Nakada¹, Emi Nishida¹, Thomas Haarmann-Stemann², Akimichi Morita¹
¹Departments of Geriatric and Environmental Dermatology, Nagoya City University, Nagoya, Japan, ²Leibniz Research Institute for Environmental Medicine, Dusseldorf, Germany
- P05-17 [O12-06] Sphingosine 1-phosphate receptor 1 (S1PR1) negatively regulates epidermal barrier function**
○ Satomi Igawa¹, Manae Takahashi¹, Risa Matsuo¹, Mari Kishibe¹, Akemi Ishida-Yamamoto¹, Anna Di Nardo²
¹The Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, ²The Department of Dermatology, School of Medicine, University of California, San Diego, La Jolla, USA
- P05-18 [O09-05] Antimicrobial peptide AG30/5C modulates tight junction barrier function in keratinocytes via EGFR, aPKC, GSK-3 and Rac1 pathways**
○ Risa Ikutama^{1,2}, Ge Peng^{1,2}, Yoshie Umehara¹, Juan V. Trujillo Paez¹, Hainan Yue^{1,2}, Hai Le Thanh Nguyen^{1,2}, Miho Takahashi^{1,2}, Shun Kagayama³, Masaaki Komatsu³, Ko Okumura¹, Hideoki Ogawa¹, Shigaku Ikeda^{1,2}, Francois Niyonsaba^{1,4}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Physiology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ⁴Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- P05-19 [O09-06] Mechanisms underlying the suppression of semaphorin 3A expression in atopic dermatitis**
○ Yayoi Kamata^{1,2}, Mitsutoshi Tominaga^{1,2}, Yasushi Suga^{2,3}, Hideoki Ogawa¹, Kenji Takamori^{1,2,3}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Anti-Aging Skin Research Laboratory, Juntendo University Graduate School of Medicine, Chiba, Japan, ³Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- P05-20 [O09-07] A skin-derived antimicrobial peptide AMP-IBP5 regulates epidermal barrier function**
○ Hai L.T. Nguyen^{1,2}, Juan V. Trujillo P.¹, Ge Peng^{1,2}, Hainan Yue^{1,2}, Risa Ikutama^{1,2}, Miho Takahashi^{1,2}, Yoshie Umehara¹, Hideoki Ogawa^{1,2}, Ko Okumura¹, Shigaku Ikeda^{1,2}, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- P05-21 [O09-08] Spatial distribution of KLK, SPINK, and SERPIN family proteins contributes to dense stratum corneum of normal sole skin and PPK phenotypes**
○ Aoi Ohira, Takuya Omine, Daisuke Utsumi, Sayaka Yamaguchi, Kenzo Takahashi
Department of Dermatology, University of the Ryukyus, Graduate School of Medicine, Okinawa, Japan

- P05-22**
[O09-09] **Detergent-induced skin inflammation and itch in a mast cell-independent and antihistamine-resistant manner in C57BL/6 mice**
 ○ Yurie Masutani^{1,2}, Toshiro Takai¹, Seiji Kamijo¹, Toru Kimitsu^{1,2}, Tomoko Yoshimura^{1,2}, Ko Okumura¹, Hideoki Ogawa², Shigaku Ikeda^{1,2}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine
- P05-23**
[O09-10] **Possible roles of advanced glycated end-products in pathogenesis of acquired perforating dermatosis**
 ○ Yuya Murase¹, Takuya Takeichi¹, Kana Tanahashi¹, Hiroyuki Takama², Masashi Akiyama¹
¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Dermatology, Aichi Medical University Graduate School of Medicine
- P05-24**
[O09-11] **Functional analysis of BCL6 in epidermal cells**
 ○ Kaori Kanemaru¹, Kento Nagasawa¹, Asahi Tanaka¹, Yohsuke Harada², Yoshikazu Nakamura¹
¹Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science, Chiba, Japan, ²Laboratory of Pharmaceutical Immunology, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Chiba, Japan

Category 6 (P06): Genetic Disease, Gene Regulation and Gene Therapy

- P06-01**
[I-1] **CRISPR/Cas9 targeting an intronic region for retrieving Col17 expression in junctional epidermolysis bullosa model mice**
 ○ Hong Ha Nguyen¹, Satoru Shinkuma^{1,2,3}, Ryota Hayashi¹, Shota Takashima³, Masashi Mori⁴, Masahito Ikawa⁴, Hiroshi Shimizu³, Riichiro Abe¹
¹Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Department of Dermatology, Nara University, Nara, Japan, ³Department of Dermatology, Hokkaido University, Sapporo, Japan, ⁴Department of Experimental Genome Research, Genome Information Research Center, Osaka University, Osaka, Japan
- P06-02**
[C08-02] **Altered replication stress response due to *CARD14* mutations induces somatic genetic reversion**
 ○ Toshinari Miyauchi¹, Shotaro Suzuki¹, Masae Takeda¹, Jin Teng Peh¹, Masayuki Aiba¹, Ken Natsuga¹, Yasuyuki Fujita¹, Takuya Takeichi², Taiko Sakamoto³, Masashi Akiyama², Hiroshi Shimizu¹, Hideyuki Ujiie¹, Toshifumi Nomura^{1,4}
¹Department of Dermatology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ³Sakamoto Clinic, Fujieda, Japan, ⁴Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan
- P06-03**
[C08-03] **A novel keratin 14 mutation in epidermolysis bullosa induces more morphological abnormalities in keratin fiber than a hotspot mutation**
 ○ Mari Kishibe¹, Risa Matsuo¹, Satomi Igawa¹, Akiharu Kubo², Akemi Ishida-Yamamoto¹
¹Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, ²Department of Dermatology, Keio University School of Medicine, Tokyo, Japan
- P06-04**
[C08-04] **Diversity of Mechanisms Underlying Dysregulating TGF- β Signaling in Recessive Dystrophic Epidermolysis Bullosa**
 ○ Eijiro Akasaka¹, Alexander Nyström², Leena Bruckner-Tuderman², Hajime Nakano¹, Daisuke Sawamura¹
¹Department of Dermatology, Hirosaki University Graduate School of Medicine, Hirosaki, Japan, ²Department of Dermatology, Faculty of Medicine and Medical Center - University of Freiburg, Germany
- P06-05**
[C08-05] **Psoriasis-like skin lesions in a patient carrying *MEFV* variants**
 ○ Takenori Yoshikawa¹, Takuya Takeichi¹, Tomoo Ogi², Masashi Akiyama¹
¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Genetics, Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan
- P06-06**
[C08-06] **Transcriptional and translational interference of laminin-332 subunits in junctional epidermolysis bullosa with *LAMB3* mutations**
 ○ Ping-Chen Hou^{1,2,3}, Ken Natsuga⁴, Wei-Ting Tu^{1,3}, Hsin-Yu Huang¹, Brandon Chen³, Liang-Yu Chen^{2,3}, Wan-Rung Chen¹, Yi-Kai Hong^{1,3}, Yen-An Tang^{5,6}, Julia Yu-Yun Lee¹, Peng-Chieh Chen^{7,8}, H. Sunny Sun^{5,6}, John A. McGrath⁹, Chao-Kai Hsu^{1,3,7,10}
¹Department of Dermatology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ²School of Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ³International Center for Wound Repair and Regeneration (iWRR), National Cheng Kung University, Tainan, Taiwan, ⁴Department of Dermatology, Hokkaido University Faculty of Medicine and Graduate School of Medicine, Sapporo, Japan, ⁵Institute of Molecular Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁶Center for Genomic Medicine, Innovation Headquarters, National Cheng Kung University, Tainan, Taiwan, ⁷Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁸Center of Clinical Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁹St John's Institute of Dermatology, King's College London (Guy's Campus), London, UK, ¹⁰Department of Genomic Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan
- P06-07**
[O02-01] **Aberrant keratin assembly causes impaired mitochondrial movement and function: Implications for epidermolysis bullosa simplex pathogenesis**
 ○ Osamu Ansai¹, Ryota Hayashi¹, Satoru Shinkuma², Asuka Suto³, Hiroshi Shimizu³, Riichiro Abe¹
¹Division of Dermatology, Niigata University School of Medical and Dental Science, ²Department of Dermatology, Nara Medical University School of Medicine, ³Department of Dermatology, Hokkaido University Graduate School of Medicine

- P06-08 [O02-02] Mutations in SAM syndrome and palmoplantar keratoderma patients suggest genotype/phenotype correlations in *DSG1* mutations**
○ So Takeuchi¹, Takuya Takeichi¹, Yuta Koike², Hiroyuki Takama³, Kana Tanahashi¹, Yusuke Okuno⁴, Norito Ishii⁵, Yoshinao Muro¹, Tomoo Ogi⁶, Yasushi Suga⁷, Masashi Akiyama¹
¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Dermatology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, ³Department of Dermatology, Aichi Medical University, Nagakute, Japan, ⁴Medical Genomics Center, Nagoya University Hospital, Nagoya, Japan, ⁵Department of Dermatology, Kurume University School of Medicine, Fukuoka, Japan, ⁶Department of Genetics, Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan, ⁷Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu, Japan
- P06-09 [O02-03] Atypical epidermolytic palmoplantar keratoderma caused by *KRT1* mutation is considered as mild type epidermolytic ichthyosis**
○ Ryota Hayashi¹, Osamu Ansai¹, Rei Yokoyama¹, Tatsuya Katsumi¹, Mahoko Oginezawa¹, Tomoki Nishiguchi¹, Satoru Shinkuma², Riichiro Abe¹
¹Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan
- P06-10 [O02-04] Delineating the functional relevance of different lamin A domains that accelerate human ageing**
○ Oliver Dreesen, Peh Fern Ong, Mattheus XR Foo
Skin Research Institute of Singapore
- P06-11 [O02-05] Evidence for a dominant-negative effect of a missense mutation in the *SERPING1* gene responsible for hereditary angioedema type I**
○ Shuichiro Yasuno¹, Osamu Ansai², Sawako Nakamura¹, Yutaka Shimomura¹
¹The Department of Dermatology, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, ²The Division of Dermatology, Niigata University Graduate School of Medicine and Dental Sciences, Niigata, Japan
- P06-12 [O02-06] Hereditary mucoepithelial dysplasia/autosomal-dominant IFAP syndrome is a clinical spectrum due to *SREBF1* variants**
○ Chiaki Murase¹, Takuya Takeichi¹, Toshifumi Nomura², Tomoo Ogi³, Masashi Akiyama¹
¹The Department of Dermatology, Nagoya University Graduate School of Medicine, Aichi, Japan, ²Department of Dermatology, Faculty of Medicine, University of Tsukuba, ³Department of Genetics, Research Institute of Environmental Medicine, Nagoya University
- P06-13 [O02-07] Updated allele frequencies of *SERPINB7* founder mutations in Asian patients with Nagashima-type palmoplantar keratosis/keratoderma**
○ Yasutoshi Ito¹, Takuya Takeichi¹, Kenta Ikeda², Kana Tanahashi¹, Takenori Yoshikawa¹, Yuya Murase¹, Yoshinao Muro¹, Yoshio Kawakami³, Jun Muto⁴, Kazumitsu Sugiura⁵, Yasushi Suga⁶, Mariko Seishima⁷, Akira Kawada⁸, Tomoo Ogi⁹, Masashi Akiyama¹
¹Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ²Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan, ³Department of Dermatology, Kurashiki Medical Center, Okayama, Japan, ⁴Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan, ⁵Department of Dermatology, Fujita Health University School of Medicine, Toyoake, Japan, ⁶Department of Dermatology, Juntendo University Urayasu Hospital, Urayasu, Japan, ⁷Department of Dermatology, Gifu University Graduate School of Medicine, Gifu, Japan, ⁸Department of Dermatology, Kinki University Faculty of Medicine, Osaka-Sayama, Japan, ⁹Department of Genetics, Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan
- P06-14 [O02-08] Bradykinin pathogenesis in hereditary angioedema based on the discovery of novel genetic mutations in *ACE* and *SERPING7* gene**
○ Takuya Omine, Takuya Miyagi, Daisuke Utumi, Sayaka Yamaguhi, Kenzo Takahashi
University of the Ryukyus
- P06-15 [O02-09] A microchip flow-chamber assay can be a powerful tool for detecting platelet function defects in Hermansky-Pudlak syndrome**
○ Satoru Shinkuma¹, Hidetaka Kinoshita¹, Kenichi Ogiwara², Kengo Hamada¹, Kohei Ogawa¹, Fumi Miyagawa¹, Keiji Nogami², Hideo Asada¹
¹Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan, ²Department of Pediatrics, Nara Medical University School of Medicine

Category 7 (P07): Innate Immunity, Microbiology, Microbiome

- P07-01 [I-2] Migration and local adaptation of integrin β 7-positive mast cell progenitors in murine allergic skin**
○ Yuki H Keith¹, Tetsuya Honda², Sachiko Ono¹, Bernett Lee³, Satoshi Nakamizo¹, Sho Hanakawa³, Yoshihiro Ishida¹, Kenji Kabashima^{1,3}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan, ³Singapore Immunology Network (SigN) and Skin Research Institute of Singapore (SRIS), Agency for Science, Technology and Research (A*STAR), Biopolis, Singapore

- P07-02 [I-4] Type I IFN derived from inflammatory monocytes controls type 2 inflammation by suppressing basophil proliferation in atopic dermatitis**
 ○ Fumi Miyagawa, Hideo Asada
 Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan
- P07-03 [C01-01] CCL2-CCR2 signaling in the skin drives surfactant-induced irritant contact dermatitis via IL-1 β -mediated neutrophil accumulation**
 ○ Rintaro Shibuya¹, Yoshihiro Ishida¹, Sho Hanakawa², Tatsuki R. Kataoka³, Akihiko Kitoh², Kenji Kabashima^{1,2}
¹Department of Dermatology, Kyoto University Graduate School of Medicine, ²Singapore Immunology Network and Skin Research Institute of Singapore, Agency for Science, Technology and Research (A*STAR), Singapore, ³Department of Molecular Diagnostic Pathology, Iwate Medical University
- P07-04 [C01-02] I κ B ζ -deficient epidermis mediates systemic autoimmune inflammation via skin dysbiosis**
 ○ Hitoshi Terui¹, Moyuka Wada-Irimada¹, Mayuko Onodera-Amagai¹, Naokazu Hatchome¹, Masato Mizuashi¹, Riu Yamashita², Setsuya Aiba¹, Kenshi Yamasaki¹
¹Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan, ²Division of Translational Informatics, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center, Chiba, Japan
- P07-05 [C01-03] T-cell receptor signaling pathways that regulate functional reprogramming of $\gamma\delta$ T cells in the perinatal epidermis**
 ○ Atsuko Ibusuki¹, Kazuhiro Kawai^{1,2}, Takuro Kanekura¹
¹Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima, Japan, ²Department of Dermatology, Kido Hospital, Niigata, Japan
- P07-06 [C01-04] Proteomics analysis of bacterial and fungal composition in skin and serum extracellular vesicles**
 ○ Toru Kawai¹, Ryota Hayashi¹, Akito Hasegawa¹, Akari Sakai¹, Osamu Ansai¹, Koichi Tomii¹, Tomoki Nishiguchi¹, Jun Adachi^{2,3}, Takeshi Tomonaga^{2,3}, Riichiro Abe¹
¹Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Laboratory of Proteome Research, National Institute of Biomedical Innovation, Health and Nutrition, ³Laboratory of Proteomics for Drug Discovery, Center for Drug Design Research, National Institute of Biomedical Innovation, Health and Nutrition
- P07-07 [C01-05] TREM2/APOE-double positive macrophages as possible pathogenic cells in sarcoidosis**
 ○ Satoshi Nakamizo, Yoshihiro Ishida, Gyohei Egawa, Kenji Kabashima
 Department of Dermatology Kyoto University Graduate School of Medicine, Kyoto, Japan
- P07-08 [O05-01] Dysbiosis mediates inflammatory destruction of the hair follicles**
 ○ Keiko Sakamoto¹, Seon-Pil Jin¹, Shubham Goel¹, Jay-Hyun Jo², Benjamin Voisin¹, Doyoung Kim¹, Vinod Nadella¹, Hai Liang², Tetsuro Kobayashi¹, Xin Huang³, Clay Deming³, Keisuke Horiuchi⁴, Julia_A Segre³, Heidi_H Kong², Keisuke Nagao¹
¹Cutaneous Leukocyte Biology Section, Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, USA, ²Cutaneous Microbiome and Inflammation Section, Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, USA, ³Microbial Genomics Section, Translational and Functional Genomics Branch, National Human Genome Research Institute, National Institutes of Health, Bethesda, USA, ⁴Department of Orthopedic Surgery, National Defense Medical College, Saitama, Japan
- P07-09 [C01-06] Purinergic molecules in murine bone marrow-derived mast cells**
 ○ Riko Asakawa, Youichi Ogawa, Shinji Shimada, Tatsuyoshi Kawamura
 The Department of Dermatology, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan
- P07-10 [C01-07] Granzyme K cleaves protease-activated receptor-2 and induces itch**
 ○ Sho Hiroyasu^{1,2,3}, Matthew R. Zeglinski^{2,3}, Hongyan Zhao^{2,3}, Aoi Hiroyasu¹, Daisuke Tsuruta¹, David J. Granville^{2,3}
¹The Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ²International Collaboration On Repair Discoveries (ICORD) Centre, Vancouver, BC, Canada, ³Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, BC, Canada
- P07-11 [C08-01] Involvement of V δ 1+ epithelial type of $\gamma\delta$ T cells in the systemic form of hydroa vacciniforme-like lymphoproliferative disorders**
 ○ Yoji Hirai¹, Tomoko Miyake¹, Takahide Takahashi², Keiji Iwatsuki^{1,3,4}, Shin Morizane¹
¹Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan, ²Division of Medical Support, Okayama University Hospital, Okayama, Japan, ³Division of Dermatology, Fukushima Rosai Hospital, Iwaki, Japan, ⁴Division of Dermatology, Okazaki Medical Center, Fujita Health University, Okazaki, Japan
- P07-12 [O05-02] An antimicrobial peptide cathelicidin triggers skin inflammation with other DAMPs via multiple receptors**
 ○ Ryo Amagai, Toshiya Takahashi, Taku Fujimura, Kenshi Yamasaki
 Department of dermatology, Tohoku University Graduate School of medicine, Miyagi, Japan
- P07-13 [O05-03] Potential role of neutrophil elastase (NE) in the development of nephrogenic systemic fibrosis (NSF) in an in vivo model of renal failure**
 ○ Syahla N. Amalia¹, A. Adhipatria. P Kartamihardja², Anu Bhattarai³, Akiko Sekiguchi¹, Ayako Taketomi-Takahashi², Sei-ichiro Motegi¹, Hiroshi Koyama⁴, Yoshito Tsushima^{2,5}
¹Department of Dermatology, Gunma University, Maebashi, ²Department of Diagnostic Radiology and Nuclear Medicine, Gunma University, Maebashi, Japan, ³National Academy of Medical Sciences (NAMS), Bir Hospital, Nepal, ⁴Department of Public Health, Gunma University, Maebashi, Japan, ⁵Division of Integrated Oncology Research, Gunma Initiative for Advanced Research, Japan

- P07-14**
[O05-04] **Coordinated expression of retrotransposon and type I interferon with distinct interferon pathways in autoimmune diseases**
○ Yuko Kuriyama¹, Akira Shimizu^{1,2}, Saki Kanai¹, Daisuke Oikawa³, Fuminori Tokunaga³, Osamu Ishikawa¹, Sei-ichiro Motegi¹
¹The Department of Dermatology, Gunma University Graduate School of Medicine, Gunma, Japan, ²Department of Dermatology, Kanazawa Medical University, Ishikawa, Japan, ³Department of Pathobiochemistry, Graduate School of Medicine, Osaka City University, Osaka, Japan
- P07-15**
[O05-05] **Macrophages express β Klotho in skin lesions of psoriasis patients and the skin of imiquimod-treated mice**
○ Kozo Nakai¹, Reiji Haba², Yoshio Kushida², Yasuo Kubota³, Daisuke Tsuruta¹
¹Department of Dermatology, Osaka City University Graduate School of Medicine, ²Department of Diagnostic Pathology, Kagawa University, ³Department of Dermatology, Kagawa University
- P07-16**
[O05-06] **Skin Inflammation and Testicular Function**
○ Ai Umaoka¹, Hiroki Takeuchi², Kento Mizutani¹, Naohiro Seo³, Yoshiaki Matsushima¹, Shohei Lida¹, Makoto Kondo¹, Koji Habe¹, Tomoaki Ikeda², Keiichi Yamanaka¹
¹Department of Dermatology Mie University, Graduate School of Medicine, Japan, ²Obstetrics and Gynecology, Mie University Graduate School of Medicine, ³Immuno-Gene Therapy, Mie University Graduate School of Medicine
- P07-17**
[O05-07] **Roles of interferon regulatory factor 3 in murine models of allergic and irritant dermatitis**
○ Risa Tamagawa-Mineoka¹, Mayumi Ueta², Yukiyasu Arakawa¹, Mari Nakanishi¹, Hiromi Nishigaki¹, Risa Yasuie¹, Norito Katoh¹
¹Departments of Dermatology, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, ²Departments of Ophthalmology, Graduate School of Medical Science, Kyoto Prefectural University of Medicine
- P07-18**
[O05-08] **Internalization of live atopic dermatitis-derived *Staphylococcus aureus* into HaCaT cells and inhibition by *Staphylococcus epidermidis***
○ Tomofumi Numata, Kazumasa Iwamoto, Ryu Miyake, Michihiro Hide, Akio Tanaka
Department of Dermatology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima
- P07-19**
[O05-09] **Low heterogeneity among isolates of *Cutibacterium modestum*: Resident of human skin with possible infectious nature**
○ Itaru Dekio^{1,2}, Ken-ichi Okuda³, Masako Nishida⁴, Susumu Hamada-Tsutsumi⁵, Hiroto Tamura⁵, Kenichiro Ohnuma⁴, Yoshiyuki Murakami², Yuki Kinjo³, Akihiko Asahina¹
¹Department of Dermatology, The Jikei University, Tokyo, Japan, ²Seikakai Mildix Skin Clinic, Tokyo, Japan, ³Department of Bacteriology, The Jikei University, Tokyo, Japan, ⁴Kobe University Hospital, Kobe, Japan, ⁵Department of Environmental Bioscience, Meijo University, Nagoya, Japan
- P07-20**
[O05-10] **Cutaneous adverse events caused by EGFR inhibitors may result from reduced expression of human β -defensins induced by staphylococci**
○ Rie Ommori, Yuki Nishimura, Fumi Miyagawa, Chinatsu Shobatake, Kohei Ogawa, Satoru Shinkuma, Hideo Asada
The Department of Dermatology, Nara Medical University, Nara, Japan
- P07-21**
[O05-11] **Alternation of the cutaneous microbiome of herpes zoster lesion in a patient with severe coronavirus disease 2019**
○ Makoto Kondo^{1,2}, Asami Ito³, Yoshiaki Matsushima¹, Shohei Lida¹, Ai Umaoka¹, Takehisa Nakanishi¹, Hiroshi Imai², Keiichi Yamanaka¹
¹Department of Dermatology Mie University, Graduate School of Medicine, Japan, ²Emergency Critical Care Center, University of Mie, Mie, Japan
- P07-22**
[O05-12] **Postbiotics power in supporting skin**
○ Nadine Pernodet¹, Don Collins³, Yulan Qu², Nan Frank Huang², Jian Richard Cao²
¹Research & Development, The Estee Lauder Companies, Estee Lauder Research Laboratories, ²Asia Innovation Center, the Estee Lauder Companies, ³Research & Development, The Estee Lauder Companies

Category 8 (P08): Patient Population Research

- P08-01**
[III-5] **Estimation of cutaneous squamous cell carcinoma incidence attributable to arsenic in U.S. water supplies**
○ Masaaki Kawasumi
Division of Dermatology, Department of Medicine, University of Washington, Seattle, WA, United States
- P08-02**
[C02-01] **Plasma metabolome-wide analysis in Japanese identifies potential biomarkers of psoriasis and clinical subtypes**
○ Yukinori Okada^{1,2}, Toshihiro Kishikawa^{1,3}, Noriko Arase⁴, Shigeyoshi Tsuji⁵, Yuichi Maeda^{6,7}, Takuro Nii^{6,7}, Jun Hirata¹, Ken Suzuki¹, Kenichi Yamamoto^{1,8}, Shiro Ohshima⁵, Hidenori Inohara³, Atsushi Kumanogoh^{2,5}, Manabu Fujimoto^{2,4}
¹Department of Statistical Genetics, Osaka University Graduate School of Medicine, Suita, Japan, ²Immunology Frontier Research Center (WPI-IFReC), Osaka University, Suita, Japan, ³Department of Otorhinolaryngology-Head and Neck Surgery, Osaka University Graduate School of Medicine, Suita, Japan, ⁴Department of Dermatology, Osaka University Graduate School of Medicine, Suita, Japan, ⁵NHO Osaka Minami Medical Center, Kawachinagano, Osaka, Japan, ⁶Department of Respiratory Medicine and Clinical Immunology, Osaka University Graduate School of Medicine, Suita, Japan, ⁷Department of Immune Regulation, Osaka University Graduate School of Medicine, Suita, Japan, ⁸Department of Pediatrics, Osaka University Graduate School of Medicine, Suita, Japan

- P08-03 [C02-02] Prevalence, comorbidities, and treatment patterns of Japanese patients with alopecia areata: a descriptive study using JMDC claims database**
 ○ Eduardo Kawasaki¹, Tomohiro Hirose¹, Manabu Ohyama²
¹Medical Affairs, Pfizer Japan, ²Department of Dermatology, Kyorin University Faculty of Medicine
- P08-04 [O11-01] Pork allergies in Japanese urban areas are predominantly classified as pork-cat syndrome**
 ○ Naoko Inomata, Nobuko Sagawa, Fumi Sawada, Saori Sano, Michiko Aihara
 Dept. of Environmental Immuno-Dermatology Yokohama City University Graduate School of Medicine
- P08-05 [C02-03] Prevalence of malignancies in Japanese psoriasis patients and selected treatments in the West Japan Psoriasis Registry**
 ○ Takuya Miyagi^{1,3}, Kenzo Takahashi^{1,3}, Noriko Tsuruta^{2,3}, Shinichi Imafuku^{2,3}
¹Department of Dermatology, University of the Ryukyus, Graduate school of medicine, Okinawa, Japan, ²Fukuoka University, ³Western Japan Inflammatory Disease Research Group
- P08-06 [O11-02] The Clinical Significance of a Shortened Activated Partial Thromboplastin Time in Patients with Connective Tissue Disease**
 ○ Koji Habe¹, Hideo Wada², Kento Mizutani¹, Yoshiaki Matsushima¹, Makoto Kondo¹, Keiichi Yamanaka¹
¹Department of Dermatology, Mie University Graduate School of Medicine, Mie, Tsu, Japan, ²Department of General and Laboratory Medicine, Mie Prefectural General Medical Center
- P08-07 [O11-03] Prevalence and Characteristics of Prurigo Nodules in Adults With Moderate-to-severe Atopic Dermatitis in Japan: a 2-year Observational Study**
 ○ Norito Katoh¹, Hidehisa Saeki², Yoko Kataoka³, Takafumi Etoh⁴, Satoshi Teramukai⁵, Yuki Tajima⁶, Parul Shah⁷, Kazuhiko Arima⁶
¹Kyoto Prefectural University of Medicine Graduate School of Medical Science, Kyoto, Japan, ²Nippon Medical School, Tokyo, Japan, ³Osaka Habikino Medical Care Center, Osaka, Japan, ⁴Tokyo Teishin Postal Services Agency Hospital, Tokyo, Japan, ⁵Kyoto Prefectural University of Medicine, Kyoto, Japan, ⁶Sanofi, K.K., Tokyo, Japan, ⁷Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA
- P08-08 [O11-04] Withdrawn**
- P08-09 [O11-05] Psoriasis Epidemiology Screening Tool (PEST) is a useful tool for psoriatic arthritis in the Japanese population**
 ○ Ayako Setoyama, Yu Sawada, Motonobu Nakamura
 The Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- P08-10 [O11-06] The impact of atopic dermatitis on health-related quality of life in Bangladeshi adults**
 ○ Abir Majbauddin¹, Taheruzzaman Kazi¹, Zubaida Akter², Shigeki Inui¹
¹Department of Regenerative Dermatology, Graduate School of Medicine, Osaka University, Osaka, Japan, ²Department of Dermatology & Venereology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh
- P08-11 [O11-07] A clinical investigation for superficial type atypical lipomatous tumor**
 ○ Emi Mashima, Yu Sawada, Motonobu Nakamura
 The Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- P08-12 [O11-08] A single-center survey of psoriasis patients on biologics during the COVID-19 pandemic**
 ○ Koji Kamiya, Soichiro Kado, Megumi Kishimoto, Takeo Maekawa, Aya Kuwahara, Junichi Sugai, Mayumi Komine, Mamitaro Ohtsuki
 Department of Dermatology, Jichi Medical University, Shimotsuke, Japan

Category 9 (P09): Patient-Targeted Research

- P09-01 [II-5] Basal sweating as unrecognized machinery to maintain skin hydration in the finger: a long-standing paradox in dry skin resolved**
 ○ Tetsuko Sato, Chieko Katayama, Yuki Hayashida, Yumiko Asanuma, Yumi Aoyama
 Department of dermatology, Kawasaki Medical School, Okayama, Japan
- P09-02 [II-6] Increased serum levels of CCL2 and IL-8 in patients with toxic epidermal necrolysis accompanied by acute respiratory distress syndrome**
 ○ Tomoya Watanabe, Yuko Watanabe, Michiko Aihara, Yukie Yamaguchi
 Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan
- P09-03 [C12-01] Decomposition of skin RNA-seq data by Non-negative matrix factorization reveals various pathways in pathogenesis of Atopic dermatitis**
 ○ Ayano Fukushima-Nomura¹, Hiroshi Kawasaki^{1,2}, Kiyoshi Yashiro¹, Keiji Tanese¹, Eiryu Kawakami³, Masayuki Amagai¹
¹Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ²RIKEN Center for Integrative Medical Sciences, ³RIKEN Advanced Data Science Project

- P09-04 [C12-02] Automated assessment of the severity of psoriasis by AI**
○ Takashi Okamoto¹, Masataka Kawai², Shinji Shimada¹, Tatsuyoshi Kawamura¹
¹The Department of Dermatology, University of Yamanashi, Yamanashi, Japan, ²The Department of Human Pathology, University of Yamanashi, Yamanashi, Japan
- P09-05 [C12-03] Stimulator of IFN genes (STING) expression is a prognostic marker in patients with Merkel cell carcinoma**
○ Sayaka Sato, Yu Sawada, Etsuko Okada, Motonobu Nakamura
Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- P09-06 [C12-04] Ultra high-frequency ultrasound provides a novel noninvasive diagnostic method for hair diseases complementing conventional modalities**
○ Misaki Kinoshita-Ise^{1,2,3}, Manabu Ohyama¹, Stuart Foster^{4,5}, Shachar Sade⁶, Neil H. Shear⁷
¹The Department of Dermatology, Kyorin University Faculty of Medicine, ²The Division of Dermatology, Department of Medicine, Sunnybrook Health Sciences Centre, ³The Division of Dermatology, Department of Medicine, University of Toronto, ⁴Sunnybrook Research Institute, ⁵The Department of Medical Biophysics, University of Toronto, ⁶The Division of Pathology, Department of Medicine, Sunnybrook Health Sciences Centre
- P09-07 [C12-05] Persistent HHV-6 infection has an increased risk of autoimmune disorders in patients with DIHS**
○ Yuki Nishimura¹, Chinatsu Shobatake¹, Fumi Miyagawa¹, Satoru Shinkuma¹, Hideaki Watanabe², Masahiro Kira³, Saeko Nakajima⁴, Yuko Higashi⁵, Hideo Asada¹
¹Department of Dermatology, Nara Medical University School of Medicine, Nara, Japan, ²Department of Dermatology, Showa University School of Medicine, Tokyo, Japan, ³Department of Dermatology, Ikeda City Hospital, Ikeda, Japan, ⁴Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ⁵Department of Dermatology, Kagoshima University, Kagoshima, Japan
- P09-08 [C12-06] S100A2 is a potent biomarker of severe drug reaction**
○ Manabu Yoshioka, Yu Sawada, Motonobu Nakamura
Department of Dermatology, University of Occupational and Environmental Health, Fukuoka, Japan
- P09-09 [C12-07] Inflammatory type of acquired idiopathic generalized anhidrosis is characterized by dysregulation of sweat gland immune privilege**
○ Yurie Shimoda, Yoshimi Yamazaki, Yoshiko Mizukawa, Manabu Ohyama
Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, Japan
- P09-10 [C12-08] Lymphocyte count and neutrophil-to-lymphocyte ratio at the onset of herpes zoster are useful biomarker for predicting life prognosis**
○ Takenobu Yamamoto^{1,2}, Takuya Ohyama¹, Mariko Yamane¹, Yumi Aoyama¹
¹Department of Dermatology, Kawasaki Medical School, Kurashiki, Japan, ²Department of Dermatology, Kawasaki Medical School General Medical Center, Okayama, Japan
- P09-11 [O06-01] Investigation of the involvement of TIF1 γ expression in tumors in the pathogenesis of cancer-associated dermatomyositis**
○ Mai Ishikawa, Akiko Sekiguchi, Yuko Kuriyama, Yukie Endo, Sei-ichiro Motegi
The Department of Dermatology, University of Gunma, Gunma, Japan
- P09-12 [O06-02] Identification of serum biomarkers predicting the therapeutic effect of dupilumab in atopic dermatitis by a targeted metabolomics approach**
○ Shoko Miyamoto¹, Shin Nishiumi², Masako Matsutani¹, Makoto Nagai¹, Kiyofumi Yamanishi¹, Nobuo Kanazawa¹, Yasutomo Imai¹
¹Department of Dermatology, Hyogo College of Medicine, ²Department of Omics Medicine, Hyogo College of Medicine
- P09-13 [O06-03] Predicting RNA sequences of small patch image for Treatment of Atopic Skin Disease by Deep Convolutional Neural Networks**
○ Daiki Ito¹, Yutaka Kawashima¹, Hiroto Horikawa², Koichi Ashizaki³, Hiroshi Kawasaki², Yoshimitsu Aoki¹
¹Department of Engineering, Keio University School, ²Department of Dermatology, Keio University School of Medicine, ³Medical Sciences Innovation Hub Program, RIKEN
- P09-14 [O06-04] Dermoscopic diagnostic performance of non-dermatologists for skin tumor is improved by a computer-aided diagnosis system**
○ Akane Minagawa¹, Hiroshi Koga¹, Kazuhisa Matsunaga², Yuya Hayashi², Akira Hamada², Yoshiharu Houjou², Ryuhei Okuyama¹
¹The Department of Dermatology, Shinshu University School of Medicine, Matsumoto, Japan, ²Casio Computer Co., Ltd., Tokyo, Japan
- P09-15 [O06-05] A possible role of surgical deroofing procedure to cover the disadvantage of adalimumab treatment for hidradenitis suppurativa**
○ Natsuko Sasaki, Yu Sawada, Etsuko Okada, Motonobu Nakamura
The Department of Dermatology, University of Occupational and Environmental Health, Kitakyusyu, Japan
- P09-16 [O06-06] Dermcidin is a prognostic factor in patients with extramammary Paget's disease**
○ Yu Sawada, Shun Ohmori, Motonobu Nakamura
Department of Dermatology, University of Occupational and Environmental Health

- P09-17 [O06-07] Immediate impact of granulocyte and monocyte adsorption apheresis on generalized pustular psoriasis**
 ○ Masahiro Kamata, Hideaki Uchida, Shota Egawa, Mayumi Nagata, Saki Fukaya, Kotaro Hayashi, Atsuko Fukuyasu, Takamitsu Tanaka, Takeko Ishikawa, Takamitsu Ohnishi, Yayoi Tada
 Department of Dermatology, Teikyo University School of Medicine, Tokyo, Japan
- P09-18 [O06-08] Safety and efficacy of bexarotene for Japanese patients with CTCL: Real-world experience from a result of post marketing survey**
 ○ Toshihisa Hamada¹, Akimichi Morita², Hiraku Suga³, Hikari Boki³, Taku Fujimura⁴, Yoji Hirai⁵, Takatoshi Shimauchi⁶, Chiharu Tateishi⁷, Eiji Kiyohara⁸, Ikko Muto⁹, The Japanese Bexarotene Study Group¹⁰
¹Department of Dermatology, Takamatsu Red Cross Hospital, Takamatsu, Japan, ²Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, ³Department of Dermatology, The University of Tokyo Graduate School of Medicine, Tokyo, ⁴Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, ⁵Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, ⁶Department of Dermatology, Hamamatsu University School of Medicine, Shizuoka, ⁷Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, ⁸Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Suita, ⁹Department of Dermatology, Kurume University School of Medicine, Kurume, ¹⁰the Japanese Bexarotene Study Group
- P09-19 [O06-09] MicroRNAs in neutrophils as markers of psoriasis**
 ○ Yuko Higashi¹, Munekazu Yamakuchi², Tomoko Fukushige¹, Teruto Hashiguchi², Takuro Kanekura¹
¹Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Sciences, ²Department of Laboratory and Vascular Medicine, Kagoshima University Graduate School of Medical and Dental Sciences
- P09-20 [O06-10] Chronic hepatitis B virus infection in dupilumab-treated atopic dermatitis patients**
 ○ Masako Matsutani
 Department of Dermatology, Hyogo College of Medicine, Nishinomiya, Japan
- P09-21 [O06-11] Comparison of treatment goals between users of biological and non-biological therapies for treatment of psoriasis in Japan**
 ○ Yukari Okubo¹, Ann_Chao Tang², Sachie Inoue³, Hitoe_Toritsu Itakura², Mamitaro Ohtsuki¹
¹Department of Dermatology, Tokyo Medical University, Tokyo, Japan, ²Eli Lilly Japan K.K., Tokyo, Japan, ³Crecon Medical Assessment INC., Tokyo, Japan, ⁴Department of Dermatology, Jichi Medical University, Shimotsuke, Tochigi, Japan
- P09-22 [O06-12] A patient with atopic dermatitis and psoriasis vulgaris presenting an unusual reaction for dupilumab**
 ○ Yudai Tsukamoto, Toshifumi Takahashi, Miho Kabuto, Akihiko Yamaguchi, Noriki Fujimoto
 Department of dermatology, Shiga university of medical science, Shiga, Japan

Category 10 (P10): Pharmacology and Drug Development

- P10-01 [III-6] Blockade of CX3CL1-CX3CR1 pathway inhibits mouse sclerodermatous chronic graft-versus-host disease model**
 ○ Akira Utsunomiya¹, Vu Huy Luong¹, Takenao Chino¹, Noritaka Oyama¹, Takashi Matsushita², Naoto Ishii³, Hideaki Ogasawara³, Toshio Imai³, Minoru Hasegawa¹
¹Dermatology, University of Fukui, ²Dermatology, Kanazawa University, ³KAN Research Institute. Inc.
- P10-02 [C02-04] Vitamins and their derivatives synergistically promote hair shaft elongation *ex vivo* via PIGF/VEGFR-1 signaling activation**
 ○ Liuying Hu¹, Shun Kimura¹, Sayo Kashiwagi¹, Kyoko Takagi¹, Takashi Shimizu¹, Tsuyoshi Ishii¹, Manabu Ohyama²
¹Basic Research Development Division, ROHTO Pharmaceutical Co., LTD., Kyoto, Japan, ²Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, Japan
- P10-03 [C02-05] Formyl peptide receptor 1 triggers cell death signals in keratinocyte as SJS/TEN model**
 ○ Tomoki Nishiguchi, Akito Hasegawa, Riichiro Abe
 Department of dermatology, Graduate School of Medical and Dental Sciences, Niigata University, Niigata, Japan
- P10-04 [C02-06] Konjac-ceramide (kCer) induces semaphorin 3A production in normal human epidermal keratinocytes**
 ○ Mirei Fujita¹, Yayoi Kamata¹, Mitsutoshi Tominaga¹, Seigo Usuki², Katsuyuki Mukai³, Nobuaki Takahashi¹, Hideoki Ogawa¹, Yasuyuki Igarashi², Kenji Takamori^{1,4}
¹Juntendo Itch Research Center (JIRC), Institute for Environmental and Gender-Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Lipid Biofunction Section, Faculty of Advanced Life Science, Hokkaido University, ³Daicel Corporation, ⁴Department of Dermatology, Juntendo University Urayasu Hospital
- P10-05 [C02-07] A calpain inhibitor ALLN attenuates bleomycin-induced skin fibrosis in a mice model**
 ○ Hiroshi Kasamatsu¹, Takenao Chino¹, Takumi Hasegawa¹, Natsuko Utsunomiya¹, Akira Utsunomiya¹, Noritaka Oyama¹, Masami Yamada², Minoru Hasegawa¹
¹Department of Dermatology, University of Fukui, Fukui, Japan, ²Department of Cell Biology and Biochemistry, University of Fukui, Fukui, Japan

- P10-06 [O04-08] Spesolimab improves patient-reported outcomes (PROs) in patients with generalized pustular psoriasis (GPP) in the Effisayil 1 study**
○ Akimichi Morita¹, Alexander A Navarini², Manuelle Viguier³, Tsen-Fang Tsai⁴, Kristian Reich⁵, Eva Kleine⁶, Mogana Sivalingam⁶, Christian Thoma⁷, Mark G Lebwohl⁸
¹Department of Geriatric and Environmental Dermatology, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, ²Department of Dermatology, University Hospital of Basel, Basel, Switzerland, ³Department of Dermatology, Hôpital Robert Debré, Reims, France, ⁴Department of Dermatology, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, Taiwan, ⁵Center of Translational Research in Inflammatory Skin Diseases, Institute for Health Services Research in Dermatology and Nursing, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, ⁶Boehringer Ingelheim International GmbH, Ingelheim, Germany, ⁷Boehringer Ingelheim International GmbH, Biberach, Germany, ⁸Icahn School of Medicine at Mount Sinai, New York, NY, USA
- P10-07 [O04-09] Induction of Type XVII collagen decreases cellular senescence in Human hTert/KER-CT keratinocytes**
○ Tuba M. Ansary, Koji Kamiya, Md. Razib Hossain, Mayumi Komine, Mamitaro Ohtsuki
Department of Dermatology, Jichi Medical University, Tochigi, Japan
- P10-08 [O04-10] An antimicrobial peptide derived from insulin-like growth factor-binding protein 5 alleviates imiquimod-induced psoriatic skin inflammation**
○ Saori Yoshiba¹, Ge Peng^{1,2}, Saya Tsukamoto^{1,2}, Ko Okumura¹, Hideoki Ogawa¹, Shigaku Ikeda², Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University
- P10-09 [O04-11] Difamilast, a novel PDE4B inhibitor, topically improves chronic idiopathic dermatitis induced by persisting psychological stress in mice**
○ Hidetaka Hiyama, Naoya Arichika, Masafumi Shibamori, Hiroki Urashima
Biology and Translational Research Unit, Department of Medical Innovations, New Drug Research Division, Otsuka Pharmaceutical Co., Ltd. Tokushima, Japan
- P10-10 [O04-12] Investigation of *in-vitro* antibacterial activity of selected plant extracts and its combination with a view of developing a face wash**
○ N. A. Sanjeevani¹, H. M. G. M. Dissanayake¹, U. H. W. De Silva¹, W. D. Ratnasooriya², P. B. V. Navaratne³
¹Department of Pharmacy, General Sir John Kotelawala Defence University, Sri Lanka, ²Department of Basic Sciences, General Sir John Kotelawala Defence University, Sri Lanka, ³Faculty of Medicine, General Sir John Kotelawala Defence University, Sri Lanka

Category 11 (P11): Photobiology

- P11-01 [I-6] Skin regulatory T cells producing proenkephalin expand upon ultraviolet B exposure without ST2-IL33 axis and promote keratinocyte outgrowth**
○ Sayuri Yamazaki¹, Hiroaki Shime¹, Mizuyu Odanaka¹, Makoto Tsujii², Takuma Matoba^{1,3}, Masaki Imai¹, Yoshiaki Yasumizu⁴, Ryuta Uraki¹, Kiyoshi Minohara^{1,3}, Maiko Watanabe¹, Anthony Bonito⁵, Hidehiro Fukuyama⁶, Naganari Ohkura^{6,7}, Shimon Sakaguchi⁴, Akimichi Morita⁸
¹Department of Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan, ²Department of Microbiology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Shinagawa-ku, Japan, ³Department of Oto-rhinolaryngology and Head-and-neck-surgery, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan, ⁴Department of Experimental Immunology, World Premier International Research Center Initiative, Immunology Frontier Research Center, Osaka University, Osaka, Japan, ⁵Immunoassay Research & Development, Laboratory Diagnostics, Siemens Healthineers, Tarrytown, NY, USA, ⁶Laboratory for Lymphocyte Differentiation, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, ⁷Immunopharmaceutical Development Unit, Center of Medical Innovation Research, Graduate School of Medicine, Osaka University, Osaka, Japan, ⁸Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan
- P11-02 [C09-02] Analysis of anti-inflammatory effects and the underlying mechanisms of CO2 on skin**
○ Keimon Sayama^{1,2}, Katsuyuki Yuki¹, Keiichi Sugata¹, Satoko Fukagawa¹, Tetsuji Yamamoto¹, Natsumi Nagamori¹, Takayoshi Inoue¹, Shigaku Ikeda², Takatoshi Murase¹
¹Biological Science Research, Kao Corporation, Tochigi, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan
- P11-03 [C09-03] Epigenetic regulation in melanocytes differentiated from induced pluripotent stem cells originated from xeroderma pigmentosum**
○ Chihiro Takemori¹, Takeshi Fukumoto¹, Michiyo Koyanagi-Aoi^{2,3}, Makoto Kunisada¹, Chieko Hosaka¹, Takashi Aoi^{2,3}, Chikako Nishigori^{1,3}
¹Division of Dermatology, Department of Internal Related, Graduate School of Medicine, Kobe University, Kobe, Japan, ²Division of Advanced Medical Science, Graduate School of Science, Technology and Innovation, Kobe University, Kobe, Japan, ³Department of iPS cell applications, Graduate School of Medicine, Kobe University, Kobe, Japan
- P11-04 [C09-04] Identification and Quantification of Senescent Cells In UV-induced Skin Pathologies**
○ Audrey Wang¹, Satoshi Nakamizo², Yoshihiro Ishida², Genevieve Klassen³, Priscilla Chong³, John Lim⁴, Graham Wright⁴, Oliver Dreesen¹, Kenji Kabashima^{1,2}
¹Skin Research Institute Singapore, ²Kyoto University Graduate School of Medicine, Japan, ³School of Biological Sciences, Nanyang Technology University, ⁴A*STAR Microscopy Platform

- P11-05**
[O09-01] **Deficiency of epidermal ferroportin enhances UV dermatitis in mice**
○ Naokazu Hatchome, Hitoshi Terui, Mayuko Onodera-Amagai, Masayuki Asano, Kenshi Yamasaki, Setsuya Aiba
The Department of Dermatology, University of Tohoku, Miyagi, Japan
- P11-06**
[C09-05] **Rapid pustule fixation of palmoplantar pustulosis by UVA1-LED phototherapy**
○ Kyoko Ikumi¹, Tomohiko Kio², Kan Torii¹, Hideyuki Masuda², Akimichi Morita¹
¹Department of Geriatric and Environmental Dermatology Nagoya City University Graduate School of Medical Sciences, ²R&D Group, Biomedical Division, USHIO INC, Tokyo, Japan
- P11-07**
[C09-06] **Switching the light source of phototherapy from a lamp to a deep ultraviolet light-emitting diodes**
○ Hideyuki Masuda^{1,2}, Akimichi Morita¹
¹Department of Geriatric and Environmental Dermatology, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, ²Ushio Inc. Tokyo, Japan
- P11-08**
[O09-02] **Effect of M1 and M2 Macrophages on Production and Degradation of Extracellular Matrix in Dermal Fibroblasts**
○ Munetaka Kawamoto, Ryota Kami, Satoshi Horiba
MIRAI Technology Institute, Shiseido Co.,Ltd
- P11-09**
[O09-03] **Downregulation of IL-34 Associated with the Skewing of M1/M2 Balance of Macrophages Induces Senescence in Human dermal fibroblasts**
○ Satoshi Horiba, Ryota Kami, Taiki Tsutsui, Junichi Hosoi
Shiseido Co., Ltd MIRAI Technology Institute
- P11-10**
[C09-07] **Bath-PUVA therapy targets keratinocytes to suppress the secretion of pathogenic chemokines**
○ Yoshifumi Kanayama, Kan Torii, Kyoko Ikumi, Akimichi Morita
Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan
- P11-11**
[O09-04] **Non-invasive assessment of diameter-dependent cutaneous vascular alterations with age using Optical Coherence Tomography Angiography**
○ Takuma Hoshino¹, Yusuke Hara¹, Masato Ninomiya¹, Toyonobu Yamashita¹, Motoki Oguri¹, Masako Katsuyama¹, Chika Katagiri¹, Yuandong J. Li², Yuxuan Cheng², Nhan M. Le², Ruikang Wang²
¹MIRAI Technology Institute, Shiseido Corporation Limited, ²Department of Bioengineering, University of Washington, Seattle, United States
- P11-12**
[O03-01] **Excimer light downregulates interleukin-17 production and induces regulatory T cells in imiquimod-induced psoriasisform dermatitis**
○ Shota Egawa, Masahiro Kamata, Hideaki Uchida, Teruo Shimizu, Makoto Ito, Ryosuke Takeshima, Itsumi Mizukawa, Ayu Watanabe, Yayoi Tada
Department of Dermatology, Teikyo University School of Medicine, Tokyo, Japan
- P11-13**
[O03-02] **Characterization of the DNA damage response in human skin cell types**
○ Chin Yee Ho¹, A.L Soon¹, C Tan², P.F Ong¹, M Ehrman³, J Oblong⁴, S Bellanger², O Dreesen¹
¹Skin Research Institute of Singapore, A*STAR, Singapore, ²Stemness, Differentiation and Aging in Human Epidermis, Skin Research Institute of Singapore, A*STAR, Singapore, ³Procter & Gamble International Operations SA, Singapore, ⁴Beauty Technology Division, The Procter & Gamble Company, Cincinnati, Ohio, USA
- P11-14**
[O03-03] **A role of elastogenic factors in the pathogenesis of Solar Elastosis**
○ Teruhiko Makino¹, Ko Kagoyama¹, Chisato Murabe², Tomoyuki Nakamura², Tadamichi Shimizu¹
¹Department of Dermatology, University of Toyama, Toyama, Japan, ²Department of Pharmacology, Kansai Medical University, Osaka, Japan
- P11-15**
[O03-04] **Photodynamic therapy using portable devices**
○ Rie Teranishi¹, Toshiyuki Ozawa¹, Tsuyoshi Goya³, Kenji Kuwada³, Katsuyuki Morii^{3,4}, Takahiro Nishimura², Kunio Awazu², Daisuke Tsuruta¹
¹The Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan, ²Department of Quantum Energy Engineering, Graduate School of Engineering, Osaka University, ³Innovation and Business Division, Nippon Shokubai Co, ⁴Nippon Shokubai Research Alliance Laboratories, Osaka University
- P11-16**
[O03-05] **Usefulness of UVA lamps for the diagnosis of green nail syndrome with or without onychomycosis**
○ Tomotaka Sato, Kazuhiro Aoyama, Norihito Fukada, Akihiko Kinjo
The Department of Dermatology, Teikyo University Chiba Medical Center

Category 12 (P12): Pigmentation and Melanoma

- P12-01 [II-4] A mechanism of cooling hot tumors: lactate and its induced EGR1 are novel key factors that turn hot tumors into cold tumors**
○ Hisashi Kanemaru, Yukari Mizukami, Akira Kaneko, Hidemi Tagawa, Toshihiro Kimura, Haruka Kuriyama, Soichiro Sawamura, Ikko Kajihara, Katsunari Makino, Jun Aoi, Satoshi Fukushima
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University
- P12-02 [C05-01] TIGIT/CD155 axis mediates resistance to immunotherapy in cancer patients with the inflamed tumor microenvironment**
○ Shusuke Kawashima^{1,2}, Takashi Inozume^{1,2,3}, Masahito Kawazu⁴, Toshihide Ueno⁴, Etsuko Tanji¹, Tatsuyoshi Kawamura³, Yasuhiro Nakamura⁵, Tomonori Kawasaki⁶, Yukiko Kiniwa⁷, Hiroyoshi Nishikawa^{8,9}, Hiroyuki Matsue², Yosuke Togashi^{1,8,10}
¹Chiba Cancer Center, Research Institute, Chiba, Japan, ²Department of Dermatology, Graduate School of Medicine, Chiba University, Chiba, Japan, ³Department of Dermatology, University of Yamanashi, Yamanashi, Japan, ⁴Division of Cellular Signaling, National Cancer Center Research Institute, Tokyo, Japan, ⁵Department of Skin Oncology/Dermatology, Saitama Medical University International Medical Center, Saitama, Japan, ⁶Department of Pathology, Saitama Medical University International Medical Center, Saitama, Japan, ⁷Department of Dermatology, Shinshu University School of Medicine, Nagano, Japan, ⁸Division of Cancer Immunology, Research Institute/Exploratory Oncology Research and Clinical Trial Center (EPOC), National Cancer Center, Tokyo/Kashiwa, Japan, ⁹Department of Immunology, Nagoya University Graduate School of Medicine, Nagoya, Japan, ¹⁰Department of Tumor Microenvironment, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan
- P12-03 [C05-02] IPS cell-derived myeloid cells expressing OX40 ligand amplify tumor-infiltrating T cells in advanced melanoma**
○ Toshihiro Kimura¹, Haruka Kuriyama¹, Hisashi Kanemaru¹, Yosuke Kubo¹, Satoshi Nakahara¹, Azusa Miyashita¹, Jun Aoi¹, Hirotake Tsukamoto², Yasuharu Nishimura^{3,4}, Takashi Inozume⁵, Rong Zhang⁶, Yasushi Uemura⁶, Satoru Senju³, Hironobu Ihn¹, Satoshi Fukushima¹
¹Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan, ²Division of Clinical Immunology and Cancer Immunotherapy, Center for Cancer Immunotherapy and Immunobiology, Graduate School of Medicine, Kyoto University, Kyoto, Japan, ³Department of Immunogenetics, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan, ⁴Nishimura Project Laboratory, Institute of Resource Development and Analysis, Kumamoto University, Kumamoto, Japan, ⁵Department of Dermatology, Graduate School of Medicine, Chiba University, Chiba, Japan, ⁶Division of Cancer Immunotherapy, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center (NCC), Chiba, Japan
- P12-04 [C05-03] Impact of a SLC24A5 novel mutation identified in the first Japanese patient with oculocutaneous albinism 6 on retinal pigment epithelium**
○ Toru Saito¹, Ken Okamura¹, Rika Kosaki², Kazumasa Wakamatsu³, Shosuke Ito³, Osamu Nakajima⁴, Hidetoshi Yamashita⁵, Yutaka Hozumi¹, Tamio Suzuki¹
¹Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan, ²Division of Medical Genetics, National Center for Child Health and Development, Tokyo, Japan, ³Institute for Melanin Chemistry, Fujita Health University, Toyoake, Japan, ⁴Research Center for Molecular genetics, Institute for Promotion of Medical Science Research, Yamagata University Faculty of Medicine, Yamagata, Japan, ⁵Department of Ophthalmology, Yamagata University Faculty of Medicine, Yamagata, Japan
- P12-05 [C05-04] Molecular and functional characterization of melanocyte subpopulations in the human hairy skin epidermis based on single-cell RNA sequencing**
○ Fumihito Noguchi, Peinan Zhao, Mark Shackleton
Cancer Development and Treatment Group, Department of Medicine Research Laboratories, Alfred Hospital, Monash University, Melbourne, Victoria, Australia
- P12-06 [C05-05] Melanocyte stem cell dynamics underlie de novo melanomagenesis**
○ Sally Eshiba¹, Takeshi Namiki², Yasuaki Mohri¹, Tomomi Aida^{3,4}, Naotaka Serizawa¹, Takakazu Shibata⁵, Hironobu Morinaga¹, Daisuke Nanba¹, Keiko Miura⁶, Masaru Tanaka⁷, Hisashi Uhara⁸, Hiroo Yokozeki², Toshiaki Saida⁹, Emi K. Nishimura^{1,10}
¹Department of Stem cell biology Tokyo medical and dental university, ²Department of Dermatology, Tokyo Medical and Dental University Graduate School and Faculty of Medicine, Tokyo, Japan, ³Department of Molecular Neuroscience, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ⁴Laboratory of Genome Editing for Biomedical Research, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ⁵Medical Corporation Shibata Dermatology Clinic, Osaka, Japan, ⁶Department of Pathology, Tokyo Medical and Dental University Graduate School and Faculty of Medicine, Tokyo, Japan, ⁷Department of Dermatology, Tokyo Women's Medical University Medical Center East, Tokyo, Japan, ⁸Department of Dermatology, Sapporo Medical University School of Medicine, Hokkaido, Japan, ⁹Shinshu University, Professor Emeritus, Saitama, Japan, ¹⁰Division of Aging and Regeneration, Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- P12-07 [C05-06] Liquid biopsy-based analysis by CAPP-Seq and ddPCR in patients with melanoma**
○ Akira Kaneko, Hisashi Kanemaru, Ikko Kajihara, Haruka Kuriyama, Toshihiro Kimura, Soichiro Sawamura, Katsunari Makino, Azusa Miyashita, Jun Aoi, Takamitsu Makino, Shinichi Masuguchi, Satoshi Fukushima
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- P12-08 [O11-09] NUMB inhibits melanoma migration, invasion, and metastasis**
○ Takeshi Fukumoto¹, Denitsa M Hristova², Xia Hua², Haruki Jimbo¹, Chihiro Takemori¹, Chikako Nishigori^{1,3}, Zhi Wei⁴, Rajasekharan Somasundaram², Mizuho Fukunaga-Kalabis², Meenhard Herlyn²
¹Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, ²The Wistar Institute, ³Department of iPS cell applications, Graduate School of Medicine, Kobe University, ⁴Department of Computer Science, New Jersey Institute of Technology

- P12-09**
[O11-10] **Nucleosome assembly protein 1-like 4, a new therapeutic target for melanoma**
○ Satoru Mizuhashi¹, Takayuki Ishibashi¹, Haruka Kuriyama¹, Toshihiro Kimura¹, Hisashi Kanemaru¹, Ikko Kajihara¹, Katsunari Makino¹, Azusa Miyashita¹, Jun Aoi¹, Kanako Kita², Hironobu Ihn¹, Satoshi Fukushima¹
¹Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan, ²Department of Comprehensive Molecular Medicine, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- P12-10**
[O11-11] **Investigation the mechanism of novel lncRNAs, lncRNA00094, involved in metformin-inducing inhibition of melanoma cells**
○ Hui-Wen Tseng^{1,2}, Kuo-Wang Tsai³
¹The Department of Dermatology, Kaohsiung Veterans General Hospital, ²Institute of Biomedical Sciences, National SunYet-sen University, ³Department of Research, Taipei Tzu Chi Hospital, New Taipei, Taiwan
- P12-11**
[O11-12] **Increased expression of SPARC and TIMP3 in epidermotropic melanoma metastasis**
○ Maureen.T Meling, Yukiko Kiniwa, Eisaku Ogawa, Yuki Sato, Ryuhei Okuyama
Department of Dermatology, Shinshu University School of Medicine, Matsumoto, Japan
- P12-12**
[O03-06] **Attenuation of melanocyte reoccupation in long-lasting rhododendrol-induced guinea pig model of vitiligo**
○ Yasutaka Kuroda^{1,2}, Lingli Yang¹, Fei Yang^{1,2}, Sylvia Lai¹, Tetsuya Sayo^{1,2}, Yoshito Takahashi^{1,2}, Daisuke Tsuruta³, Ichiro Katayama¹
¹Department of Pigmentation Research and Therapeutics, Osaka City University Graduate school of medicine, ²Biological Science Research Laboratories, Kao Corporation, ³Department of Dermatology, Osaka City University Graduate school of medicine
- P12-13**
[O03-07] **Methyl-CpG binding domain protein 3 is a new diagnostic marker and potential therapeutic target of melanoma**
○ Takayuki Ishibashi¹, Ikko Kajihara¹, Satoru Mizuhashi¹, Haruka Kuriyama¹, Toshihiro Kimura¹, Hisashi Kanemaru¹, Katsunari Makino¹, Azusa Miyashita¹, Jun Aoi¹, Takamitsu Makino¹, Satoshi Fukushima¹, Kanako Kita², Hironobu Ihn¹
¹Department of Dermatology and Plastic Surgery, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan, ²Department of Molecular Pathology, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan
- P12-14**
[O03-08] **NUAK2 is an important factor in acral melanomas development and progression**
○ Kohei Nojima¹, Masahiro Hayashi², Masakazu Kawaguchi², Tamio Suzuki², Masashi Ishikawa³, Yasuhiko Kaneko⁴, Atsushi Tanemura⁵, Ichiro Katayama⁶, Taisuke Mori⁷, Naoya Yamazaki⁸, Hiroki Mori⁹, Hiroo Yokozeki¹, Takeshi Namiki¹
¹Department of Dermatology, Tokyo Medical and Dental University, ²Department of Dermatology, Yamagata University, ³Department of Dermatology, Saitama Cancer Center, ⁴Research Institute for Clinical Oncology, Saitama Cancer Center, ⁵Department of Dermatology, Osaka University, ⁶Department of Dermatology, Osaka City University, ⁷Department of Pathology, National Cancer Center Hospital, ⁸Department of Dermatologic Oncology, National Cancer Center Hospital, ⁹Department of Plastic Surgery, Tokyo Medical and Dental University
- P12-15**
[O03-09] **Protective efficacy of Sanqi-derived compound K on melanocytes against oxidative stress: in vitro and in vivo evaluation**
○ Suwei Tang^{1,5}, Lingli Yang¹, Yasutaka Kuroda², Sylvia Lai¹, Shaoqiong Xie⁵, Huimin Zhang⁴, Daisuke Tsuruta³, Ichiro Katayama¹
¹Department of Pigmentation Research and Therapeutics, Graduate School of Medicine, Osaka City University, Osaka, Japan, ²Biological Science Laboratories, Kao Corporation, Kanagawa, Japan, ³Department of dermatology, Graduate School of Medicine, Osaka City University, Osaka, Japan, ⁴Department of Dermatology, Shuguang Hospital affiliated with Shanghai University of Traditional Chinese Medicine, Shanghai, China, ⁵Department of Dermatology, Shanghai Skin Disease Hospital, Tongji University School of Medicine, Shanghai, China
- P12-16**
[O03-10] **Genipin contained in gardenia fruit enhanced melanogenesis**
○ Megumi Mizawa¹, Tsugunobu Andoh², Tadamichi Shimizu¹
¹Department of Dermatology, Faculty of Medicine, Academic Assembly, University of Toyama, Toyama, Japan, ²Department of Pharmacology and Pathophysiology, College of Pharmacy, Kinjo Gakuin University, Aichi, Japan
- P12-17**
[C05-07] **Genome-scale DNA methylation analysis identifies regulatory region and repeat element alterations that modulate the genomic stability of melanocytic nevi**
Meghan E. Muse¹, Drew T. Bergman¹, Lucas A. Salas¹, Lisa N. Tom², Jean-Marie Tan², Antonia Laino², Duncan Lambie^{3,4}, Richard A. Sturm², Helmut Schaidt^{2,5}, H. Peter Soyer^{2,6}, Brock C. Christensen^{1,7,8}, ○ Mitchell S. Stark²
¹Department of Epidemiology, Geisel School of Medicine at Dartmouth, Hanover, NH, USA, ²The University of Queensland Diamantina Institute, The University of Queensland, Dermatology Research Centre, Brisbane, QLD 4102, Australia, ³IQ Pathology, Brisbane, Queensland, Australia, ⁴Pathology Queensland, Princess Alexandra Hospital, Brisbane, Queensland, Australia, ⁵Department of Dermatology, Sunshine Coast Hospital and Health Service, Birtinya, Queensland, Australia, ⁶Department of Dermatology, Princess Alexandra Hospital, Brisbane, Queensland, Australia, ⁷Department of Molecular & Systems Biology, Dartmouth Geisel School of Medicine, Hanover, NH, USA, ⁸Department of Molecular & Systems Biology, Dartmouth Geisel School of Medicine, Hanover, NH, USA, ⁹Department of Community & Family Medicine, Dartmouth Geisel School of Medicine, Hanover, NH, USA

Category 13 (P13): Skin, Appendages, and Stem Cell Biology

- P13-01**
[III-3] **Development of molecular atlas of the human nail unit and hair follicle with spatially resolved transcriptomics**
Dongyoun Lee, ○ Joonho Shim, Ji-Hye Park, Gulimila Abudureyimu, Jong Hee Lee
Department of Dermatology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea

- P13-02 [C03-02] Antifibrotic effects and mechanisms of miR-196b-5p of mesenchymal stem cell-derived exosomes in a systemic sclerosis mouse model**
Hritu Baral¹, ○ Akihiko Uchiyama¹, Yoko Yokoyama¹, Akiko Sekiguchi¹, Sahori Yamazaki¹, Syahla Nisaa Amalia¹, Yuta Inoue¹, Sachiko Ogino¹, Ryoko Torii¹, Mari Hosoi¹, Toshiyuki Matsuzaki², Sei-ichiro Motegi¹
¹Department of Dermatology, Gunma University Graduate School of Medicine, ²Department of Anatomy and Cell Biology, Gunma University Graduate School of Medicine
- P13-03 [C03-03] Obesity accelerates hair thinning by stem cell-centric converging mechanisms**
○ Hironobu Morinaga¹, Emi K. Nishimura¹, Yasuaki Mohri¹, Kyosuke Asakawa¹, Hiroyuki Matsumura¹, Andrzej_A Dlugosz², Atsushi Iwama³
¹Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ²Department of Dermatology, University of Michigan Medical School, Ann Arbor, MI, USA, ³Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- P13-04 [C03-04] Therapeutic potential of adipose-derived stem cells for the treatment of recessive dystrophic epidermolysis bullosa**
○ Akinori Matsuda, Toshio Hasegawa, Akino Wada, Shigaku Ikeda
Department of Dermatology and Allergology Juntendo University Graduate School of Medicine, Tokyo, Japan
- P13-05 [C03-05] Perivascular adipose tissue in dermis induces infiltration of immune cells in the murine imiquimod (IMQ)-induced psoriasis model**
○ Riko Takimoto-Ito, Satoshi Nakamizo, Gyohei Egawa, Kenji Kabashima
Department of Dermatology, Kyoto University Graduate school of medicine, Kyoto, Japan
- P13-06 [C03-06] Label-free quality control and identification of human keratinocyte stem cells by deep learning-based automated cell tracking**
Takuya Hirose¹, Jun'ichi Kotoku¹, Fujio Toki², Emi K. Nishimura^{2,3}, ○ Daisuke Nanba²
¹Graduate School of Medical Care and Technology, Teikyo University, Tokyo, Japan, ²Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ³Division of Aging and Regeneration, Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- P13-07 [C03-07] Ahed has crucial roles as a spliceosomal protein for cell proliferation of epidermal keratinocytes**
○ Mikiro Takaishi¹, Tatsushi Ishimoto¹, Masahiro Tokunaga², Chikara Kokubu³, Junji Takeda⁴, Shigetoshi Sano¹
¹Department of Dermatology, Kochi Medical School, Kochi University, ²Dept. Hematol, Suita Municipal Hosp., ³Child Healthcare and Genetic Science Lab, Grad. School Med., Osaka Univ., ⁴Research Inst. Microb. Diseases, Osaka Univ.
- P13-08 [O08-01] Dynamic stem cell selection safeguards the genomic integrity of the epidermis**
○ Tomoki Kato¹, Nan Liu¹, Kyosuke Asakawa¹, Taichi Muraguchi¹, Yuko Muroyama¹, Hironobu Morinaga¹, Mariko Shimokawa¹, Yuriko Nishimori¹, Li Jing Tan¹, Yasuaki Mohri¹, Emi K. Nishimura^{1,2}
¹Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ²Division of Aging and Regeneration, Institute of Medical Science, The University of Tokyo, Japan
- P13-09 [O08-02] Impaired holocrine cell rupture of sebocytes in comedo: Revisiting the mechanism of comedo formation in the study with excised human skins**
○ Toru Atsugi¹, Takashi Teramura², Hiroki Ota³, Tomoko Aida³, Mika Yamashita³, Mathieu Lacroix⁴, Anne-Laure Desroches⁴, Nico Forraz⁴, Colin McGuckin⁴, Eiji Naru¹
¹Dermatology and Cosmeceutical Research Laboratories, KOSÉ Corporation, ²KOSÉ R&D France, KOSÉ Corporation, ³Safety and Analytical Research Laboratories, KOSÉ Corporation, ⁴CTI BIOTECH
- P13-10 [O08-03] Immunological Properties of Atopic Dermatitis-Associated Alopecia Areata**
○ Reiko Kageyama¹, Taisuke Ito¹, Shiho Hanai², Naomi Morishita¹, Shinsuke Nakazawa¹, Toshiharu Fujiyama¹, Tetsuya Honda¹, Yoshiki Tokura³
¹Department of Dermatology, Hamamatsu University School of Medicine, ²Seirei Hamamatsu General Hospital, ³Chutoen General Medical Center
- P13-11 [O08-04] Time course changes in peripheral blood mononuclear cell subsets during intravenous corticosteroid pulse therapy for severe alopecia areata**
○ Ryo Takahashi¹, Yohei Sato², Momoko Kimishima², Manabu Ohyama^{1,2}
¹Flow Cytometry Core Facility, Kyorin University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology, Kyorin University Faculty of Medicine, Tokyo, Japan
- P13-12 [O08-05] Distinct types of stem cell divisions orchestrate organ regeneration and aging in hair follicles**
○ Hiroyuki Matsumura¹, Nan Liu¹, Daisuke Nanba¹, Shizuko Ichinose², Aki Takada¹, Sotaro Kurata¹, Hironobu Morinaga¹, Yasuaki Mohri¹, Adèle De Arcangelis⁴, Shigeo Ohno⁵, Emi K. Nishimura¹
¹The Department of Stem cell medicine, Medical Research Institute, Tokyo Medical and Dental University, Japan, ²Research Center for Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan, ³Beppu Garden-Hill Clinic, Kurata Clinic, Beppu City, Japan, ⁴Institut de Génétique et de Biologie Moléculaire et Cellulaire, Department of Development and Stem Cells, Université de Strasbourg, Illkirch, France, ⁵Department of Molecular Biology, Yokohama City University School of Medicine, Yokohama, Kanagawa, Japan

- P13-13 [O08-06] Mu-opioid ligand endomorphin induces alloknesis at the periphery**
 ○ Eriko Komiya¹, Mitsutoshi Tominaga^{1,2}, Ryo Hatano³, Takumi Itoh³, Kotaro Honda¹, Sumika Toyama¹, Yayoi Kamata^{1,2}, Haruna Otsuka³, Kei Ohnuma³, Chikao Morimoto³, Kenji Takamori^{1,2,4}
¹Juntendo Itch Research Center (IIRC), Institute for Environmental and Gender Specific Medicine, Graduate School of Medicine, Juntendo University, Chiba, Japan, ²Anti-Aging Skin Research Laboratory, Juntendo University Graduate School of Medicine, Chiba, Japan, ³Department of Therapy Development and Innovation for Immune Disorders and Cancers, Graduate School of Medicine, Juntendo University, Tokyo, Japan, ⁴Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- P13-14 [O08-07] Monocytic lineage cells distributed along sweat glands modulate sweat function**
 ○ Tadatsune Iida¹, Daisuke Kobayashi², Tomoki Tamura², Hiroo Yokozeki¹, Takeshi Namiki¹
¹Department of dermatology, Tokyo Medical and Dental University, Tokyo, ²Department of human pathology, Tokyo Medical and Dental University, Tokyo
- P13-15 [O08-08] The potential of hair-follicle-associated pluripotent (HAP) stem cells to treat Parkinson's disease**
 ○ Michiko Yamane¹, Nanako Takaoka^{1,2}, Koya Obara², Kyoumi Shirai², Yuko Hamada², Nobuko Arakawa², Ryoichi Aki², Robert M. Hoffman^{3,4}, Yasuyuki Amoh²
¹The Department of Dermatology, Department of Dermatology, Kitasato University Grad Sch Med Sci, Kanagawa, Japan, ²Department of Dermatology, Kitasato University School of Medicine, Kanagawa, Japan, ³AntiCancer, Inc., ⁴Department of Surgery, University of California San Diego
- P13-16 [O08-09] The potential of hair-follicle-associated pluripotent (HAP) stem cells for heart regeneration**
 ○ Nanako Takaoka^{1,2}, Michiko Yamane¹, Koya Obara², Kyoumi Shirai², Yuko Hamada², Nobuko Arakawa², Ryoichi Aki², Robert M. Hoffman^{3,4}, Yasuyuki Amoh²
¹Department of Dermatology, Kitasato University Graduate School of Medical Science, Kanagawa, Japan, ²Department of Dermatology, Kitasato University School of Medicine, Kanagawa, Japan, ³AntiCancer, Incorporated, California, USA, ⁴Department of Surgery, University of California San Diego, California, USA
- P13-17 [O08-10] Exploring the impact of ovariectomy on hair growth; Is ovariectomized mouse a model for investigating female pattern hair loss in human?**
 ○ Sayaka Togo, Hisayoshi Imanishi, Koji Sugawara, Daisuke Tsuruta
 Department of Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan

Category 14 (P14): Tissue Regeneration and Wound Healing

- P14-01 [III-2] CCL5/CCR5 feedforward loop by FLI1 deficiency in microvascular endothelial cells contributes to SSC vasculopathy**
 ○ Tetsuya Ikawa, Takuya Miyagawa, Yuki Fukui, Satoshi Toyama, Jun Omatsu, Kentaro Awaji, Yuta Norimatsu, Yusuke Watanabe, Ayumi Yoshizaki, Shinichi Sato, Yoshihide Asano
 The Department of Dermatology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan
- P14-02 [C07-04] Ninjurin-1 contributes to skin wound healing through the formation of functional blood vessels**
 ○ Risa Matsuo, Mari Kishibe, Shin Iinuma, Mizue Fujii, Satomi Igawa, Masaru Homma, Akemi Ishida-Yamamoto
 The Department of Dermatology, Asahikawa Medical University, Hokkaido, Japan
- P14-03 [C07-05] Odorant-dependent Merkel cell chemosensation: implications for wound healing**
 Ilaria Piccini¹, Jeremy Cheret^{1,2}, Moe Tsutsumi³, S Sakaguchi³, Leslie Ponce¹, Luis Almeida¹, K Funk¹, Max Kueckelhaus⁵, Kentaro Kajiya³, Ralf Paus^{1,2,6}, ○ Marta Bertolini¹
¹Monasterium Laboratory, Skin and Hair Research Solutions GmbH, Muenster, Germany, ²Dr. Phillip Frost Dept. of Dermatology & Cutaneous Surgery, University of Miami Miller School of Medicine, Miami, FL, USA, ³MIRAI Technology Institute, Shiseido Co., Ltd. Yokohama, Japan, ⁴Clinic for Plastic, Aesthetic and Reconstructive Surgery, Munich, Germany, ⁵Fachklinik Hornheide, Muenster, Germany, ⁶Centre for Dermatology Research, University of Manchester, MAHSC, and Manchester NIHR Biomedical Research Centre, Manchester, UK
- P14-04 [C07-06] Adipose derived stem cells inhibits fibrotic effect of keloid derived dermal fibroblasts**
 ○ Yuki Nukui, Toshio Hasegawa, Akino Wada, Shigaku Ikeda
 Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine
- P14-05 [C07-07] Skin-derived human β -defensin-3 promotes wound healing and angiogenesis**
 ○ Miho Takahashi^{1,2}, Yoshie Umehara¹, Hainan Yue^{1,2}, Juan Valentin Trujillo¹, Ge Peng^{1,2}, Hai Le Thanh Nguyen^{1,2}, Risa Ikutama^{1,2}, Ko Okumura¹, Hideoki Ogawa¹, Shigaku Ikeda¹, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan
- P14-06 [O01-03] Calcitriol, the active form of vitamin D, regulates epidermal tight junction barrier function in diabetes**
 ○ Juan V. Trujillo¹, Le Thanh Hai Nguyen^{1,2}, Yoshie Umehara¹, Hainan Yue^{1,2}, Lisa Ikutama^{1,2}, Miho Takahashi^{1,2}, Ge Peng^{1,2}, Hideoki Ogawa¹, Shigaku Ikeda², Ko Okumura¹, Francois Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University, Tokyo, Japan, ²Department of dermatology and Allergology, Juntendo University, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan

- P14-07 [O01-04] Trehalose-induced senescence-associated secretory phenotype accelerates organotypic skin culture development**
○ Jun Muto¹, Shinji Fukuda², Kenji Watanabe³, Xiuju Dai¹, Teruko Tsuda¹, Hideki Mori¹, Ken Shiraiishi¹, Masamoto Murakami¹, Shigeki Higashiyama^{4,5}, Yoichi Mizukami³, Koji Sayama¹
¹Department of Dermatology, Ehime University Graduate School of Medicine, Toon, Japan, ²Department of Biochemistry, School of Dentistry, Aichi Gakuin University, Nagoya, Japan, ³Institute of Gene Research, Yamaguchi University Science Research Center, Yamaguchi, Japan, ⁴Division of Cell Growth and Tumor Regulation, Proteo-Science Center, Ehime University, Toon, Japan, ⁵Department of Molecular and Cellular Biology, Osaka International Cancer Institute, Osaka, Japan
- P14-08 [O01-05] Antioxidant protein Peroxiredoxin 4 uniquely improved aging-related delayed wound healing in mice**
○ Reimon Yamaguchi^{1,2}, Xin Guo², Jianbo Zheng², Jing Zhang², Jia Han², Akihiro Shioya², Hidetaka Uramoto², Takashi Mochizuki¹, Akira Shimizu¹, Sohsuke Yamada²
¹The Department of Dermatology, Kanazawa Medical University, Ishikawa, Japan, ²The Department of Pathology and Laboratory Medicine, Kanazawa Medical University, Ishikawa, Japan, ³The Department of Thoracic Surgery, Kanazawa Medical University, Ishikawa, Japan
- P14-09 [O01-06] AMP-IBP5, an antimicrobial peptide derived from insulin-like growth factor-binding protein 5, promotes diabetic wound healing**
○ Hainan Yue^{1,2}, Yoshie Umehara², Juan Valentin Trujillo-Paez², Ge Peng^{1,2}, Hai Le Thanh Nguyen^{1,2}, Miho Takahashi^{1,2}, Risa Ikutama^{1,2}, Ko Okumura², Hideoki Ogawa², Shigaku Ikeda^{1,2}, Francois Niyonsaba^{2,3}
¹Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, ²Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University Graduate School of Medicine, Tokyo, Japan
- P14-10 [O01-07] Determination of host defense peptide inducers for their therapeutic use in diabetic foot ulcers**
○ Alan Santos¹, Bruno Rivas^{1,2}
¹Posgrado de Ciencias Químicas, Universidad Autonoma de San Luis Potosi, San Luis Potosi, Mexico, ²Unidad de Investigacion Biomedica de Zacatecas, Instituto Mexicano del Seguro Social, Zacatecas, Mexico
- P14-11 [O01-08] Effects of antimicrobial peptide human β -defensins on the expression of angiogenin in human dermal fibroblasts**
○ Yoshie Umehara¹, Miho Takahashi^{1,2}, Hainan Yue¹, Juan Valentin Trujillo-Paez¹, Ge Peng¹, Le Thanh Hai Nguyen¹, Risa Ikutama^{1,2}, Ko Okumura¹, Hideoki Ogawa², François Niyonsaba^{1,3}
¹Atopy (Allergy) Research Center, Juntendo University School of Medicine, Tokyo, Japan, ²Department of Dermatology and Allergology, Juntendo University School of Medicine, Tokyo, Japan, ³Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan

Category 15 (P15): Translational Studies

- P15-01 [O01-09] Spinal cholecystokinin 2 receptor is involved in induction of alopecia**
○ Mitsutoshi Tominaga¹, Kotaro Honda¹, Fumiya Kusube¹, Eriko Komiya¹, Masafumi Yokota¹, Masaru Kurosawa¹, Nobuaki Takahashi¹, Sumika Toyama¹, Yayoi Kamata¹, Mirei Fujita¹, Qiao Feng Zhao¹, Yasushi Suga², Hideoki Ogawa¹, Kenji Takamori^{1,2}
¹Juntendo Itch Research Center (IIRC), Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, ²Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- P15-02 [C03-01] Early-onset female pattern hair loss: a case-control study for analyzing clinical features and genetic variants**
○ Jungyeon Ohn^{1,2}, Ho-Young Son^{3,4}, Kyu Han Kim^{1,2}, Ohsang Kwon^{1,2,4}, Jong-Il Kim^{3,4}
¹Department of Dermatology, Seoul National University College of Medicine, Seoul, Republic of Korea, ²Institute of Human-Environment Interface Biology, Medial Research Center, Seoul National University, Seoul, Republic of Korea, ³Department of Biochemistry and Molecular Biology, Seoul National University College of Medicine, Seoul, Republic of Korea, ⁴Genomic Medicine Institute (GMI), Medical Research Center, Seoul National University, Seoul, Republic of Korea
- P15-03 [C09-01] A deep learning framework enables prompt and objective scoring of Nail Psoriasis Severity Index**
○ Hiroto Horikawa, Keiji Tanese, Ryoko Hosokawa, Julia Miyamoto, Kaori Murakami, Risa Kakuta, Hitomi Matsuzaki, Yuhei Kawashima, Masayuki Amagai, Masataka Saito
Department of Dermatology, Keio University School of Medicine, Tokyo, Japan
- P15-04 [O01-10] The effectivity of metformin solution as a melanogenesis inhibitor: A chromameter analysis on human**
○ Ivan Kurniadi¹, Asnawi Madjid¹, Farida Tabri¹, Arifin Seweng², Husaini Umar³, Firdaus Hamid⁴
¹Department of Dermatology and Venereology, Faculty of Medicine, Hasanuddin University, Makassar, South Sulawesi, Indonesia, ²Faculty of Public Health, Hasanuddin University, Makassar, South Sulawesi, Indonesia, ³Department of Internal Medicine, Faculty of Medicine, Hasanuddin University, Makassar, South Sulawesi, Indonesia, ⁴Department of Clinical Microbiology, Faculty of Medicine, Hasanuddin University, Makassar, South Sulawesi, Indonesia
- P15-05 [O01-11] Predicting regional Eczema Area and Severity Index from the images of atopic dermatitis using deep convolutional networks**
○ Yutaka Kawashima¹, Daiki Ito¹, Hiroto Horikawa², Ayano Nomura², Koichi Ashizaki^{2,3}, Hiroshi Kawasaki^{2,4}, Masayuki Amagai², Yoshimitsu Aoki¹
¹Department of Engineering, Keio University School, ²Department of Dermatology, Keio University School of Medicine, ³Advanced Data Science Project, Information R&D and Strategy Headquarters, RIKEN, ⁴Laboratory for Developmental Genetics, RIKEN Center for Integrative Medical Sciences

- P15-06 [O01-12] Serum biomarkers correlate with disease response in Moderate to Severe Atopic Dermatitis patients treated with baricitinib**
 ○ Takeshi Nakahara¹, Jonathan_T. Sims², Robert Bissonnette³, Stephanie Colvin², Jonathan Janes², Venkatesh Krishnan², Jason_R. Chan², Ferda Cevikbas²
¹Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, ²Eli Lilly and Company, ³Innovaderm

Late abstract submission

- L-01 Histone deacetylase 4 reverses cellular senescence via DDIT4 in dermal fibroblasts**
 Yuri Lee^{1,2,3}, Ji Hwan Park⁵, Hye Sun Shin^{1,2,3}, Mi Hee Shin^{1,3}, Min-Kyoung Kim^{1,3}, Daehee Hwang⁶, ○ Dong Hun Lee^{1,3}, Jin Ho Chung^{1,2,3,4}
¹Department of Dermatology, Seoul National University College of Medicine, Seoul, Republic of Korea, ²Department of Biomedical Sciences, Seoul National University Graduate School, Seoul, Republic of Korea, ³Institute of Human-Environment Interface Biology, Medical Research Center, Seoul National University, Seoul, Republic of Korea, ⁴Institute on Aging, Seoul National University, Seoul, Republic of Korea, ⁵Department of New Biology, DGIST, Daegu, Republic of Korea, ⁶Department of Biological Sciences, Seoul National University, Seoul, Republic of Korea
- L-02 Metabolic reprogramming defines myeloid cell function in skin repair**
 ○ Sebastian Willenborg¹, David E. Sanin², Alexander Jais¹, Xiaolei Ding¹, Milica Popović⁴, Edward J. Pearce², Jens C. Brüning³, Aleksandra Trifunovic⁴, Sabine A. Eming¹
¹Department of Dermatology, University of Cologne, Germany, ²Department of Immunometabolism, Max Planck Institute of Epigenetics and Immunobiology, Germany, ³Max Planck Institute for Metabolism Research, Germany, ⁴Institute for Mitochondrial Diseases and Ageing, Medical Faculty, University of Cologne, Germany
- L-03 Application of microdissection-based spatial transcriptomics for mechanistic and biomarker investigations in dermatology**
 ○ Tomohiro Miyai^{1,2}, Hiroshi Kawasaki^{2,3}, Masahito Hosokawa⁴, Hiroko Matsunaga⁴, Rumi Satoh¹, Aiko Sekita¹, Haruko Takeyama⁴, Masayuki Amagai^{2,3}, Haruhiko Koseki^{1,3}
¹Laboratory for Developmental Genetics, RIKEN IMS, ²Department of Dermatology, Keio University School of Medicine, ³Laboratory for Skin Homeostasis, RIKEN IMS, ⁴Research Organization for Nano & Life Innovation, Waseda University, ⁵Department of Cellular and Molecular Medicine, Chiba University School of Medicine
- L-04 Anti-staphylococcus aureus effect of the hot spring water via metal accumulation**
 ○ Duena Tie¹, Saeko Nakajima^{1,2}, Ichiro Nakagawa¹, Kenji Kabashima^{1,4}
¹Department of Dermatology, Kyoto University Faculty of Medicine, Kyoto University, Kyoto, Japan, ²Department of Drug Discovery for Inflammatory Skin Diseases, Kyoto University Graduate School of Medicine, Kyoto, Japan, ³Department of Microbiology, Graduate School of Medicine, Kyoto University, Kyoto, Japan, ⁴Singapore Immunology Network (SlGN) and Skin Research Institute of Singapore (SRIS), Agency for Science, Technology, and Research (A*STAR), Singapore
- L-05 Particulate matter triggers Th17 polarization in atopic dermatitis in association with increased pregnane X receptor signaling**
 ○ Ji Su Lee¹, Sunhyae Jang^{2,3,4}, Dong Hun Lee^{1,3,4}, Youngae Lee^{1,3,4}, Soyun Cho^{3,4,5}
¹Department of Dermatology, Seoul National University Hospital, Seoul, Korea, ²Laboratory of Cutaneous Aging and Hair Research, Clinical Research Institute, Seoul National University Hospital, Seoul, Republic of Korea, ³Institute of Dermatological Science, Medical Research Center, Seoul National University, Seoul, Korea, ⁴Department of Dermatology, College of Medicine, Seoul National University, Seoul, Republic of Korea, ⁵Department of Dermatology, Seoul National University Boramae Hospital, Seoul, Korea
- L-06 Bird's-eye viewing of dermatologists' research trends using a natural language processing approach: the contribution of Japanese researchers**
 ○ Yasushi Ogawa^{1,2}, Takeya Adachi^{3,4}, Jun Hirako⁵, Ryohei Sasano⁵, Masashi Akiyama²
¹Department of Advanced Medicine, Nagoya University Hospital, ²Department of Dermatology, Nagoya University Graduate School of Medicine, ³Keio Frontier Research & Education Collaborative Square (K-FRECS) at Tonomachi, Keio University, ⁴Department of Medical Regulatory Science, Kyoto Prefectural University of Medicine, Graduate School of Medical Science, ⁵Graduate School of Informatics, Nagoya University
- L-07 Expression of TAM receptors in melanoma of Korean patients**
 Min Young Lee², ○ Yoon Jin Choi¹, You Won Choi², Hae Young Choi¹, Ji Yeon Byun¹
¹Department of Dermatology, Ewha Womans University Mokdong Hospital, Seoul, Korea, ²Department of Dermatology, Ewha Womans University Seoul Hospital, Seoul, Korea
- L-08 Autophagy is a defense mechanism rescuing hair loss against particulate matter exposure**
 ○ Da-Ae Yu¹, Sunhyae Jang^{1,2,3}, Jungyoon Ohn^{1,2,3}, Tommy Sungjoo Hwang⁴, Kyu Han Kim^{1,2,3}, Ohsang Kwon^{1,2,3}
¹Department of Dermatology, Seoul National University College of Medicine, Seoul, Korea, ²Laboratory of Cutaneous Aging and Hair Research, Clinical Research Institute, Seoul National University Hospital, Seoul, Korea, ³Institute of Human Environment Interface Biology, Seoul National University College of Medicine, Seoul, Korea, ⁴Dr. Hwang's Hair-Hair Clinic, Seoul, Korea
- L-09 Skin Microbiome Analysis using Postally-Delivered Tape-Stripped Material for General Consumers**
 ○ Yutaka Shimokawa¹, Osamu Funatsu¹, Nozomi Kajihara¹, Fukashi Inoue², Sumiko Ohashi², Atsuko Asano², Itaru Dekio³
¹KINS RESEARCH, Tokyo, Japan, ²TAK-Circulator Corporation, Tokyo, Japan, ³Department of Dermatology, The Jikei University School of Medicine, Tokyo, Japan

L-10 Comprehensive morphological observation of epidermal Merkel cells in human skin

○ Moe Tsutsumi, Saito Sakaguchi, Kazuki Takagaki, Kentaro Kajiya
MIRAI Technology Institute, Shiseido Co., Ltd., Yokohama, Japan

L-11 Withdrawn

L-12 Evaluation of anti-pigmentation cassette to other anti-pigmentation ingredients

○ Thomas Mammone, Jaimie Jerome
The Estee Lauder Companies, Melville, New York

L-13 Unmet educational needs and clinical practice gaps in the management of generalized pustular psoriasis: Global insights from the front line

○ Yukari Okubo¹, Joyce Leman², Maja Mockenhaupt³, Juliana Nakano de Melo⁴, Ahmed Nassar⁵, Lee Yoong Wei⁶, Masahito Yasuda⁷, Ning Yu⁸, Ana Cristina Hernandez Daly⁹, Bruce Strober¹⁰

¹Tokyo Medical University, Tokyo, Japan, ²BMI Kings Park Hospital, Stirling, UK, ³Department of Dermatology, Medical Center - University of Freiburg, Freiburg, Germany, ⁴Santa Casa de São Paulo, São Paulo, Brazil, ⁵Ain Shams University, Cairo, Egypt, ⁶Hospital Sultanah Aminah, Johor, Malaysia, ⁷Gunma University Graduate School of Medicine, Gunma, Japan, ⁸Shanghai Dermatology Hospital and Tongji University School of Medicine, Shanghai, China, ⁹Boehringer Ingelheim International GmbH, Ingelheim, Germany, ¹⁰Yale University, New Haven, and Central Connecticut Dermatology Research, Cromwell, CT, USA