



# Timetable

1st Day, December 12, Friday, 2014					
	Room A	Room B	Room C	Poster Venue	Corporate Exhibition
	Orbit Hall	Izumi	Ginga	Seiun + Gekko	Foyer
8:00					
9:00	8:40-8:50 <b>Opening</b> 8:50-10:50 <b>Plenary Session I</b> 【I-1~I-8】 (K. Iwatsuki, S. W. Caughman, Y. Tokura)			8:30-12:00	9:00-18:00
10:00				<b>Mount Posters</b>	
11:00	10:55-12:31 <b>Immunology 1: Adaptive Immunity</b> 【C1-1~C1-8】 (K. Kabashima, N. Katoh, M. G. Lee)	10:55-12:31 <b>Carcinogenesis/Growth Factors/Signal Transduction/Cancer Genetics, Pigmentation and Melanoma, Immunology 2: Innate Immunity and Microbiology</b> 【C2-1~C2-8】 (M. Fujimoto, R. Abe)	10:55-12:31 <b>Human Clinical Research and Therapeutics</b> 【C3-1~C3-8】 (H. Asada, K. Yamasaki)		
12:00				12:00-18:00	
13:00	12:35-13:25 <b>Luncheon Seminar 1</b> (M. Fujimoto, M. Hasegawa) <i>NOV, Takiwa Pharmaceutical</i>	12:35-13:25 <b>Luncheon Seminar 2</b> (S. W. Caughman, M. Ohtsuki) <i>Novartis Pharma</i>	12:35-13:25 <b>Luncheon Seminar 3</b> (S. Shimada) <i>JANSEN PHARMACEUTICAL</i>		Bayer Yakuhin Candela JMEC KAKEN PHARMACEUTICAL KURABO INDUSTRIES NIPPON ZOKI PHARMACEUTICAL Skincure Labo
14:00	13:30-14:30 <b>15th Galderma Award Presentation Meeting and Ceremony</b> (M. Amagai, Y. Tokura)	15:00-15:05 <b>JSID Kisaragi Award</b> Presenter: M. Amagai			
15:00	14:30-15:00 <b>JSID Award Lecture</b> (M. Amagai)	15:05-15:25 <b>Award Ceremony</b> (M. Amagai) <b>JSID's Fellowship SHISEIDO Award</b> Presenter: S. Inomata			
	15:00-15:05 <b>JSID Kisaragi Award</b> 15:05-15:25 <b>Award Ceremony</b>	<b>Diploma of Dermatological Scientist</b> Presenter: M. Amagai			
	15:25-15:55 <b>Tanioku Kihei Memorial Lecture</b> A. M. Christiano (I. Katayama)	<b>JSID Honorary Membership</b> Presenter: M. Amagai			
16:00	16:00-17:00 <b>Autoimmunity/Inflammation 1</b> 【C4-1~C4-5】 (H. Ihn, T. Yamamoto)	16:00-17:00 <b>Hair and Cutaneous Development</b> 【C5-1~C5-5】 (Y. Asano, M. Ohyama)	16:00-17:00 <b>Photobiology, Epidemiology/Health Service Research, Tissue Regeneration</b> 【C6-1~C6-5】 (A. Morita, K. Sayama)		
17:00					
18:00	17:10-17:55 <b>Sweets Seminar 1</b> (Y. Kitajima) <i>LEO Pharma &amp; Kyowa Hakko Kirin</i>	17:10-17:55 <b>Sweets Seminar 2</b> (M. Picardo, H. Iizuka) <i>Mitsubishi Tanabe Pharma</i>	17:10-17:55 <b>Sweets Seminar 3</b> (S. Sano, M. Fujimoto) <i>JANSEN PHARMACEUTICAL</i>		
19:00				18:00-19:00	
				<b>Poster Discussion</b> 【Odd numbers】	
20:00	19:25-21:00 <b>Social Gathering (Buffet Party)</b>	<b>Award Ceremony</b> (M. Amagai) <b>SID/JSID Young Fellow Collegiality</b> Presenter: S. W. Caughman <b>ESDR/JSID Young Fellow Collegiality</b> Presenter: M. Picardo			

2nd Day, December 13, Saturday, 2014					3rd Day, December 14, Sunday, 2014	
Room A	Room B	Room C	Poster Venue	Corporate Exhibition	Room A	
Orbit Hall	Izumi	Ginga	Seiun+Gekko	Foyer	Orbit Hall	
8:00-8:50 <b>Morning Seminar 1</b> (K. Hashimoto, I. Katayama) <i>Maruho</i>						8:00
			8:30-13:20	8:30-15:00	8:05-8:55 <b>Morning Seminar 2</b> (K. Iwatsuki) <i>Kyowa Hakko Kirin</i>	
8:55-10:31 <b>Immunology 2: Innate Immunity and Microbiology</b> 【C7-1~C7-8】 (L. E. French, S. Aiba)	8:55-10:31 <b>Autoimmunity/ Inflammation, Cell Adhesion/Matrix/ Vascular Biology</b> 【C8-1~C8-8】 (M. Hide, S. Hirakawa)	8:55-10:31 <b>Pigmentation and Melanoma</b> 【C9-1~C9-8】 (E. Nishimura, T. Suzuki)			9:00-11:30 <b>JSID-Asia-Oceania-Forum</b> Epithelial barrier session Sachiko Tsukita Alpha S. Yap (A. Kowalczyk, A. Kubo)	9:00
10:35-12:20 <b>Plenary Session II</b> 【II-1~II-7】 (M. Amagai, M. Picardo, A. Pentland)			<b>Poster Presentation</b>	<i>Bayer Yakuhin</i> <i>Candela</i> <i>JMEC</i> <i>KAKEN PHARMACEUTICAL</i> <i>KURABO INDUSTRIES</i> <i>NIPPON ZOKI PHARMACEUTICAL</i> <i>Skincure Labo</i>	11:00-11:50 <b>Innovative imaging strategies</b> Masaru Ishii Sung-Jan Lin Kenji Kabashima (S. Sano, T. Kawamura)	10:00 11:00
12:25-13:15 <b>Luncheon Seminar 4</b> (J. C. Szepletowski, T. Shiohara) <i>Mitsubishi Tanabe Pharma</i>	12:25-13:15 <b>Luncheon Seminar 5</b> (H. Ogawa) <i>GlaxoSmithKline</i>	12:25-13:15 <b>Luncheon Seminar 6</b> (H. Yokozeki, H. Ihn) <i>AbbVie &amp; Eisai</i>			11:30-11:50 <b>Coffee break</b>	
			13:20-14:20		11:50-13:20 <b>JSID-Asia-Oceania-Forum</b> Cell biology, Stem cell and Physiology Akira Kikuchi Ai-Young Lee Hiroyuki Murota (S. C. Kim, K. Igawa)	12:00
			<b>Poster Discussion</b> 【Even numbers】		13:20-13:50 <b>ASDR Exchange Program</b>	13:00
14:30-15:54 <b>Autoimmunity/ Inflammation 2</b> 【C10-1~C10-7】 (R. Okuyama, H. Yokozeki)	14:30-15:54 <b>Epidermal Structure and Function</b> 【C11-1~C11-7】 (M. Akiyama, T. Kanekura)	14:30-15:54 <b>Genetic Disease/ Gene Regulation and Gene Therapy, Tissue Regeneration/Stem Cell and Wound Healing</b> 【C12-1~C12-7】 (A. Yamamoto, K. Tamai, A. Hovnanian)	14:20-15:00	<b>Remove Posters</b>	13:20-13:50 <b>ASDR Exchange Program</b> Wolfgang Weninger (M. Amagai, A. Enk)	14:00
						15:00
16:05-17:35 <b>Plenary Session III</b> 【III-1~III-6】 (I. Katayama, N. Reynolds, S. Shimada)						16:00
17:40-18:25 <b>Sweets Seminar 4</b> (F. Furukawa) <i>DAIICHI SANKYO &amp; UCB Japan</i>	17:40-18:25 <b>Sweets Seminar 5</b> (S. Aiba) <i>Sanofi</i>	17:40-18:25 <b>Sweets Seminar 6</b> (T. Suzuki) <i>KOWA PHARMACEUTICAL</i>				17:00
18:30-20:00 <b>Special Program for JAOF's eve President's Invited Lecture</b> S. Akira (I. Katayama)						18:00
						19:00
						20:00
20:05-21:30 <b>JSID-Asia-Oceania-Forum Social Gathering</b> Main building 4F Sansui All participants are welcomed. (If you will not attend the JSID-Asia-Oceania-Forum on Dec. 14th.)						

Chair : ( )

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## December 12, 2014, Room A

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### President address

8:40-8:50

### Plenary Session I

8:50-10:50

Chairs: Keiji Iwatsuki, S. Wrgiht Caughman, Yoshiki Tokura

**I-1**  
**[P08-01]**  
8:50-9:05

#### **A Cell Polarity Protein, aPKC $\lambda$ , is Essential for Maintaining Hair Follicle Stem Cell Quiescence and Hair Follicle Regeneration**

○Shin-Ichi Osada<sup>1</sup>, Naoko Minematsu<sup>1</sup>, Fumino Oda<sup>1</sup>, Kazunori Akimoto<sup>2</sup>, Seiji Kawana<sup>1</sup>, Shigeo Ohno<sup>2</sup>

<sup>1</sup>Department of Dermatology, Nippon Medical School, Tokyo, Japan, <sup>2</sup>Department of Molecular Biology, Yokohama City University Graduate School of Medical Science, Yokohama, Kanagawa, Japan

**I-2**  
**[P07-01]**  
9:05-9:20

#### **Generation of induced pluripotent stem cells from revertant keratinocytes**

○Noriko Umegaki<sup>1</sup>, Noriko Umegaki<sup>1,2</sup>, Anna M.G. Pasmooij<sup>4</sup>, Munenari Itoh<sup>1,5</sup>, Jane E. Cerise<sup>1</sup>, Zongyou Guo<sup>1</sup>, Brynn Levy<sup>6</sup>, Antoni Gostynski<sup>4</sup>, Lisa Chung-Rothman<sup>1</sup>, Marcel F. Jonkman<sup>4</sup>, Angela M. Christiano<sup>1,3</sup>

<sup>1</sup>Department of Dermatology, Columbia University, New York, NY, USA, <sup>2</sup>Department of Dermatology, Keio University, Tokyo, Japan, <sup>3</sup>Department of Genetics and Development, Columbia University, New York, USA, <sup>4</sup>Department of Dermatology, University of Groningen, University Medical Center Groningen, Groningen, Netherlands, <sup>5</sup>Department of Dermatology, Jikei University School of Medicine, Tokyo, Japan, <sup>6</sup>Department of Pathology & Cell Biology, Columbia University, New York, USA

**I-3**  
**[P09-01]**  
9:20-9:35

#### **Use of human induced pluripotent stem cell-derived CD271+CD90+ mesenchymal stem cells for the generation of hair inductive dermal cells**

○Ophelia Veraitch<sup>1,2</sup>, Yo Mabuchi<sup>3,4</sup>, Yumi Matsuzaki<sup>3,5</sup>, Takashi Sasaki<sup>1</sup>, Aki Tsukashima<sup>1</sup>, Masayuki Amagai<sup>1</sup>, Hideyuki Okano<sup>3</sup>, ○Manabu Ohyama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Keio University School of Medicine, <sup>2</sup>St John's Institute of Dermatology, St Thomas' Hospital, <sup>3</sup>Department of Physiology, Keio University School of Medicine, <sup>4</sup>Department of Biochemistry and Biophysics, Graduate School of Health Care Sciences, Tokyo Medical and Dental University, <sup>5</sup>Laboratory of Tumor Biology, Department of Life Sciences, Faculty of Medicine, Shimane University

**I-4**  
**[P08-02]**  
9:35-9:50

#### **HMGB1 accelerates skin regeneration by inducing bone marrow mesenchymal stromal cells**

○Eriko Aikawa<sup>1</sup>, Yuki Komurasaki<sup>1,3</sup>, Ryo Fujita<sup>2</sup>, Yasufumi Kaneda<sup>2</sup>, Ichiro Katayama<sup>3</sup>, Katsuto Tama<sup>2</sup>

<sup>1</sup>Department of Stem Cell Therapy Science Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>2</sup>Division of Gene Therapy Science, Graduate School of Medicine, Osaka University, Japan, <sup>3</sup>Department of Dermatology Course of Integrated Medicine Graduate School of Medicine, Osaka University, Japan

**I-5**  
**[P04-01]**  
9:50-10:05

#### **Topical rapamycin treatment is effective in hypopigmented macules of tuberous sclerosis**

○Fei Yang<sup>1</sup>, Mari Wataya-Kaneda<sup>1</sup>, Mari Tanaka<sup>1</sup>, Lingli Yang<sup>1</sup>, Daisuke Tsuruta<sup>2</sup>, Ichiro Katayama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, <sup>2</sup>Department of Dermatology, Osaka City University Graduate School of Medicine

**I-6**  
**[P04-02]**  
10:05-10:20

#### **Non-invasive three-dimensional diagnostic approach to extramammary Paget's disease by two-photon microscopy**

○Teruasa Murata, Tetsuya Honda, Kenji Kabashima

Department of Dermatology, Kyoto University, Kyoto, Japan

**I-7**  
**[P01-01]**  
10:20-10:35

#### **Epithelial Fli1 deletion induces fibrosis and autoimmunity with downregulation of AIRE - possible roles in systemic sclerosis pathogenesis**

○Takehiro Takahashi, Yoshihide Asano, Kouki Nakamura, Takashi Yamashita, Ryosuke Saigusa, Yohei Ichimura, Tetsuo Toyama, Takashi Taniguchi, Ayumi Yoshizaki, Shinichi Sato

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

**I-8**  
**[P01-02]**  
10:35-10:50

#### **The impact of IRF5 deficiency on fibrosis, vasculopathy, and immune abnormality in a bleomycin-treated murine model of systemic sclerosis**

○Ryosuke Saigusa<sup>1</sup>, Yoshihide Asano<sup>1</sup>, Takashi Taniguchi<sup>1</sup>, Yohei Ichimura<sup>1</sup>, Takehiro Takahashi<sup>1</sup>, Tetsuo Toyama<sup>1</sup>, Ayumi Yoshizaki<sup>1</sup>, Tadatsugu Taniguchi<sup>2</sup>, Shinichi Sato<sup>1</sup>

<sup>1</sup>Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Molecular Immunology, Institute of Industrial Science, University of Tokyo, Tokyo, Japan

## Concurrent Oral Session 1 (Immunology 1: Adaptive Immunity)

10:55-12:31

Chairs: Kenji Kabashima, Norito Katoh, Min Geol Lee

- C01-01 [P10-04]**  
10:55-11:07  
**Local cortisol activation by 11 $\beta$ -hydroxysteroid dehydrogenase 1 in keratinocytes down regulates skin inflammation**  
oMika Terao, Saori Itoi, Shun Kitaba, Hiroyuki Murota, Ichiro Katayama  
Department of Dermatology, Osaka University Graduate School of Medicine
- C01-02 [P10-05]**  
11:07-11:19  
**Blockade for CD155-TIGIT interaction elicits anti-melanoma T cell responses in vitro and in vivo**  
oTakashi Inozume<sup>1</sup>, Tomonori Yaguchi<sup>2</sup>, Junpei Furuta<sup>1</sup>, Mamoru Itoh<sup>3</sup>, Yutaka Kawakami<sup>2</sup>, Shinji Shimada<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Yamanashi, Yamanashi, Japan, <sup>2</sup>Division of Cellular Signaling, Institute for Advanced Medical Research, Keio University School of Medicine, <sup>3</sup>Central Institute for Experimental Animals
- C01-03 [P10-06]**  
11:19-11:31  
**Aquaporin-9-expressing neutrophils are required for the establishment of contact hypersensitivity**  
oCatharina Sagita Moniaga, Mariko Hara-Chikuma  
Center for Innovation in Immunoregulative Technology and Therapeutics Graduate School of Medicine Kyoto University
- C01-04 [P10-07]**  
11:31-11:43  
**The possible mechanisms of the recruitment of Tregs in the lesional skin of extramammary Paget's disease by RANKL/ RANK pathways**  
oTaku Fujimura, Yumi Kambayashi, Sadanori Furudate, Masayuki Asano, Aya Kakizaki, Setsuya Aiba  
Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan
- C01-05 [P10-08]**  
11:43-11:55  
**Interaction of adhesion molecules of keratinocytes and Langerhans cells in the epidermis in contact hypersensitivity**  
oAkiko Nishibu, Takashi Mochizuki  
The Department of Dermatology, Kanazawa Medical University
- C01-06 [P10-09]**  
11:55-12:07  
**Skin controls maintenance of thymus-derived Foxp3<sup>+</sup> regulatory cells in the periphery through ultraviolet B exposure**  
oSayuri Yamazaki<sup>1</sup>, Akiko Nishioka<sup>1</sup>, Saori Kasuya<sup>1</sup>, Naganari Ohkura<sup>2</sup>, Hiroaki Hemmi<sup>3</sup>, Tsuneyasu Kaisho<sup>3,4</sup>, Osamu Taguchi<sup>1</sup>, Shimon Sakaguchi<sup>2</sup>, Akimichi Morita<sup>1</sup>  
<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, <sup>2</sup>Department of Experimental Immunology, World Premier International Research Center Initiative, Immunology Frontier Research Center, Osaka University, Osaka, <sup>3</sup>Laboratory for Immune Regulation, World Premier International Research Center Initiative, Immunology Frontier Research Center, Osaka University, Osaka, <sup>4</sup>Laboratory for Inflammatory Regulation, RIKEN Center for Integrative Medical Sciences, IMS-RCAI, Yokohama
- C01-07 [P10-10]**  
12:07-12:19  
**TSLPR expressing CD4<sup>+</sup> T cells produce enhanced IL-4 by directly responding to TSLP in AD**  
oKazuki Tatsuno, Toshiharu Fujiyama, Hayato Yamaguchi, Michihiko Waki, Yoshiki Tokura  
Hamamatsu University School of Medicine
- C01-08 [P10-02]**  
12:19-12:31  
**Skin-infiltrating CD4<sup>+</sup> lymphoma cells depend on hair follicle-derived IL-7**  
oTakeya Adachi<sup>1</sup>, Tetsuro Kobayashi<sup>1</sup>, Eiji Sugihara<sup>2</sup>, Keitaro Fukuda<sup>1,2</sup>, Manabu Ohyama<sup>1</sup>, Hideyuki Saya<sup>2</sup>, Taketo Yamada<sup>3</sup>, Masayuki Amagai<sup>1</sup>, Keisuke Nagao<sup>1,4</sup>  
<sup>1</sup>Department of Dermatology, Keio University School of Medicine, <sup>2</sup>Division of Gene Regulation, Institute for Advanced Medical Research, Keio University School of Medicine, <sup>3</sup>Department of Pathology, Keio University School of Medicine, <sup>4</sup>Dermatology Branch, National Cancer Institute, Center for Cancer Research, National Institutes of Health

## Luncheon Seminar 1 "Cutaneous immunity and percutaneous sensitization"

12:35-13:25

Chairs: Manabu Fujimoto, Minoru Hasegawa

- LS1-1**  
**T-cell subsets in skin diseases**  
Makoto Sugaya  
Department of Dermatology, Faculty of Medicine, University of Tokyo, Tokyo, Japan
- LS1-2**  
**Cutaneous sensitization to environmental allergens and development of food allergy**  
Eishin Morita  
Department of Dermatology, Shimane University Faculty of Medicine, Shimane, Japan

Co-sponsored by NOV, Tokiwa Pharmaceutical Co., Ltd.

## 15th Galderma Award Presentation Meeting and Ceremony

13:30-14:30

Chairs: Masayuki Amagai, Yoshiki Tokura

- GAW1**      **Basophils are required for the induction of Th2 immunity to haptens and peptide antigens.**  
Atsushi Otsuka  
Department of Dermatology, Zurich University Hospital
- GAW2**      **Skin-specific expression of IL-33 activates group 2 innate lymphoid cells and elicits atopic dermatitis-like inflammation in mice**  
Yasutomo Imai  
Department of Dermatology, Medical College of Wisconsin, Milwaukee, WI, USA  
Department of Dermatology, Hyogo College of Medicine, Hyogo, Japan
- GAW3**      **Antimicrobial Peptide LL-37 Produced by HSV-2-Infected Keratinocytes Enhances HIV Infection of Langerhans Cells**  
Yoichi Ogawa  
Department of Dermatology, Faculty of Medicine, University of Yamanashi, Japan

Co-sponsored by GALDERMA

### JSID Award Lecture

14:30-15:00

Chair and Presenter: Masayuki Amagai

**The roles of Langerhans cells in Acrodermatitis enteropathica and HIV infection**

Tatsuyoshi Kawamura  
Department of Dermatology, University of Yamanashi

### JSID Kisaragi Award

15:00-15:05

Presenter: Masayuki Amagai

**Cross-talk of hair follicles with T cells in skin**

Takeya Adachi  
Department of Dermatology, Keio University School of Medicine

### Award Ceremony

Chair: Masayuki Amagai

15:05-15:25

### JSID's Fellowship SHISEIDO Award

Presenter: Shinji Inomata

**Molecular cues for asymmetric cell division in epidermis**

Teruki Dainichi  
Department of Dermatology, Kyoto University

**Investigation of the activation mechanism of autoreactive B cells in pemphigus**

Jun Yamagami  
Department of Dermatology, Keio University School of Medicine

**The role of Resolvin E1, a lipid mediator derived from  $\omega$ -3 polyunsaturated fatty acid, in cutaneous immune system**

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

**Comprehensive analysis of long non-coding RNAs in keratinization**

Toshifumi Nomura  
Department of Dermatology, Hokkaido University Graduate School of Medicine

## Diploma of Dermatological Scientist

Presenter: Masayuki Amagai

Xue Chen, Department of Dermatology, Peking University People's Hospital  
Chanisa Kiatsurayanon, Department of Dermatology, Juntendo University Graduate School of Medicine  
Kwesi Teye, Kurume University, Institute of Cutaneous Cell Biology  
Ophelia Kaur Veraitch, St John's Institute of Dermatology, St Thomas' Hospital  
Nguyen The Toan, Quyhoa National Leprosy Dermatology Hospital

## JSID Honorary Membership

Presenter: Masayuki Amagai

### Tanioku Kihei Memorial Lecture

15:25-15:55

Chair: Ichiro Katayama

#### Genetics and Immunology of alopecia areata

Angela M. Christiano  
Depts of Dermatology and Genetics and Development, Columbia University, NY

## Concurrent Oral Session 4 (Autoimmunity/Inflammation 1)

16:00-17:00

Chairs: Hironobu Ihn, Toshiyuki Yamamoto

**C04-01**  
**[P01-04]**  
16:00-16:12

#### **Myeloid Fli1 deficiency induces tissue fibrosis, vasculopathy, and immune abnormalities recapitulating systemic sclerosis**

oTakashi Taniguchi<sup>1</sup>, Yoshihide Asano<sup>1</sup>, Kaname Akamata<sup>1</sup>, Shinji Noda<sup>1</sup>, Takehiro Takahashi<sup>1</sup>, Yohei Ichimura<sup>1</sup>, Tetsuo Toyama<sup>1</sup>, Ryosuke Saigusa<sup>1</sup>, Ayumi Yoshizaki<sup>1</sup>, Maria Trojanowska<sup>2</sup>, Shinichi Sato<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Tokyo Graduate School of Medicine, <sup>2</sup>Arthritis Center, Boston University

**C04-02**  
**[P01-08]**  
16:12-16:24

#### **Hypoxia inducible factor-1 $\alpha$ of Langerhans cell plays a critical role in a murine irritant dermatitis model**

oSaeko Nakajima<sup>1</sup>, Catharina Moniaga<sup>2</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, <sup>2</sup>Center for Innovation in Immunoregulative Technology and Therapeutics, Kyoto University Graduate School of Medicine

**C04-03**  
**[P01-11]**  
16:24-16:36

#### **Identification of disease-specific molecules in the skin of dermatomyositis and lupus erythematosus by proteomics analysis using LC-MS/MS**

oKayo Nakamura, Masatoshi Jinnin, Satoshi Fukushima, Hironobu Ihn  
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan

**C04-04**  
**[P01-17]**  
16:36-16:48

#### **Role of mast cells in the development and maintenance of lupus-like skin lesions on MRL-lpr/lpr mice**

oYutaka Inaba<sup>1,2</sup>, Takashi Yoshimasu<sup>1,2</sup>, Nobuo Kanazawa<sup>1</sup>, Fukumi Furukawa<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Wakayama Medical University, <sup>2</sup>Department of Dermatology, Arida Municipal Hospital

**C04-05**  
**[P01-14]**  
16:48-17:00

#### **IRF7 controls the production of autoantibodies against the DNA- and RNA-containing autoantigens in murine lupus**

oFumi Miyagawa, Hideo Asada  
Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan

## Sweets Seminar 1 "The mechanism of new topical treatment for psoriasis"

17:10-17:55

Chair: Yasuo Kitajima

**SS1**      **Biological rationale for the synergistic effect of the fixed combination of vitamin D and steroid for treating psoriasis**

Siegfried Segaert  
Dermatology Dept, University Hospital Leuven, Belgium

Co-sponsored by LEO Pharma K.K. / Kyowa Hakko Kirin Co., Ltd.

## Social Gathering

19:25-21:00

Chair: Masayuki Amagai

## Award Ceremony

### SID/JSID Young Fellow Collegiality Award

Presenter: Wright Caughman

Nicole Najor, Northwestern University  
Kyungho Park, University of California  
Sara Stahley, Emory University  
Rajesh Thangapazham, Uniformed Services University of the Health Sciences

### ESDR/JSID Young Fellow Collegiality Award

Presenter: Mauro Picardo

Roman Huber, University of Zurich Switzerland

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## December 12, 2014, Room B

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### Concurrent Oral Session 2 (Carcinogenesis/Growth Factors/Signal Transduction/Cancer Genetics, Pigmentation and Melanoma, Immunology 2: Innate Immunity and Microbiology)

10:55-12:31

Chairs: Manabu Fujimoto, Riichiro Abe

- C02-01  
[P02-02]**  
10:55-11:07  
**Epigenetic regulation of E-cadherin in the reprogramming gene-introduced cancer cells**  
○Mikiro Takaishi<sup>1</sup>, Masahito Tarutani<sup>1</sup>, Junji Takeda<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan, <sup>2</sup>Department of Social and Environmental Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan
- C02-02  
[P02-03]**  
11:07-11:19  
**Endoplasmic reticulum stress-induced keratinocyte necrosis is a new mechanism of epidermal cell death in SJS/TEN**  
○Mikiko Tohyama, Xiuju Dai, Ken Shiraishi, Masamoto Murakami, Koji Sayama  
Department of Dermatology, Ehime University Graduate School of Medicine
- C02-03  
[P02-05]**  
11:19-11:31  
**Role of endothelin-1/endothelin receptor signaling in fibrosis and calcification in nephrogenic systemic fibrosis**  
○Sei-ichiro Motegi<sup>1</sup>, Akihiko Uchiyama<sup>1</sup>, Kazuya Yamada<sup>1</sup>, Buddhini Perera<sup>1</sup>, Sachiko Ogino<sup>1</sup>, Yoko Yokoyama<sup>1</sup>, Yuko Takeuchi<sup>1</sup>, Fumiko Sato<sup>2</sup>, Tamio Suzuki<sup>2</sup>, Osamu Ishikawa<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, <sup>2</sup>Department of Dermatology, Faculty of Medicine, Yamagata University, Yamagata, Japan
- C02-04  
[P02-06]**  
11:31-11:43  
**Injury promotes melanoma metastasis via wound healing process with periostin**  
○Keitaro Fukuda<sup>1,2</sup>, Eiji Sugihara<sup>2</sup>, Shoichiro Ohta<sup>3</sup>, Kenji Izuhara<sup>4</sup>, Masayuki Amagai<sup>1</sup>, Hideyuki Saya<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, <sup>2</sup>Division of Gene Regulation, Institute for Advanced Medical Research, Keio University School of Medicine, Tokyo, Japan, <sup>3</sup>Department of Laboratory Medicine, Saga Medical School, Saga, Japan, <sup>4</sup>Division of Medical Biochemistry, Department of Biomolecular Sciences, Saga Medical School, Saga, Japan
- C02-05  
[P02-09]**  
11:43-11:55  
**Acantholytic variants of SCC are related to the frequent local recurrence and mostly caused by the internalization of desmosomal proteins**  
○Ryoko Awazawa, Daisuke Utsumi, Yoshiyuki Kariya, Hiroshi Uezato, Kenzo Takahashi  
Department of Dermatology, University of the Ryukyus, Okinawa, Japan
- C02-06  
[P02-10]**  
11:55-12:07  
**Aberrant expression of chemokine receptors in lymphoma cells through flow cytometry-based segregation in patients with mycosis fungoides**  
○Mika Teraishi<sup>1</sup>, Hideki Nakajima<sup>1</sup>, Sayo Kataoka<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Nankoku, Japan, <sup>2</sup>Science Research Center, Kochi University, Nankoku, Japan
- C02-07  
[P13-12]**  
12:07-12:19  
**High-mobility-group-Box1 (HMGB1) promotes melanoma progression through the recruitment of M2 macrophages**  
○Roman Huber, Atsushi Otsuka, Barbara Meier, Daniel Widmer, Takashi Satoh, Gabriele Fenini, Johanna Mangana, Tatiana Proust, Reinhard Dummer, Emmanuel Contassot, Lars E. French  
Department of Dermatology, University Hospital Zurich, Zurich, Switzerland
- C02-08  
[P11-11]**  
12:19-12:31  
**M2 macrophages and innate lymphoid type 2 cells promote metastasis in malignant melanoma via IL-1β-driven thymic stromal lymphopoietin**  
○Atsushi Otsuka, Reinhard Dummer, Emmanuel Contassot, Lars E French  
Devision of Dermatology, University Hospital Zurich , Switzerland



## Luncheon Seminar 2

### "Psoriasis: Systemic therapy in the era of biological drug"

12:35-13:25

Chairs: S. Wrgiht Caughman, Mamitaro Ohtsuki

**LS2-1 The strategies of psoriasis treatments from the viewpoint of patients' lifestyle in the era of biologics.**

Kenshi Yamasaki  
Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan

**LS2-2 Cyclosporine for psoriasis**

Hideki Fujita  
Department of Dermatology, Nihon University

Co-sponsored by Novartis Pharma K.K.

## Concurrent Oral Session 5 (Hair and Cutaneous Development)

16:00-17:00

Chairs: Yoshihide Asano, Manabu Ohyama

**C05-01 Molecular cues for asymmetric cell division in epidermis**

[P09-02][SE]  
16:00-16:12

oTeruki Dainichi<sup>1,2</sup>, Matthew S. Hayden<sup>2,3</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>, Sankar Ghosh<sup>2</sup>

<sup>1</sup>Department of Dermatology, Kyoto University, Kyoto, Japan, <sup>2</sup>Department of Microbiology & Immunology, Columbia University College of Physicians & Surgeons, New York, NY, United States, <sup>3</sup>Department of Dermatology, Columbia University College of Physicians & Surgeons, New York, NY, United States

**C05-02 Mesenchymal cell specific deletion of *Tsc2* regulates hair follicle development and patterning**

[P09-03]  
16:12-16:24

oRajesh Thangapazham<sup>1</sup>, Peter Klover<sup>1</sup>, Neera Nathan<sup>1,2</sup>, Ji-an Wang<sup>1</sup>, Jiro Kato<sup>2</sup>, Shaowei Li<sup>1</sup>, Joel Moss<sup>2</sup>, Thomas Darling<sup>1</sup>

<sup>1</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, USA, <sup>2</sup>Cardiovascular and Pulmonary Branch, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD

**C05-03 *PVRL1* and *PVRL4*, of which mutations cause ectodermal dysplasia syndromes, are potential direct target genes of p63**

[P09-04]  
16:24-16:36

oRyota Hayashi<sup>1,2</sup>, Masaaki Ito<sup>1</sup>, Yutaka Shimomura<sup>2</sup>

<sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, <sup>2</sup>Laboratory of Genetic Skin Diseases, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

**C05-04 Localized EGFL6 regulates the architecture and location of sensory terminals in the hair follicle**

[P09-05]  
16:36-16:48

Chun-Chun Cheng<sup>1</sup>, Fiona Watt<sup>2</sup>, oHironobu Fujiwara<sup>1</sup>

<sup>1</sup>RIKEN CDB, <sup>2</sup>King's College London, UK

**C05-05 *BNIP3* plays crucial roles in the differentiation and maintenance of epidermal keratinocytes**

[P09-06]  
16:48-17:00

Mariko Moriyama, oJunki Uda, Hiroyuki Moriyama, Takao Hayakawa

Pharmaceutical and Technology Institute, Kindai University, Osaka, Japan

## Sweets Seminar 2

### "Outcome assessment of anti-cytokine therapy in psoriasis patients"

17:10-17:55

Chairs: Mauro Picardo, Hajime Iizuka

**SS2-1 Effective treatments of psoriatic arthritis by anti-TNF-alpha drugs evaluated by magnetic resonance imaging**

Hidehisa Saeki  
Department of Dermatology, Nippon Medical School, Tokyo, Japan

**SS2-2 Psoriasis: anti-cytokine therapy and pathogenesis**

Mayumi Komine  
Department of Dermatology, Jichi Medical University

Co-sponsored by Mitsubishi Tanabe Pharma Corporation

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## December 12, 2014, Room C

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### Concurrent Oral Session 3 (Human Clinical Research and Therapeutics)

10:55-12:31

Chairs: Hideo Asada, Kenshi Yamasaki

- C03-01  
[P04-03]**  
10:55-11:07  
**Detection of subclinical enthesitis as a potential predictor of psoriatic arthritis in Japanese psoriasis patients**  
○Tomoya Takata<sup>1</sup>, Aya Takahashi<sup>1</sup>, Yoshinori Taniguchi<sup>2</sup>, Yoshio Terada<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan, <sup>2</sup>Department of Endocrinology, Metabolism and Nephrology, Kochi Medical School, Kochi University
- C03-02  
[P04-04]**  
11:07-11:19  
**Effect of topical steroid on the stratum corneum compositions by using confocal Raman microscopy**  
○Hideaki Tanizaki, Wataru Amano, Pawinee Rerknimitr, Yoshiki Miyachi, Kenji Kabashima  
Kyoto University Graduate School of Medicine, Kyoto, Japan
- C03-03  
[P04-05]**  
11:19-11:31  
**Detection of IFN- $\alpha$  response induced by plasmacytoid dendritic cells via LL37 in the lesional skin of drug-induced hypersensitivity syndrome**  
○Pawinee Rerknimitr, Saeko Nakajima, Akihiko Kitoh, Yoshiki Miyachi, Kenji Kabashima  
Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- C03-04  
[P04-06]**  
11:31-11:43  
**High titer of anti-phosphatidylserine-prothrombin complex antibodies in patients and model rats with rheumatoid vasculitis**  
○Tamihiko Kawakami<sup>1</sup>, Sora Takeuchi<sup>1</sup>, Yoshinao Soma<sup>1</sup>, Ai Kawakami<sup>2</sup>, Utano Tomaru<sup>3</sup>, Akihiro Ishizu<sup>4</sup>  
<sup>1</sup>Department of Dermatology, St. Marianna University School of Medicine, Kawasaki, Japan, <sup>2</sup>Graduate School of Health Sciences, Hokkaido University, Sapporo, Japan, <sup>3</sup>Department of Pathology, Hokkaido University Graduate School of Medicine, Sapporo, Japan, <sup>4</sup>Faculty of Health Sciences, Hokkaido University, Sapporo, Japan
- C03-05  
[P04-07]**  
11:43-11:55  
**The expression of CADM1/TSLC1 in leukemic cutaneous T-cell lymphoma: a possible diagnostic marker for Sézary syndrome**  
○Mari Yamaguchi<sup>1</sup>, Toshihisa Hamada<sup>1</sup>, Masahide Imada<sup>2</sup>, Toshiyuki Watanabe<sup>2</sup>, Ken Okada<sup>2</sup>, Keiji Iwatsuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan, <sup>2</sup>Division of medical support of Okayama university hospital, Okayama, Japan
- C03-06  
[P04-08]**  
11:55-12:07  
**The serum levels of squamous cell carcinoma antigens 1 and 2 are associated with severity and clinical types of atopic dermatitis**  
○Tomoko Okawa<sup>1</sup>, Yukie Yamaguchi<sup>1</sup>, Kevin Kou<sup>1</sup>, Junya Ono<sup>2</sup>, Yusuke Inoue<sup>1</sup>, Masumi Kohno<sup>3</sup>, Setsuko Matsukura<sup>3</sup>, Takeshi Kambara<sup>3</sup>, Shoichiro Ohta<sup>4</sup>, Kenji Izuhara<sup>5</sup>, Michiko Aihara<sup>1</sup>  
<sup>1</sup>Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan, <sup>2</sup>Shino-Test Corporation, Sagami-hara, Japan, <sup>3</sup>Department of Dermatology, Yokohama City University Medical Center, Yokohama, Japan, <sup>4</sup>Department of Laboratory Medicine, Saga Medical School, Saga, Japan, <sup>5</sup>Division of Medical Biochemistry, Department of Biomolecular Sciences, Saga Medical School, Saga, Japan
- C03-07  
[P04-09]**  
12:07-12:19  
**Elevated IL-10 levels are associated with beneficial responses to plasmapheresis while predicting progression to cytomegalovirus disease**  
○Yumi Aoyama<sup>1</sup>, Shin Morizane<sup>1</sup>, Toshihisa Hamada<sup>1</sup>, Tetsuo Shiohara<sup>2</sup>, Keiji Iwatsuki<sup>1</sup>  
<sup>1</sup>Dermatology, Okayama University, Okayama, Japan, <sup>2</sup>Dermatology, Kyorin University, Mitaka city, Tokyo, Japan
- C03-08  
[P04-10]**  
12:19-12:31  
**Secukinumab Treatment Rapidly Leads to Positive Proteomic and Transcriptional Changes in Psoriatic Skin**  
○Frank Kolbinger<sup>1</sup>, Gerardus Bruin<sup>1</sup>, Marie-Anne Valentin<sup>1</sup>, Thomas Peters<sup>1</sup>, Edward Khokhlovich<sup>1</sup>, Xiuyun Jiang<sup>1</sup>, Irina Koroleva<sup>1</sup>, David Lee<sup>1</sup>, Frank Sinner<sup>2</sup>, Thomas Pieber<sup>2</sup>, Christian Dragatin<sup>2</sup>, Manfred Bodenlenz<sup>2</sup>, Christian Loesche<sup>1</sup>  
<sup>1</sup>Novartis Institutes for BioMedical Research, Basel, Switzerland, <sup>2</sup>HEALTH - Institute for Biomedicine and Health Sciences of the Joanneum Research Forschungsgesellschaft mbH, Graz, Austria

### Luncheon Seminar 3

### "Pathogenic mechanism of psoriasis obtained from treatment with Ustekinumab"

12:35-13:25

Chair: Shinji Shimada

- LS3**  
**Pathogenesis, biologic therapies and biomarker monitoring of psoriasis**  
Yoshiki Tokura  
Department of Dermatology, Hamamatsu University School of Medicine

Co-sponsored by JANSSEN PHARMACEUTICAL K.K.

## Concurrent Oral Session 6 (Photobiology, Epidemiology/Health Service Research, Tissue Regeneration)

16:00-17:00

Chairs: Akimichi Morita, Koji Sayama

**C06-01**  
**[P12-04]**  
16:00-16:12

**NER assay based on flow cytometry of pyrimidine dimer immunocytochemistry: comparison with unscheduled DNA synthesis using autoradiography**

oEiji Nakano, Seiji Takeuchi, Ryusuke Ono, Taro Masaki, Chikako Nishigori

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

**C06-02**  
**[P12-02]**  
16:12-16:24

**Irradiation by excimer lamp induces intraepidermal nerve degeneration and inhibits itch-related behavior in a dry-skin mouse model**

oAtsuko Kamo<sup>1,2</sup>, Mitsutoshi Tominaga<sup>1</sup>, Yayoi Kamata<sup>1</sup>, Kazuyuki Kaneda<sup>3</sup>, Kyi C Ko<sup>1</sup>, Hironori Matsuda<sup>1</sup>, Utako Kimura<sup>4</sup>, Kenji Takamori<sup>4</sup>

<sup>1</sup>Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, <sup>2</sup>Department of Nursing, School of Health Sciences, Tokai University, <sup>3</sup>Ushio Inc., <sup>4</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Japan

**C06-03**  
**[P12-03]**

**Withdrawn**

**C06-04**  
**[P06-01]**  
16:24-16:36

**Risk of incident chronic kidney disease and end-stage renal disease in people with psoriasis: a nationwide population-based cohort study**

oChing-Chi Chi<sup>1,2</sup>, Jui Wang<sup>3</sup>, Yu-Fen Chen<sup>4</sup>, Shu-Hui Wang<sup>5</sup>, Tao-Hsin Tung<sup>6</sup>

<sup>1</sup>Department of Dermatology and Centre for Evidence-Based Medicine, Chang Gung Memorial Hospital, Chiayi, Taiwan, <sup>2</sup>College of Medicine, Chang Gung University, Taoyuan, Taiwan, <sup>3</sup>Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taipei, Taiwan, <sup>4</sup>Department of Health, Taipei City Government, Taipei, Taiwan, <sup>5</sup>Department of Dermatology, Far Eastern Memorial Hospital, New Taipei, Taiwan, <sup>6</sup>Department of Medical Research and Education, Cheng Hsin General Hospital, Taipei, Taiwan

**C06-05**  
**[P08-06]**  
16:36-16:48

**The Role of Nestin-Expressing Cells During Whisker Sensory-Nerves Extention In Long-Term 3D Culture and In Vivo**

oSumiyuki Mii<sup>1,2,3</sup>, Jennifer Duong<sup>2</sup>, Yasunori Tome<sup>2</sup>, Aisada Uchugonova<sup>2,4</sup>, Fang Liu<sup>2,5</sup>, Benjamin Tran<sup>2</sup>, Kensei Katsuoka<sup>1</sup>, Yasuyuki Amoh<sup>1</sup>, Robert M. Hoffman<sup>2,3</sup>

<sup>1</sup>Department of Dermatology Kitasato University School of Medicine, <sup>2</sup>Anti Cancer Inc, <sup>3</sup>Department of Surgery University of California, <sup>4</sup>Department of Biophotonics and Laser Technology Saarland University, <sup>5</sup>Department of Anatomy Second Military Medical University

## Sweets Seminar 3

### "Update on pathogenic mechanism of psoriasis"

17:10-17:55

Chairs: Shigetoshi Sano, Manabu Fujimoto

**SS3-1**

**Central role of IL-23/Th17 pathway in the pathogenesis and treatment of psoriasis**

Hideki Fujita

Department of Dermatology, Nihon University

**SS3-2**

**Update on genetics of psoriasis**

Tomotaka Mabuchi

Department of Dermatology, Tokai University School of Medicine, Kanagawa, Japan

Co-sponsored by JANSSEN PHARMACEUTICAL K.K.

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## December 13, 2014, Room A

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### Morning Seminar 1

## "Atopic dermatitis: Historical perspectives and recent advances"

8:00-8:50

Chairs: Koji Hashimoto, Ichiro Katayama

**MS1-1 Exacerbating factors beyond filaggrin**

Naotomo Kambe

Department of Dermatology, Chiba University Graduate School of Medicine, Chiba, Japan

**MS1-2 Historical background of Atopic dermatitis**

Kiyoshi Nishioka

Tokyo Medical and Dental University

Co-sponsored by Maruho Co., Ltd.

### Concurrent Oral Session 7

## (Immunology 2: Innate Immunity and Microbiology)

8:55-10:31

Chairs: Lars E French, Setsuya Aiba

**C07-01 Atopic dermatitis susceptible gene NLRP10 suppresses inflammatory reaction and NLRP10 SNP mutation down-regulates NLRP10 expression**

[P11-03]

8:55-9:07

oMasashi Miyai<sup>1</sup>, Mami Yamamoto-Tanaka<sup>1,2</sup>, Kaori Inoue<sup>1</sup>, Ryoji Tsuboi<sup>2</sup>, Toshihiko Hibino<sup>1</sup><sup>1</sup>Shiseido Research Center, Yokohama, Japan, <sup>2</sup>Department of Dermatology, Tokyo Medical University, Tokyo, Japan

**C07-02 Two Ceramide Metabolites, sphingosine-1-phosphate and ceramide-1-phosphate signal to stimulate Innate Immunity through Independent-mechanisms**

[P11-04]

9:07-9:19

oYoshikazu Uchida<sup>1</sup>, Young-Il Kim<sup>1</sup>, Ho Seong Seo<sup>2</sup>, Jong Youl Kim<sup>3</sup>, Kyoung-Oh Shin<sup>4</sup>, Yong-Moon Lee<sup>4</sup>, Walter M. Holleran<sup>1</sup>, Peter M. Elias<sup>1</sup>, Kyungho Park<sup>1</sup><sup>1</sup>Department of Dermatology, University of California, San Francisco, USA, <sup>2</sup>Radiation Research Division, Korea Atomic Energy Research Institute, Jeongseup, Republic of Korea, <sup>3</sup>Department of Endocrinology, Veterans Affairs Medical Center, San Francisco, USA, <sup>4</sup>College of Pharmacy, Chungbuk National University, Cheongju, Republic of Korea

**C07-03 High fat diet contributes to cutaneous IL-17 producing gamma delta T cell recruitment and exacerbates imiquimod-induced psoriatic dermatitis**

[P11-05]

9:19-9:31

oSatoshi Nakamizo, Gyohei Egawa, Yoshiki Miyachi, Kenji Kabashima

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

**C07-04 Innate immune activation through ITAM-Syk-CARD9 signaling is essential for the sensitization of contact hypersensitivity**

[P11-06]

9:31-9:43

oShinsuke Yasukawa<sup>1,2,3</sup>, Masutaka Furue<sup>1</sup>, Hiroki Yoshida<sup>2</sup>, Hiromitsu Hara<sup>2</sup><sup>1</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, <sup>2</sup>Department of Biomolecular Sciences, Saga Medical School, Saga, Japan, <sup>3</sup>Department of Dermatology, Steel Memorial Yawata Hospital, Fukuoka, Japan

**C07-05 Induction of the steroid synthesis by the innate immune system in human keratinocytes**

[P11-07]

9:43-9:55

oRyoko Shimada-Omori, Kenshi Yamasaki, Saaya Koike, Na Li, Setsuya Aiba

Department of Dermatology Tohoku University Graduate School of Medicine, Miyagi, Japan

**C07-06 HOUSE DUST MITE ALLERGEN RELEASES IL-31 AND IL-33 FROM EPIDERMAL KERATINOCYTES VIA ATP SIGNALING**

[P11-08]

9:55-10:07

oXiuju Dai, Mikiko Tohyama, Masamoto Murakami, Yasushi Hanakawa, Koji Sayama

Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan

**C07-07 Pharmacological modulation of sphingosine kinase 1 activity enhances epidermal innate immunity through cathelicidin production**

[P11-09]

10:07-10:19

oKyungho Park<sup>1</sup>, Sin Hee Lee<sup>2</sup>, Jeong Eun Jeon<sup>2</sup>, Bong-Woo Kim<sup>2</sup>, Young Il Kim<sup>1</sup>, Kyoung-Oh Shin<sup>3</sup>, Yong-Moon Lee<sup>3</sup>, Hyun Jong Kim<sup>4</sup>, Theodora Mauro<sup>1</sup>, Peter M. Elias<sup>1</sup>, Yoshikazu Uchida<sup>1</sup>, Se Kyoo Jeong<sup>2</sup><sup>1</sup>Department of Dermatology, University of California, San Francisco, USA, <sup>2</sup>CRID Center, NeoPharm Co., Ltd., Daejeon, South Korea, <sup>3</sup>College of Pharmacy, Chungbuk National University, Cheongju, South Korea, <sup>4</sup>Department of Dermatology and Atopy Clinic, Seoul Medical Center, Seoul, South Korea

**C07-08 Monocytes are crucial for a shift away from a Treg to Th17 response in *mycoplasma pneumoniae* infection and SJS/TEN**

[P11-10]

10:19-10:31

oRyo Takahashi<sup>1</sup>, Yukiko Ushigome<sup>2</sup>, Tetsuo Shiohara<sup>1,2</sup><sup>1</sup>Division of Flowcytometry, Kyorin University Graduate School of Medicine, <sup>2</sup>Department of Dermatology, Kyorin University School of Medicine, Tokyo, Japan

## Plenary Session II

10:35-12:20

Chairs: Masayuki Amagai, Mauro Picardo, Alice Pentland

- II-1**  
[P05-01]  
10:35-10:50  
**Epidermis-specific ablation of claudin-1 in adult mice demonstrates the essential role of a tight junction barrier in skin homeostasis**  
○Takashige Hirano<sup>1,2</sup>, Mariko Yokouchi<sup>1</sup>, Toru Atsugi<sup>1,3</sup>, Masayuki Amagai<sup>1</sup>, Akiharu Kubo<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Keio University, Tokyo, Japan, <sup>2</sup>Maruho Co., Kyoto, Japan, <sup>3</sup>KOSÉ Co., Tokyo, Japan
- II-2**  
[P02-01]  
10:50-11:05  
**The role of versican on the pathogenesis of Sèzary syndrome**  
○Kazuyasu Fujii<sup>1,2,3</sup>, Maria Karpova<sup>1</sup>, Phil Cheng<sup>1</sup>, Takuro Kanekura<sup>3</sup>, Keiji Iwatsuki<sup>2</sup>, Reinhard Dummer<sup>1</sup>, Mirjana Urosevic-Maiwald<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Zurich, Zurich, Switzerland, <sup>2</sup>Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan, <sup>3</sup>Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Science, Kagoshima, Japan
- II-3**  
[P05-02]  
11:05-11:20  
**Role of a Desmosome-COP9 signalosome complex in epidermal differentiation**  
○Nicole A. Najor<sup>1</sup>, Kathleen J. Green<sup>1,2</sup>  
<sup>1</sup>The Department of Pathology, Northwestern University Feinberg School of Medicine, <sup>2</sup>The Department of Dermatology, Northwestern University Feinberg School of Medicine
- II-4**  
[P13-01]  
11:20-11:35  
**Coupling of the radiosensitivity of melanocyte stem cells to their dormancy during the hair cycle**  
○Makiko Ueno<sup>1</sup>, Takahiro Aoto<sup>2</sup>, Yasuaki Mohri<sup>2</sup>, Hiroo Yokoze<sup>1</sup>, Emi K. Nishimura<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Tokyo Medical and Dental University Graduate school of Medicine, Tokyo, Japan, <sup>2</sup>Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan
- II-5**  
[P13-02]  
11:35-11:50  
**Induction of melanocytes and fibroblasts from multilineage-differentiating stress-enduring (Muse) cells derived from human adipose tissue**  
○Takeshi Yamauchi<sup>1</sup>, Kenshi Yamasaki<sup>1</sup>, Kenichiro Tsuchiyama<sup>1</sup>, Saaya Koike<sup>1</sup>, Mai Inoue<sup>1</sup>, Fumitaka Ogura<sup>2</sup>, Shohei Wakao<sup>2</sup>, Mari Dezawa<sup>2</sup>, Setsuya Aiba<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan, <sup>2</sup>Department of Stem Cell Biology and Histology, Tohoku University Graduate School of Medicine
- II-6**  
[P01-06]  
11:50-12:05  
**PD-1 regulates autoimmune CD8 T cell-mediated mucocutaneous disease of 'interface dermatitis' via PD-L1 expressed on target epidermal cells**  
○Naoko Okiyama<sup>1,2</sup>, Stephen I. Katz<sup>2</sup>  
<sup>1</sup>Department of Dermatology, University of Tsukuba, Ibaragi, Japan, <sup>2</sup>Dermatology Branch, CCR, NCI, NIH, Maryland, USA
- II-7**  
[P12-01]  
12:05-12:20  
**Establishment and characterization of iPS cells derived from XPA patients**  
○Chihiro Shimizuhiro<sup>1</sup>, Hidaka Yokota<sup>1,2</sup>, Shinichi Moriwaki<sup>3</sup>, Yoshinori Yoshida<sup>2</sup>, Yoshiki Miyachi<sup>1</sup>, Shinya Yamanaka<sup>2</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan, <sup>2</sup>Department of Reprogramming Science, Center for iPS Cell Research and Application, Kyoto University, <sup>3</sup>Department of Dermatology, Osaka Medical College

## Luncheon Seminar 4

### "Harvesting the fruits of work in dermatological research"

12:25-13:15

Chairs: Jacek C Szepletowski, Tetsuo Shiohara

- LS4-1**  
**Clinical applications of microRNAs in skin disorders**  
Masatoshi Jinnin  
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- LS4-2**  
**Sweat, the unsung hero of healthy skin: an emerging perspective on functional biology and regulatory mechanisms**  
Hiroyuki Murota  
Department of Dermatology, Graduate School of Medicine, Osaka University

Co-sponsored by Mitsubishi Tanabe Pharma Corporation

## Concurrent Oral Session 10 (Autoimmunity/Inflammation 2)

14:30-15:54

Chairs: Ryuhei Okuyama, Hiroo Yokozeki

**C10-01**  
[P01-05]

14:30-14:42

### Psoriatic inflammation facilitates the onset of arthritis in a mouse model

○Mayuko Yamamoto<sup>1</sup>, Kimiko Nakajima<sup>1</sup>, Mikiro Takaishi<sup>1</sup>, Shun Kitaba<sup>2</sup>, Yasuhiro Magata<sup>3</sup>, Sayo Kataoka<sup>4</sup>, Shigetoshi Sano<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi, Japan, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, <sup>3</sup>Department of Molecular Imaging, Applied Medical Photonics Laboratory, Medical Photonics Research Center, Hamamatsu University School of Medicine, <sup>4</sup>Science Research Center, Kochi University

**C10-02**  
[P01-07]

14:42-14:54

### Caveolin-1 reduction induced by psoriasis-related cytokines enhances psoriatic pathogenic inflammation

○Yukie Yamaguchi, Yuko Watanabe, Noriko Koumitsu, Tomoya Watanabe, Michiko Aihara

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

**C10-03**  
[P01-10]

14:54-15:06

### *IL36RN* mutations underlie impetigo herpeticiformis and *CARD14* c.526G>C is a risk factor for pustular psoriasis with psoriasis vulgaris

○Kazumitsu Sugiura<sup>1</sup>, Naoki Oiso<sup>2</sup>, Shin Iinuma<sup>3</sup>, Hiromasa Matsuda<sup>2</sup>, Masako Minami-Hori<sup>3</sup>, Akemi Ishida-Yamamoto<sup>3</sup>, Akira Kawada<sup>2</sup>, Hajime Iizuka<sup>3</sup>, Masahiko Muto<sup>4</sup>, Masashi Akiyama<sup>1</sup>

<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>2</sup>Department of Dermatology, Kinki University Faculty of Medicine, Osaka-Sayama, Japan, <sup>3</sup>Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, <sup>4</sup>Department of Dermatology, Yamaguchi University Graduate School of Medicine, Ube, Japan

**C10-04**  
[P01-12]

15:06-15:18

### Thromboxane A2 promotes the development of imiquimod-induced mouse psoriasis model via TP receptor

○Yuri Tanada-Ueharaguchi<sup>1</sup>, Tetsuya Honda<sup>1,2</sup>, Teruasa Murata<sup>1</sup>, Makoto Arita<sup>3</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, <sup>2</sup>Department of innovation Center for Immunoregulation Technologies and Drugs Kyoto University Graduate School of Medicine, <sup>3</sup>Department of Health Chemistry, Graduate School of Pharmaceutical Science, the University of Tokyo

**C10-05**  
[P01-13]

15:18-15:30

### Requirement of aquaporin-3-mediated hydrogen peroxide for NF-κB cell signaling and psoriasis pathogenesis

○Mariko Hara-Chikuma, Hiroki Satooka

Center for Innovation in Immunoregulative Technology and Therapeutics, Graduate School of Medicine, Kyoto University, Japan

**C10-06**  
[P01-20]

15:30-15:42

### Suppressed psoriatic inflammation in interferon regulatory factor-8 knockout mouse treated with imiquimod

○Tomoya Watanabe<sup>1</sup>, Yukie Yamaguchi<sup>1</sup>, Tomohiko Tamura<sup>2</sup>, Michiko Aihara<sup>1</sup>

<sup>1</sup>Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan, <sup>2</sup>Department of Immunology Yokohama City University Graduate School of Medicine, Yokohama, Japan

**C10-07**  
[P01-18]

15:42-15:54

### T cell expansion study using the lesional skin provides evidence for the role of drug-specific Tc1 and Th17 cells in severe drug eruptions

○Toshiharu Fujiyama<sup>1</sup>, Hideo Hashizume<sup>2</sup>, Takatsune Umayahara<sup>2</sup>, Kazuki Tatsuno<sup>1</sup>, Taisuke Ito<sup>1</sup>, Yoshiki Tokura<sup>1</sup>

<sup>1</sup>The Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan, <sup>2</sup>Shimada Municipal Hospital

## Plenary Session III

16:05-17:35

Chairs: Ichiro Katayama, Nick Reynolds, Shinji Shimada

**III-1**  
[P10-01]

16:05-16:20

### IL-36 signaling is a gatekeeper for both keratinocytes and dendritic cells linking innate immunity to psoriatic nature

○Kentarō Ohko, Kimiko Nakajima, Shigetoshi Sano

Department of Dermatology, KOCHI Medical School, Kochi University, Kochi, Japan

**III-2**  
[P11-01]

16:20-16:35

### Leucine-rich alpha-2 glycoprotein is an innovative biomarker for psoriasis linked to systemic inflammation

○Hideki Nakajima<sup>1</sup>, Kimiko Nakajima<sup>1</sup>, Mikiro Takaishi<sup>1</sup>, Minoru Fujimoto<sup>2</sup>, Tetsuji Naka<sup>2</sup>, Shigetoshi Sano<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi University, Okohcho, Nankoku, Japan, <sup>2</sup>Laboratory of Immune Signal, National Institute of Biomedical Innovation, Ibaraki, Japan

**III-3**  
[P10-03]

16:35-16:50

### New insights into immunological function of Langerhans cells in HIV *in vitro* and *ex vivo* infection

○Takamitsu Matsuzawa<sup>1</sup>, Tatsuyoshi Kawamura<sup>1</sup>, Youichi Ogawa<sup>1</sup>, Hiroaki Mitsuya<sup>2</sup>, Shinji Shimada<sup>1</sup>

<sup>1</sup>Dermatology, University of Yamanashi, Yamanashi, Japan, <sup>2</sup>Department of Infectious Diseases and Department of Hematology, Kumamoto University School of Medicine, Kumamoto, Japan

**III-4**  
**[P11-02]**  
16:50-17:05

**The IL-33/ST2 axis on mast cells contributes to protective immune responses to herpes simplex virus-2**

○Rui Aoki<sup>1</sup>, Tatsuyoshi Kawamura<sup>1</sup>, Fumi Goshima<sup>2</sup>, Susumu Nakae<sup>3</sup>, Atsuhito Nakao<sup>4</sup>, Shinji Shimada<sup>1</sup>

<sup>1</sup>Department of Dermatology, University of Yamanashi, Yamanashi, Japan, <sup>2</sup>Department of Virology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>3</sup>Laboratory of Systems Biology, Center for Experimental Medicine and Systems Biology, The Institute of Medical Science, The University of Tokyo, Japan, <sup>4</sup>Department of Immunology, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan

**III-5**  
**[P03-01]**  
17:05-17:20

**Super resolution microscopy reveals altered desmosome organization, endocytosis and desmosome splitting in pemphigus vulgaris epidermis**

○Sara N. Stahley, Maxine F. Warren, Ron J Feldman, Alexa L. Mattheyses, Andrew P. Kowalczyk

Emory University, Atlanta, GA, United States

**III-6**  
**[P01-03]**  
17:20-17:35

**Macrophages regulate IL-17-associated skin inflammation in mice with Dlx3-deficient keratinocytes**

○Youichi Ogawa<sup>1</sup>, Jin-Chul Kim<sup>2</sup>, Maria Morasso<sup>2</sup>, Mark Udey<sup>1</sup>

<sup>1</sup>Dermatology Branch, NCI, NIH, MD, USA, <sup>2</sup>Laboratory of Skin Biology, NIAMS, NIH, MD, USA

## Sweets Seminar 4

17:40-18:25

Chair: Fukumi Furukawa

**SS4**

**Dissecting function and dysfunction of skin barriers in atopic dermatitis**

Masayuki Amagai

Department of Dermatology, School of Medicine, Keio University;

Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences

Co-sponsored by DAIICHI SANKYO CO., LTD. & UCB Japan CO., Ltd.

## Special Program for JAOF's eve President's Invited Lecture

18:30-20:00

Chair: Ichiro Katayama

**Regnase-1, a ribonuclease involved in the inflammatory and immune responses**

Shizuo Akira

Laboratory of Host Defense, WPI Immunology Frontier Research Center, Osaka University

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## December 13, 2014, Room B

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### Concurrent Oral Session 8 (Autoimmunity/Inflammation, Cell Adhesion/Matrix/Vascular Biology)

8:55-10:31

Chairs: Michihiro Hide, Satoshi Hirakawa

**C08-01**  
[P01-09]  
8:55-9:07

**Prostaglandin E2-EP2 signaling in keratinocytes is an endogenous regulator for Th2 skin immunity by down-regulating PAR2 expression**

○Tetsuya Honda<sup>1,2</sup>, Yu Sawada<sup>3</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, <sup>2</sup>Innovation Center for Immunoregulation Technologies and Drugs, Kyoto University Graduate School of Medicine, Japan, <sup>3</sup>Department of Dermatology, University of Occupational and Environmental Health, Kitakyushu, Japan

**C08-02**  
[P01-15]  
9:07-9:19

**Expression of Mas-related gene X2 on skin mast cells is upregulated in the patients with severe chronic spontaneous urticaria**

○Koremasa Hayama<sup>1,2</sup>, Daisuke Fujisawa<sup>1,2</sup>, Jun-ichi Kashiwakura<sup>3</sup>, Hirohito Kita<sup>4</sup>, Yusuke Kikukawa<sup>5</sup>, Yashushi Fujitani<sup>5</sup>, Tomomi Sasaki-sakamoto<sup>2</sup>, Kazumichi Kuroda<sup>6</sup>, Satoshi Nunomura<sup>1,2</sup>, Chisei Ra<sup>6</sup>, Yoshimichi Okayama<sup>2</sup>, Tadashi Terui<sup>1</sup>

<sup>1</sup>Division of Cutaneous Science, Department of Dermatology, Nihon University School of Medicine, <sup>2</sup>Allergy and Immunology Group, Research Institute of Medical Science, Nihon University School of Medicine, <sup>3</sup>The Laboratory for Allergic Disease, RCAL, RIKEN Center for Integrative Medical Sciences (IMS-RCAL), <sup>4</sup>The Mayo Clinic College of Medicine, Mayo Clinic, <sup>5</sup>The Pharmaceutical Research Division, Takeda Pharmaceutical Company, <sup>6</sup>Department of Microbiology, Nihon University School of Medicine

**C08-03**  
[P01-16]  
9:19-9:31

**Analysis of spinal neurotransmitters in histaminergic and non-histaminergic itch**

○Mitsutoshi Tominaga<sup>1</sup>, Tasuku Akiyama<sup>2</sup>, Mirela I Carstens<sup>2</sup>, Earl Carstens<sup>2</sup>, Kenji Takamori<sup>1,3</sup>

<sup>1</sup>Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, <sup>2</sup>Department of Neurobiology, Physiology & Behavior, University of California, Davis, CA, USA, <sup>3</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Japan

**C08-04**  
[P01-19]  
9:31-9:43

**CRH promotes mucosal type mast cells degranulation and increases their number *in situ***

○Koji Sugawara<sup>1</sup>, Yukari Mizukami<sup>1</sup>, Ralf Paus<sup>2,3</sup>, Daisuke Tsuruta<sup>1</sup>

<sup>1</sup>Department of Dermatology, Osaka City University Graduate School of Medicine, <sup>2</sup>Centre for Dermatology, Institute of Inflammation and Repair, University of Manchester, <sup>3</sup>Department of Dermatology, University of Münster

**C08-05**  
[P01-22]  
9:43-9:55

**A crucial role of L-selectin in C protein-induced experimental polymyositis of mice**

○Kyosuke Oishi<sup>1</sup>, Yasuhiro Hamaguchi<sup>1</sup>, Takashi Matsushita<sup>1</sup>, Minoru Hasegawa<sup>1</sup>, Naoko Okiyama<sup>2</sup>, Jens Dernedde<sup>3</sup>, Marie Weinhart<sup>4</sup>, Rainer Haag<sup>4</sup>, Thomas F Tedder<sup>5</sup>, Kazuhiko Takehara<sup>1</sup>, Hitoshi Kosaka<sup>2</sup>, Manabu Fujimoto<sup>1</sup>

<sup>1</sup>Department of Dermatology, University of Kanazawa, Ishikawa, Japan, <sup>2</sup>Department of Medicine and Rheumatology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan, <sup>3</sup>Institut für Laboratoriumsmedizin, Klinische Chemie und Pathobiochemie, Charite-Universitätsmedizin Berlin, Berlin, Germany, <sup>4</sup>Institute für Chemie und Biochemie, Freie Universität, Berlin, Germany, <sup>5</sup>Department of Immunology, Duke University Medical Center, Durham, USA

**C08-06**  
[P03-02]  
9:55-10:07

**A combination of pemphigus foliaceus IgG monoclonal antibodies promotes desmoglein 1 clustering which induces synergistic pathogenic effect**

○Kenji Yoshida<sup>1</sup>, Ken Ishii<sup>1</sup>, Atsushi Shimizu<sup>1</sup>, Mariko Yokouchi<sup>2</sup>, Masayuki Amagai<sup>2</sup>, John R Stanley<sup>3</sup>, Akira Ishiko<sup>1</sup>

<sup>1</sup>Dermatology, Toho University School of Medicine, Tokyo, Japan, <sup>2</sup>Dermatology, Keio University School of Medicine, Tokyo, Japan, <sup>3</sup>Dermatology, University of Pennsylvania, Philadelphia, PA

**C08-07**  
[P03-03]  
10:07-10:19

**Context-dependent tight regulation of collagen XVII ectodomain shedding in skin**

○Wataru Nishie, Ken Natsuga, Kentaro Izumi, Hideyuki Ujiie, Hiroo Hata, Hiroshi Shimizu

Department of Dermatology, Hokkaido University Graduate School of Medicine, Sapporo, Japan

**C08-08**  
[P03-04]  
10:19-10:31

**Biological effect of vascular endothelial growth factor-C on culture lymphatic endothelial cells**

○Satoshi Hirakawa<sup>1</sup>, Manami Iwasaki<sup>1</sup>, Akihiro Nishiguchi<sup>2</sup>, Michiya Matsusaki<sup>2</sup>, Mitsuru Akashi<sup>2</sup>

<sup>1</sup>Department of Dermatology, Hamamatsu University School of Medicine, Japan, <sup>2</sup>Department of Applied Chemistry, Graduate School of Engineering, Osaka University, Japan



## Luncheon Seminar 5

12:25-13:15

Chair: Hideoki Ogawa

**LS5 Skin barrier defects and the risk of developing atopic dermatitis and other allergic disorders**

Masashi Akiyama

Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan

Co-sponsored by GlaxoSmithKline K.K.

## Concurrent Oral Session 11 (Epidermal Structure and Function)

14:30-15:54

Chairs: Masashi Akiyama, Takuro Kanekura

**C11-01**

**[P05-03]**

14:30-14:42

**Proteome analysis of stratum corneum from atopic dermatitis patients by hybrid quadrupole-orbitrap mass spectrometer**

Jun-ichi Sakabe, Koji Kamiya, ○Yoshiki Tokura

Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan

**C11-02**

**[P05-04]**

14:42-14:54

**Dose-dependent role of claudin-1 in epidermal differentiation and inflammation**

Reitaro Tokumasu<sup>1</sup>, Yuji Yamazaki<sup>1,2</sup>, Hiroyuki Murota<sup>3</sup>, ○Kosuke Yamaga<sup>1,3</sup>, Koya Suzuki<sup>1</sup>, Atsushi Tamura<sup>1</sup>, Hiroshi Kiyonari<sup>4</sup>, Ichiro Katayama<sup>3</sup>, Sachiko Tsukita<sup>1</sup>

<sup>1</sup>Laboratory of Biological Science, Graduate School of Frontier Biosciences and Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>2</sup>Departments of Molecular and Cell Biology, University of California at Berkeley, Berkeley, CA, USA, <sup>3</sup>Department of Dermatology Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>4</sup>Laboratory for Animal Resources and Genetic Engineering, RIKEN Center for Developmental Biology, Kobe, Japan

**C11-03**

**[P05-05]**

14:54-15:06

**IL-17A weakens the tight junction (TJ) barrier in a human-skin-equivalent model: A possible mechanism of impaired TJ in atopic dermatitis**

○Takuo Yuki<sup>1</sup>, Ayumi Kusaka<sup>1</sup>, Aya Komiya<sup>1</sup>, Megumi Tobiishi<sup>1</sup>, Tukiko Ota<sup>1</sup>, Yoshiki Tokura<sup>2</sup>

<sup>1</sup>Kao Biological Science Laboratories, Kao Corporation, Odawara, Japan, <sup>2</sup>Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan

**C11-04**

**[P05-06]**

15:06-15:18

**The role of 11β-hydroxysteroid dehydrogenase 1 in UVB-induced skin inflammation**

○Saori Itoi, Mika Terao, Hiroyuki Murota, Ichiro Katayama

Department of Dermatology, Osaka University Graduate School of Medicine

**C11-05**

**[P05-07]**

15:18-15:30

**Human keratin 5-Cre transgenic mice harbor a risk of ubiquitous Cre-recombination**

○Yujin Nakagawa, Gyohei Egawa, Yoshiki Miyachi, Kenji Kabashima

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

**C11-06**

**[P05-08]**

15:30-15:42

**Co-stimulation with interleukin-4 and tumor necrosis factor-α increases epidermal innervation accompanied by suppression of semaphorin 3A**

○Takashi Sakai<sup>1</sup>, Daisuke Takahashi<sup>2</sup>, Kousei Nikaido<sup>2</sup>, Kanako Okauchi<sup>2</sup>, Naomi Mori<sup>2</sup>, Ryosuke Irie<sup>2</sup>, Yutaka Hatano<sup>1</sup>, Sakuhei Fujiwara<sup>1</sup>

<sup>1</sup>Department of Dermatology, Faculty of Medicine, Oita University, Oita, Japan, <sup>2</sup>Medical students, Faculty of Medicine, Oita University

**C11-07**

**[P05-09]**

15:42-15:54

**Loss of phospholipase C δ1 impairs keratinocyte differentiation and epidermal barrier**

○Kaori Kanemaru, Yoshikazu Nakamura, Kiyoko Fukami

Laboratory of Genome and Biosignals, School of Life Sciences, Tokyo University of Pharmacy and Life Sciences, Tokyo, Japan

## Sweets Seminar 5

### "The latest research by the Dermatologists for the next generation"

17:40-18:25

Chair: Setsuya Aiba

- SS5-1      Understanding the mechanism of the elicitation phase of contact dermatitis**  
Kenji Kabashima  
Department of Dermatology, Kyoto University, Japan
- SS5-2      What is prurigo? -a mysterious disease with pruritic papules of unknown etiology-**  
Takahiro Satoh  
Department of Dermatology, National Defense Medical College

Co-sponsored by Sanofi K.K.

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## December 13, 2014, Room C

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### Concurrent Oral Session 9 (Pigmentation and Melanoma)

8:55-10:31

Chairs: Emi Nishimura, Tamio Suzuki

**C09-01**  
[P13-03]  
8:55-9:07

**Expression of activation induced deaminase (AID) and BRAF<sup>V600E</sup> mutation in malignant melanoma**

oDaisuke Omoto, Emi Mashima, Yumiko Sakuragi, Natsuko Saito, Takashi Yamaguchi, Reiko Watabe, Haruna Yoshioka, Kana Hiromasa, Sanehito Haruyama, Rieko Kubo, Manabu Yoshioka, Daisuke Nishio, Motonobu Nakamura  
Department of Dermatology, University of Occupational and Environmental Health

**C09-02**  
[P13-04]  
9:07-9:19

**Suppressor of cytokine signaling-1 inhibits melanoma cell growth by the suppression of JAK/STAT and the activation of p53 signaling pathways**

oNaoko Tagami<sup>1,2</sup>, Satoshi Serada<sup>2</sup>, Minoru Fujimoto<sup>2</sup>, Atsushi Tanemura<sup>1</sup>, Tetsuji Naka<sup>2</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Osaka University Graduate School of Medicine, Japan, <sup>2</sup>laboratory for Immuno Signal, National Institute of Biomedical Innovation, Osaka

**C09-03**  
[P13-05]  
9:19-9:31

**Dowling-Degos disease is genetically and clinico-pathologically distinct from Reticulate acropigmentation of Kitamura, further confirmation**

oMichihiro Kono<sup>1</sup>, Mutsumi Suganuma<sup>1</sup>, Hiromichi Takama<sup>2</sup>, Tamio Suzuki<sup>3</sup>, Kayoko Matsunaga<sup>4</sup>, Yasushi Tomita<sup>1</sup>, Masashi Akiyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>2</sup>Takama Dermatology Clinic, Kasugai, Japan, <sup>3</sup>Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan, <sup>4</sup>Department of Dermatology, Fujita Health University School of Medicine, Toyoake, Japan

**C09-04**  
[P13-06]  
9:31-9:43

**TRIF and MAVS pathway is essential to induce Rab27A and melanosome transportation by TLR3 agonist Poly(I:C) in human epidermal melanocytes**

oSaaya Koike  
Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan

**C09-05**  
[P13-07]  
9:43-9:55

**Specific cytotoxicities of rhododol and raspberry ketone on B16 melanoma cell by increasing intracellular reactive oxygen species levels**

oTakeshi Nagata<sup>1,2</sup>, Shinobu Ito<sup>2</sup>, Kazuyoshi Itoga<sup>1</sup>, Hideko Kanazawa<sup>3</sup>, Hitoshi Masaki<sup>4</sup>  
<sup>1</sup>Institute of Advanced Biomedical Engineering and Science, Tokyo Women's Medical University, Tokyo, Japan, <sup>2</sup>I.T.O.Co.,Ltd., Tokyo, Japan, <sup>3</sup>Faculty of Pharmacy, Keio University, Tokyo, Japan, <sup>4</sup>School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, Japan

**C09-06**  
[P13-08]  
9:55-10:07

**Rhododendrol activates autophagy-lysosome pathway in melanocytes: a potential mechanism for skin depigmentation disorder**

oLingli Yang<sup>1</sup>, Mari Wataya-Kaneda<sup>1</sup>, Fei Yang<sup>1</sup>, Daisuke Tsuruta<sup>2</sup>, Atsushi Tanemura<sup>1</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Course of Molecular Medicine, Graduate School of Medicine, Osaka University, <sup>2</sup>Department of Dermatology, Osaka City University Graduate School of Medicine

**C09-07**  
[P13-09]  
10:07-10:19

**The immunomodulatory effect of IFN- $\beta$  on tumor-associated macrophages in in-transit melanoma**

oAya Kakizaki, Taku Fujimura, Sadanori Furudate, Yumi Kambayashi, Yukikazu Numata, Takahiro Haga, Akira Hashimoto, Setsuya Aiba  
Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan

**C09-08**  
[P13-10]  
10:19-10:31

**Serum leptin receptor as a tumor marker of melanoma**

oSatoshi Fukushima, Hironori Mizutani, Azusa Miyashita, Junji Yamashita, Satoshi Nakahara, Masatoshi Jinnin, Hironobu Ihn  
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan

### Luncheon Seminar 6 "A New Era for Psoriasis Research"

12:25-13:15

Chairs: Hiroo Yokozeki, Hironobu Ihn

**LS6-1**

**Significance of the Inhibition of Systemic Inflammation in Psoriasis**

Daisuke Tsuruta  
Department of Dermatology, Osaka City University Graduate School of Medicine

**LS6-2**

**Skin-joint-gut axis ~how do we dermatologists cope with psoriatic arthritis~**

Toshiyuki Yamamoto  
Department of Dermatology, Fukushima Medical University, Fukushima, Japan

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

## Concurrent Oral Session 12 (Genetic Disease/Gene Regulation and Gene Therapy, Tissue Regeneration/ Stem Cell and Wound Healing)

14:30-15:54

Chairs: Akemi Yamamoto, Katsuto Tamai, Alain Hovnanian

- C12-01  
[P07-02]**  
14:30-14:42  
**Revertant mutation released a lethal mutation concealed in a healthy parent: a previously unreported pathogenesis of hereditary disorders**  
○Yasushi Ogawa<sup>1</sup>, Takuya Takeichi<sup>1</sup>, Michihiro Kono<sup>1</sup>, Nobuyuki Hamajima<sup>2</sup>, Toshimichi Yamamoto<sup>3</sup>, Kazumitsu Sugiura<sup>1</sup>, Masashi Akiyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, <sup>2</sup>Department of Healthcare Administration, Nagoya University Graduate School of Medicine, <sup>3</sup>Department of Legal Medicine and Bioethics, Nagoya University Graduate School of Medicine
- C12-02  
[P07-03]**  
14:42-14:54  
**One amino acid deletion in collagen XVII-binding domain of plectin with a truncation mutation underlies epidermolysis bullosa simplex**  
○Ken Natsuga, Machiko Nishimura, Hideki Nakamura, Wataru Nishie, Hiroshi Shimizu  
Department of Dermatology, Hokkaido University Graduate School of Medicine, Sapporo, Japan
- C12-03  
[P07-04]**  
14:54-15:06  
**The reduction of DSG1 in hereditary palmo-planter keratoderma causes the impaired differentiation and proliferation of sole epidermis**  
○Daisuke Utsumi, Hiroshi Uezato, Kenzo Takahashi  
Department of Dermatology, Graduate School of Medicine, University of the Ryukyus, Okinawa, Japan
- C12-04  
[P07-05]**  
15:06-15:18  
**Molecular diagnosis of Nagashima-type palmoplantar keratoderma**  
○Rafal P. Krol, Sanae Numata, Kwesi Teye, Takahiro Hamada, Mitsuhiro Matsuda, Norito Ishii, Bungo Ohyama, Chika Ohata, Minao Furumura, Takashi Hashimoto  
Department of Dermatology and Institute of Cutaneous Cell Biology, Kurume University, Kurume, Japan
- C12-05  
[P08-03]**  
15:18-15:30  
**Cell motion predicts human epidermal stemness**  
○Daisuke Nanba<sup>1,2</sup>, Fujio Toki<sup>2</sup>, Sota Tate<sup>2</sup>, Matome Imai<sup>2</sup>, Natsuki Matsushita<sup>3</sup>, Hiroshi Toki<sup>4</sup>, Shigeki Higashiyama<sup>1,2</sup>, Yann Barrandon<sup>5,6</sup>  
<sup>1</sup>Division of Cell Growth and Tumor Regulation, Proteo-Science Center, Ehime University, Ehime, Japan, <sup>2</sup>Department of Biochemistry and Molecular Genetics, Graduate School of Medicine, Ehime University, Ehime, Japan, <sup>3</sup>Translational Research Center, Ehime University Hospital, Ehime University, Ehime, Japan, <sup>4</sup>Research Center for Nuclear Physics, Osaka University, Osaka, Japan, <sup>5</sup>Laboratory of Stem Cell Dynamics, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, <sup>6</sup>Department of Experimental Surgery, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland.
- C12-06  
[P08-04]**  
15:30-15:42  
**Protective effect of MFG-E8 after cutaneous ischemia-reperfusion injury**  
○Akihiko Uchiyama, Kazuya Yamada, Buddhini Perera, Sachiko Ogino, Yoko Yokoyama, Yuko Takeuchi, Osamu Ishikawa, Sei-ichiro Motegi  
Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
- C12-07  
[P08-05]**  
15:42-15:54  
**MFG-E8 promotes mesenchymal stem cells-induced angiogenesis in malignant melanoma**  
○Kazuya Yamada, Akihiko Uchiyama, Sachiko Ogino, Buddhini Perera, Yoko Yokoyama, Yuko Takeuchi, Osamu Ishikawa, Sei-ichiro Motegi  
Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan

## Sweets Seminar 6

17:40-18:25

Chair: Tamio Suzuki

### SS6 Recent topics of wound healing

○Hiroshi Uchi<sup>1</sup>, Saori Morino-Koga<sup>2</sup>, Masutaka Furu<sup>1,2</sup><sup>1</sup>Department of Dermatology, Kyushu University, Fukuoka, Japan, <sup>2</sup>Research and Clinical Center for Yusho and Dioxin

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## December 14, 2014, Room A

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### Morning Seminar 2

8:05-8:55

Chair: Keiji Iwatsuki

**MS2 Control of autoimmunity and tumor immunity by regulatory T cells**

Shimon Sakaguchi  
Immunology Frontier Research Center, Osaka University

Co-sponsored by Kyowa Hakko Kirin Co., Ltd.

### JSID-Asia-Oceania-Forum

9:00-11:30

Chairs: Andrew Kowalczyk, Akiharu Kubo

### "Epithelial barrier session"

**Forum 1 Tight Junction Claudin-based Foundations of Biological Systems: Advances in the Field of Barriology**

9:00-9:30

Sachiko Tsukita  
Laboratory of Biological Science, Graduate School of Frontier Biosciences and Graduate School of Medicine,  
Osaka University

**Forum 2 Mechanical coherence of epithelial tissues: the role of active cell-cell junctions**

9:30-10:00

○Alpha S. Yap, Guillermo A. Gomez, Joanne M. Leerberg, Selwin K. Wu and Magdalene Michael  
Division of Molecular Cell Biology, Institute for Molecular Bioscience,  
The University of Queensland, St. Lucia, Brisbane, Queensland, Australia

### "Innovative imaging strategy"

Chairs: Shigetoshi Sano, Tatsuyoshi Kawamura

**Forum 3 Intravital multiphoton microscopy visualizing an 'invisible hand' controlling immune cell dynamics *in vivo***

10:00-10:30

Masaru Ishii  
Department of Immunology and Cell Biology, Graduate School of Medicine and Frontier Biosciences, Osaka University  
WPI-Immunology Frontier Research Center, & JST, CREST

**Forum 4 Multiphoton and harmonic generation microscopy in skin imaging**

10:30-11:00

Sung-Jan Lin  
Taiwan Bio-development Foundation (TBF) Chair in Biotechnology Institute of Biomedical Engineering, Department of  
Dermatology & Research Center for Developmental Biology and Regenerative Medicine National Taiwan University, Taipei,  
Taiwan

**Forum 5 Intravital multiphoton imaging of cutaneous immune responses**

11:00-11:30

Kenji Kabashima  
Department of Dermatology, Kyoto University, Japan

### Coffee break

11:30-11:50

### JSID-Asia-Oceania-Forum

### "Cell biology, Stem cell and Physiology"

11:50-13:50

Chairs: Soo Chan Kim, Ken Igawa

**Forum 6 Epithelial tubulogenesis by growth factor signaling and tumorigenesis due to its abnormality**

11:50-12:20

Akira Kikuchi  
Department of Molecular Biology and Biochemistry, Graduate School of Medicine, Osaka University

**Forum 7**  
12:20-12:50 **Coculture of melanocytes with adipose-derived stem cells for vitiligo treatment  
(as a potential substitute for coculture with keratinocytes)**

Ai-Young Lee

Department of Dermatology, Dongguk University Ilsan Hospital, Gyeonggi-do, South Korea

**Forum 8**  
12:50-13:20 **Exploring the mechanism of warmth-provoked itch:  
artemin causes systemic hypersensitivity to heat via sensitizing the brain**

Hiroyuki Murota

Department of Dermatology, Graduate School of Medicine, Osaka University

## ASDR Exchange Program

Chairs: Masayuki Amagai, Alexander Enk

**Forum 9**  
13:20-13:50 **Perivascular macrophages mediate neutrophil recruitment during bacterial skin infection**

Wolfgang Weninger

Professor and Head Immune Imaging Program Centenary Institute for Cancer Medicine and Cell Biology

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## December 12-13, 2014, Poster

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### Poster Presentation

#### Category 1 (P01): Autoimmunity/Inflammation

- P01-01 [I-7] Epithelial Fli1 deletion induces fibrosis and autoimmunity with downregulation of AIRE - possible roles in systemic sclerosis pathogenesis**  
 ○Takehiro Takahashi, Yoshihide Asano, Kouki Nakamura, Takashi Yamashita, Ryosuke Saigusa, Yohei Ichimura, Tetsuo Toyama, Takashi Taniguchi, Ayumi Yoshizaki, Shinichi Sato  
 Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, Japan
- P01-02 [I-8] The impact of IRF5 deficiency on fibrosis, vasculopathy, and immune abnormality in a bleomycin-treated murine model of systemic sclerosis**  
 ○Ryosuke Saigusa<sup>1</sup>, Yoshihide Asano<sup>1</sup>, Takashi Taniguchi<sup>1</sup>, Yohei Ichimura<sup>1</sup>, Takehiro Takahashi<sup>1</sup>, Tetsuo Toyama<sup>1</sup>, Ayumi Yoshizaki<sup>1</sup>, Tadatsugu Taniguchi<sup>2</sup>, Shinichi Sato<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Molecular Immunology, Institute of Industrial Science, University of Tokyo, Tokyo, Japan
- P01-03 [III-6] Macrophages regulate IL-17-associated skin inflammation in mice with Dlx3-deficient keratinocytes**  
 ○Youichi Ogawa<sup>1</sup>, Jin-Chul Kim<sup>2</sup>, Maria Morasso<sup>2</sup>, Mark Udey<sup>1</sup>  
<sup>1</sup>Dermatology Branch, NCI, NIH, MD, USA, <sup>2</sup>Laboratory of Skin Biology, NIAMS, NIH, MD, USA
- P01-04 [C04-01] Myeloid Fli1 deficiency induces tissue fibrosis, vasculopathy, and immune abnormalities recapitulating systemic sclerosis**  
 ○Takashi Taniguchi<sup>1</sup>, Yoshihide Asano<sup>1</sup>, Kaname Akamata<sup>1</sup>, Shinji Noda<sup>1</sup>, Takehiro Takahashi<sup>1</sup>, Yohei Ichimura<sup>1</sup>, Tetsuo Toyama<sup>1</sup>, Ryosuke Saigusa<sup>1</sup>, Ayumi Yoshizaki<sup>1</sup>, Maria Trojanowska<sup>2</sup>, Shinichi Sato<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Tokyo Graduate School of Medicine, <sup>2</sup>Arthritis Center, Boston University
- P01-05 [C10-01] Psoriatic inflammation facilitates the onset of arthritis in a mouse model**  
 ○Mayuko Yamamoto<sup>1</sup>, Kimiko Nakajima<sup>1</sup>, Mikiro Takaishi<sup>1</sup>, Shun Kitaba<sup>2</sup>, Yasuhiro Magata<sup>3</sup>, Sayo Kataoka<sup>4</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi, Japan, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, <sup>3</sup>Department of Molecular Imaging, Applied Medical Photonics Laboratory, Medical Photonics Research Center, Hamamatsu University School of Medicine, <sup>4</sup>Science Research Center, Kochi University
- P01-06 [II-6] PD-1 regulates autoimmune CD8 T cell-mediated mucocutaneous disease of 'interface dermatitis' via PD-L1 expressed on target epidermal cells**  
 ○Naoko Okiyama<sup>1,2</sup>, Stephen I. Katz<sup>2</sup>  
<sup>1</sup>Department of Dermatology, University of Tsukuba, Ibaragi, Japan, <sup>2</sup>Dermatology Branch, CCR, NCI, NIH, Maryland, USA
- P01-07 [C10-02] Caveolin-1 reduction induced by psoriasis-related cytokines enhances psoriatic pathogenic inflammation**  
 ○Yukie Yamaguchi, Yuko Watanabe, Noriko Koumitsu, Tomoya Watanabe, Michiko Aihara  
 Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of medicine, Yokohama, Japan
- P01-08 [C04-02] Hypoxia inducible factor-1 $\alpha$  of Langerhans cell plays a critical role in a murine irritant dermatitis model**  
 ○Saeko Nakajima<sup>1</sup>, Catharina Moniaga<sup>2</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, <sup>2</sup>Center for Innovation in Immunoregulative Technology and Therapeutics, Kyoto University Graduate School of Medicine
- P01-09 [C08-01] Prostaglandin E2-EP2 signaling in keratinocytes is an endogenous regulator for Th2 skin immunity by down-regulating PAR2 expression**  
 ○Tetsuya Honda<sup>1,2</sup>, Yu Sawada<sup>3</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, <sup>2</sup>Innovation Center for Immunoregulation Technologies and Drugs, Kyoto University Graduate School of Medicine, Japan, <sup>3</sup>Department of Dermatology, University of Occupational and Environmental Health, Kitakyushu, Japan
- P01-10 [C10-03] IL36RN mutations underlie impetigo herpeticiformis and CARD14 c.526G>C is a risk factor for pustular psoriasis with psoriasis vulgaris**  
 ○Kazumitsu Sugiura<sup>1</sup>, Naoki Oiso<sup>2</sup>, Shin Inuma<sup>3</sup>, Hiromasa Matsuda<sup>2</sup>, Masako Minami-Hori<sup>3</sup>, Akemi Ishida-Yamamoto<sup>3</sup>, Akira Kawada<sup>2</sup>, Hajime Iizuka<sup>3</sup>, Masahiko Muto<sup>4</sup>, Masashi Akiyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>2</sup>Department of Dermatology, Kinki University Faculty of Medicine, Osaka-Sayama, Japan, <sup>3</sup>Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, <sup>4</sup>Department of Dermatology, Yamaguchi University Graduate School of Medicine, Ube, Japan
- P01-11 [C04-03] Identification of disease-specific molecules in the skin of dermatomyositis and lupus erythematosus by proteomics analysis using LC-MS/MS**  
 ○Kayo Nakamura, Masatoshi Jinnin, Satoshi Fukushima, Hironobu Ihn  
 Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan

- P01-12 [C10-04] Thromboxane A2 promotes the development of imiquimod-induced mouse psoriasis model via TP receptor**  
 ○Yuri Tanada-Ueharaguchi<sup>1</sup>, Tetsuya Honda<sup>1,2</sup>, Teruasa Murata<sup>1</sup>, Makoto Arita<sup>3</sup>, Yoshiaki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, <sup>2</sup>Department of Innovation Center for Immunoregulation Technologies and Drugs Kyoto University Graduate School of Medicine, <sup>3</sup>Department of Health Chemistry, Graduate School of Pharmaceutical Science, the University of Tokyo
- P01-13 [C10-05] Requirement of aquaporin-3-mediated hydrogen peroxide for NF-κB cell signaling and psoriasis pathogenesis**  
 ○Mariko Hara-Chikuma, Hiroki Satooka  
 Center for Innovation in Immunoregulative Technology and Therapeutics, Graduate School of Medicine, Kyoto University, Japan
- P01-14 [C04-05] IRF7 controls the production of autoantibodies against the DNA- and RNA-containing autoantigens in murine lupus**  
 ○Fumi Miyagawa, Hideo Asada  
 Department of Dermatology, Nara Medical University School of Medicine, Kashihara, Japan
- P01-15 [C08-02] Expression of Mas-related gene X2 on skin mast cells is upregulated in the patients with severe chronic spontaneous urticaria**  
 ○Koremasa Hayama<sup>1,2</sup>, Daisuke Fujisawa<sup>1,2</sup>, Jun-ichi Kashiwakura<sup>3</sup>, Hirohito Kita<sup>4</sup>, Yusuke Kikukawa<sup>5</sup>, Yashushi Fujitani<sup>5</sup>, Tomomi Sasaki-sakamoto<sup>2</sup>, Kazumichi Kuroda<sup>6</sup>, Satoshi Nunomura<sup>1,2</sup>, Chisei Ra<sup>6</sup>, Yoshimichi Okayama<sup>2</sup>, Tadashi Terui<sup>1</sup>  
<sup>1</sup>Division of Cutaneous Science, Department of Dermatology, Nihon University School of Medicine, <sup>2</sup>Allergy and Immunology Group, Research Institute of Medical Science, Nihon University School of Medicine, <sup>3</sup>The Laboratory for Allergic Disease, RCAI, RIKEN Center for Integrative Medical Sciences (IMS-RCAI), <sup>4</sup>The Mayo Clinic College of Medicine, Mayo Clinic, <sup>5</sup>The Pharmaceutical Research Division, Takeda Pharmaceutical Company, <sup>6</sup>Department of Microbiology, Nihon University School of Medicine
- P01-16 [C08-03] Analysis of spinal neurotransmitters in histaminergic and non-histaminergic itch**  
 ○Miitsutoshi Tominaga<sup>1</sup>, Tasuku Akiyama<sup>2</sup>, Mirela I Carstens<sup>2</sup>, Earl Carstens<sup>2</sup>, Kenji Takamori<sup>1,3</sup>  
<sup>1</sup>Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, <sup>2</sup>Department of Neurobiology, Physiology & Behavior, University of California, Davis, CA, USA, <sup>3</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Japan
- P01-17 [C04-04] Role of mast cells in the development and maintenance of lupus-like skin lesions on MRL-lpr/lpr mice**  
 ○Yutaka Inaba<sup>1,2</sup>, Takashi Yoshimasu<sup>1,2</sup>, Nobuo Kanazawa<sup>1</sup>, Fukumi Furukawa<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Wakayama Medical University, <sup>2</sup>Department of Dermatology, Arida Municipal Hospital
- P01-18 [C10-07] T cell expansion study using the lesional skin provides evidence for the role of drug-specific Tc1 and Th17 cells in severe drug eruptions**  
 ○Toshiharu Fujiyama<sup>1</sup>, Hideo Hashizume<sup>2</sup>, Takatsune Umayahara<sup>2</sup>, Kazuki Tatsuno<sup>1</sup>, Taisuke Ito<sup>1</sup>, Yoshiaki Tokura<sup>1</sup>  
<sup>1</sup>The Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan, <sup>2</sup>Shimada Municipal Hospital
- P01-19 [C08-04] CRH promotes mucosal type mast cells degranulation and increases their number *in situ***  
 ○Koji Sugawara<sup>1</sup>, Yukari Mizukami<sup>1</sup>, Ralf Paus<sup>2,3</sup>, Daisuke Tsuruta<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Osaka City University Graduate School of Medicine, <sup>2</sup>Centre for Dermatology, Institute of Inflammation and Repair, University of Manchester, <sup>3</sup>Department of Dermatology, University of Münster
- P01-20 [C10-06] Suppressed psoriatic inflammation in interferon regulatory factor-8 knockout mouse treated with imiquimod**  
 ○Tomoya Watanabe<sup>1</sup>, Yukie Yamaguchi<sup>1</sup>, Tomohiko Tamura<sup>2</sup>, Michiko Aihara<sup>1</sup>  
<sup>1</sup>Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan, <sup>2</sup>Department of Immunology Yokohama City University Graduate School of Medicine, Yokohama, Japan
- P01-21 The role of protease allergens in the establishment of epicutaneous sensitization**  
 ○Sakiko Shimura<sup>1,2</sup>, Toshiro Takai<sup>2</sup>, Hideo Iida<sup>1</sup>, Yusuke Hirasawa<sup>1</sup>, Seiji Kamijo<sup>2</sup>, Hirono Ochi<sup>1,2</sup>, Izumi Nishioka<sup>1,2</sup>, Natsuko Maruyama<sup>1,2</sup>, Mutuko Hara<sup>2</sup>, Ko Okumura<sup>2</sup>, Hideoki Ogawa<sup>1</sup>, Shigaku Ikeda<sup>1,2</sup>  
<sup>1</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Atopy (Allergy) Research Center
- P01-22 [C08-05] A crucial role of L-selectin in C protein-induced experimental polymyositis of mice**  
 ○Kiyosuke Oishi<sup>1</sup>, Yasuhito Hamaguchi<sup>1</sup>, Takashi Matsushita<sup>1</sup>, Minoru Hasegawa<sup>1</sup>, Naoko Okiyama<sup>2</sup>, Jens Dernedde<sup>3</sup>, Marie Weinhart<sup>4</sup>, Rainer Haag<sup>4</sup>, Thomas F Tedder<sup>5</sup>, Kazuhiko Takehara<sup>1</sup>, Hitoshi Kosaka<sup>2</sup>, Manabu Fujimoto<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Kanazawa, Ishikawa, Japan, <sup>2</sup>Department of Medicine and Rheumatology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan, <sup>3</sup>Institut für Laboratoriumsmedizin, Klinische Chemie und Pathobiochemie, Charité-Universitätsmedizin Berlin, Berlin, Germany, <sup>4</sup>Institute für Chemie und Biochemie, Freie Universität, Berlin, Germany, <sup>5</sup>Department of Immunology, Duke University Medical Center, Durham, USA
- P01-23 Subcutaneous presensitization to protease antigen enhances protease-induced allergic airway inflammation**  
 ○Hirono Ochi<sup>1,2</sup>, Toshiro Takai<sup>2</sup>, Seiji Kamijo<sup>2</sup>, Sakiko Shimura<sup>1,2</sup>, Natsuko Maruyama<sup>1,2</sup>, Ko Okumura<sup>2</sup>, Hideoki Ogawa<sup>2</sup>, Shigaku Ikeda<sup>1,2</sup>  
<sup>1</sup>Department of Allergology and Dermatology, Juntendo University Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan



- P01-24 Epitope-dependent pathogenicity of antibodies to collagen XVII/BP180 for blister formation**  
○Mayumi Wada<sup>1,2</sup>, Wataru Nishie<sup>1</sup>, Hideyuki Ujiie<sup>1</sup>, Kentaro Izumi<sup>1</sup>, Hiroaki Iwata<sup>1</sup>, Ken Natsuga<sup>1</sup>, Yoshimasa Kitagawa<sup>2</sup>, Hiroshi Shimizu<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Hokkaido University Graduate School of Medicine, Hokkaido, Japan, <sup>2</sup>Department of Oral Diagnosis and Medicine, Hokkaido University Graduate School of Dental Medicine, Hokkaido, Japan
- P01-25 Klk8 is required for microabscess formation in a mouse imiquimod model of psoriasis**  
○Shin Inuma<sup>1</sup>, Mari Kishibe<sup>1</sup>, Satomi Igawa<sup>1</sup>, Masaru Honma<sup>1</sup>, Hidetoshi Takahashi<sup>1</sup>, Yoshio Bando<sup>2</sup>, Shigetaka Yoshida<sup>2</sup>, Hajime Iizuka<sup>1</sup>, Akemi Ishida-Yamamoto<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, <sup>2</sup>Department of Functional Anatomy and Neuroscience, Asahikawa Medical University, Asahikawa, Japan
- P01-26 Decreased IL-20 expression in scleroderma skin contributes to cutaneous fibrosis**  
○Hideo Kudo, Masatoshi Jinnin, Hironobu Ihn  
Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- P01-27 Major cleavage-dependent epitopes for linear IgA bullous dermatosis are formed at the boundary between the NC16A and C15 domains of BP180**  
○Yoshiaki Hirako<sup>1</sup>, Tomoe Yamauchi<sup>1</sup>, Satoshi Matsushita<sup>1</sup>, Takashi Hashimoto<sup>2</sup>  
<sup>1</sup>Division of Biological Science, Graduate School of Science, Nagoya University, Aichi, Japan, <sup>2</sup>Department of Dermatology, Kurume University School of Medicine, and Kurume University Institute of Cutaneous Cell Biology, Fukuoka, Japan
- P01-28 The air exposure of normal human keratinocytes induces release of ATP and IL-1beta**  
○Kaori Inoue, Masashi Miyai, Toshihiko Hibino  
Shiseido Research Center, Yokohama, Japan
- P01-29 Fasudil ameliorates fibrosis, vasculopathy, and immune abnormalities in animal models of systemic sclerosis**  
○Tetsuo Toyama<sup>1</sup>, Yoshihide Asano<sup>1</sup>, Kouki Nakamura<sup>1</sup>, Takashi Yamashita<sup>1</sup>, Ryosuke Saigusa<sup>1</sup>, Takehiro Takahashi<sup>1</sup>, Yohei Ichimura<sup>1</sup>, Takashi Taniguchi<sup>1</sup>, Ayumi Yoshizaki<sup>1</sup>, Maria Trojanowska<sup>2</sup>, Shinichi Sato<sup>1</sup>, Takafumi Kadono<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Tokyo Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Arthritis Center, Boston University School of Medicine
- P01-30 Possible mechanisms of epicutaneous-sensitized anaphylactic reaction in the mouse model**  
○Rie YU<sup>1</sup>, Ken Igawa<sup>1</sup>, Takichi Munetsugu<sup>1</sup>, Takahiro Satoh<sup>2</sup>, Hiroo Yokozeki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Tokyo Medical and Dental University, Tokyo, Japan, <sup>2</sup>Department of Dermatology, National Defense Academy of Japan
- P01-31 Protective activity of high-dose IVIG against murine pemphigus in pregnancy**  
○Sachiko Ono, Gyohei Egawa, Yoshiki Miyachi, Kenji Kabashima  
Department of Dermatology, University of Kyoto
- P01-32 Peripheral immunological tolerance in molluscum contagiosum and induction of p53-dependent apoptosis**  
Akiko Yamauchi-Yamada<sup>1</sup>, Takenobu Yamamoto<sup>1,2</sup>, Yumi Nakayama<sup>1</sup>, Kazuko Mizuno-Ikeda<sup>1</sup>, Tomoko Miyake<sup>1</sup>, Mari Yamaguchi<sup>1</sup>, Yoji Hirai<sup>1</sup>, ○Yoshinori Shirafuji<sup>1</sup>, Shin Morizane<sup>1</sup>, Yumi Aoyama<sup>1</sup>, Keiji Iwatsuki<sup>1</sup>  
<sup>1</sup>Departments of Dermatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan, <sup>2</sup>Kawasaki Medical School, Okayama, Japan
- P01-33 Lipocalin-2 exacerbates psoriasisform skin inflammation by augmenting Th17 response**  
○Carren S. Hau<sup>1</sup>, Naoko Kanda<sup>1</sup>, Yayoi Tada<sup>1,2</sup>, Hiroshi Uozaki<sup>3</sup>, Toshio Fukusato<sup>3</sup>, Shinichi Sato<sup>2</sup>, Shinichi Watanabe<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Teikyo University School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Dermatology, University of Tokyo Faculty of Medicine, Tokyo, Japan, <sup>3</sup>Department of Pathology, Teikyo University School of Medicine, Tokyo, Japan
- P01-34 Acute generalized exanthematous pustulosis and generalized pustular psoriasis: Are they distinct pustular disorders?**  
Hyo Sang Song<sup>1</sup>, ○ Sang Jin Kim<sup>1</sup>, Yong Hyun Jang<sup>2</sup>, Eun-So Lee<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Ajou University School of Medicine, Suwon, Korea, <sup>2</sup>Department of Dermatology, Kyungpook National University School of Medicine, Daegu, Korea
- P01-35 Analysis of CCR4-Expressing T Cells in Patients with Rhododendol-Induced Leukoderma**  
○Megumi Nishioka<sup>1</sup>, Atsushi Tanemura<sup>1</sup>, Aya Tanaka<sup>1</sup>, Noriko Arase<sup>1</sup>, Hiroyoshi Nishikawa<sup>2</sup>, Ichiro Katayama<sup>1</sup>, Shimon Sakaguchi<sup>2</sup>  
<sup>1</sup>Department of Dermatology Course of Integrated Medicine Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>2</sup>Experimental Immunology Immunology Frontier Research Center, Osaka University
- P01-36 Functional assessment of TRAF3IP2/Act1 expression and genetic variation in skin and blood cells**  
○Ning Yu<sup>1</sup>, Sylviane Lambert<sup>2</sup>, Andrew Johnston<sup>2</sup>, Charlotta Enerback<sup>3</sup>, James T Elder<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Shanghai Skin Disease Hospital, Shanghai, China, <sup>2</sup>Department of Dermatology, University of Michigan Medical Center, Ann Arbor, MI, USA, <sup>3</sup>Division of Cell Biology and Dermatology, Department of Clinical and Experimental Medicine, Ingrid Asp Psoriasis Research Center, Faculty of Health Sciences, Linköping University, Linköping, Sweden

- P01-37 Forensic potentials of MMPs and CC chemokines for wound age determination by real time PCR**  
 ○Yenan Wang<sup>1,2</sup>, Yuki Yamamoto<sup>2</sup>, Fukumi Furukawa<sup>2</sup>  
<sup>1</sup>Department of Forensic Medicine, Wakayama Medical University, Wakayama Japan, <sup>2</sup>Department of Dermatology, Wakayama Medical University, Wakayama Japan
- P01-38 Detection of IgE anti BP180 and anti BP230 autoantibodies in patients with bullous pemphigoid**  
 ○Ayaka Ohzono<sup>1</sup>, Norito Ishii<sup>1</sup>, Atsunari Tsuchisaka<sup>2</sup>, Teye Kwesi<sup>2</sup>, Masahiro Hashiguchi<sup>3</sup>, Chika Ohata<sup>1</sup>, Mino Furumura<sup>1</sup>, Takekuni Nakama<sup>1</sup>, Takashi Hashimoto<sup>1,2</sup>  
<sup>1</sup>Department of Dermatology, Kurume University School of Medicine, Kurume, Japan, <sup>2</sup>Kurume University Institute of Cutaneous Cell Biology, Kurume, Japan, <sup>3</sup>Medical & Biological Laboratories Co. Ltd, Marketing & Technical Support Department, Tokyo, Japan
- P01-39 Topical Thioredoxin Inhibits IL-6 and IL-1beta Production from Keratinocytes and is Effective for Psoriasis-Like Dermatitis in Mice**  
 ○Kenji Sakurai<sup>1</sup>, Teruki Dainichi<sup>1</sup>, Reiko Matsumoto<sup>1</sup>, Hai Tian<sup>2</sup>, Junji Yodoi<sup>3</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan, <sup>2</sup>Redox Bio Science Inc, Kyoto, Japan, <sup>3</sup>Laboratory of Infection and Prevention, Department of Biological Response, Institute for Virus Research, Kyoto University, Kyoto, Japan
- P01-40 The inhibitor of p38 MAP kinase suppresses skin fibrosis in the sclerodermatous chronic GVHD**  
 ○Mutsumi Date, Takashi Matsushita, Yasuhito Hamaguchi, Kazuhiko Takehara  
 Department of Dermatology, Faculty of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan
- P01-41 Ursolic acid inhibits human neutrophil activation through regulation of calcium mobilization**  
 ○Tsong-Long Hwang  
 Graduate Institute of Natural Products, Chang Gung University
- P01-42 Role of cyclosporine A in inhibitory mechanism of pruritus in atopic dermatitis**  
 ○Kyi Chan Ko, Mitsutoshi Tominaga, Yayoi Kamata, Yoshie Umehara, Kenji Takamori  
 Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Tokyo, Japan
- P01-43 The effect of hydroxychloroquine on the lupus erythematosus-like skin lesions in MRL/lpr mice**  
 ○Tatsuya Shimomatsu, Nobuo Kanazawa, Tomomi Nakatani, Hong-jin Li, Yutaka Inaba, Takaharu Ikeda, Fukumi Furukawa  
 Department of Dermatology, Wakayama Medical University, Wakayama, Japan
- P01-44 Programmed death-ligand 1,2 expressions are decreased in the epidermis of psoriasis**  
 ○Dae Suk Kim, Jung Hwan Je, Sung Hee Kim, Dongyun Shin, Do Young Kim, Min-Geol Lee  
 Department of Dermatology, Severance Hospital, Cutaneous Biology Research Institute, Yonsei University College of Medicine, Seoul, South Korea
- P01-45 Therapeutic effect of astaxanthin on atopy-like dermatitis in NC/Nga mice**  
 ○Yoko Yoshihisa<sup>1</sup>, Tsugunobu Andoh<sup>2</sup>, Kenji Matsunaga<sup>1</sup>, Tadamichi Shimizu<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, <sup>2</sup>Department of Applied Pharmacology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan
- P01-46 Roles of granzyme A in pathology of patients with atopic dermatitis**  
 ○Yayoi Kamata<sup>1</sup>, Utako Kimura<sup>2</sup>, Hironori Matsuda<sup>1</sup>, Suhandy Tenggara<sup>1</sup>, Kyoichi Iizumi<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, Kenji Takamori<sup>1,2</sup>  
<sup>1</sup>Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, <sup>2</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Chiba, Japan
- P01-47 Persistent release of IL-1s from skin is associated with systemic cardio-vascular disease, emaciation and systemic amyloidosis**  
 ○Keiichi Yamanaka, Takehisa Nakanishi, Masato Kakeda, Hitoshi Mizutani  
 Mie University, Graduate School of Medicine
- P01-48 Effects of interferon-gamma on expression of ceramide synthases and elongases of long-chain fatty acids in cultured human keratinocytes**  
 ○Yu Yasue<sup>1</sup>, Asako Ishitsuka<sup>2</sup>, Etsuko Fujine<sup>2</sup>, Yoshiko Banno<sup>2</sup>, Hiroyuki Kanoh<sup>2</sup>, Mariko Seishima<sup>2</sup>  
<sup>1</sup>Department of Dermatology, School of Medicine, Gifu University Gifu, Japan, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, Gifu University, Gifu, Japan
- P01-49 Macrophage migration inhibitory factor is increased in the stratum corneum of patients with atopic dermatitis**  
 ○Chie Yasuda<sup>1</sup>, Akiko Enomoto<sup>1</sup>, Shioji Ishiwatari<sup>1</sup>, Naoya Mori<sup>2</sup>, Kenji Matsunaga<sup>2</sup>, Yoko Yoshihisa<sup>2</sup>, Shoko Matsukuma<sup>1</sup>, Tadamichi Shimizu<sup>2</sup>  
<sup>1</sup>Beauty Science Research Center, Fancl Research Institute, Totsuka, Yokohama, Japan, <sup>2</sup>Department of Dermatology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Sugitani, Toyama

- P01-50 Isoflavone extract being a potential therapeutic agent for inflammatory skin diseases**  
○Chi-Feng Hung<sup>1</sup>, Hsin-Ju Li<sup>2</sup>, Nan-Lin Wu<sup>3</sup>  
<sup>1</sup>School of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan, <sup>2</sup>Department of Chemistry, Fu-Jen Catholic University, New Taipei City, Taiwan, <sup>3</sup>Department of Dermatology, Mackay Memorial Hospital, Taipei, Taiwan
- P01-51 Free radical production in LPS-treated skin of atopic dermatitis mouse model**  
○Kozo Nakai<sup>1</sup>, Maria Kadiiska<sup>2</sup>, Jin-Jie Jiang<sup>2</sup>, Ronald Mason<sup>2</sup>, Tetsuya Moriue<sup>1</sup>, Kozo Yoneda<sup>1</sup>, Yasuo Kubota<sup>1</sup>  
<sup>1</sup>Kagawa University, <sup>2</sup>NIEHS
- P01-52 Clinicopathological analysis of erythema nodosum-like lesions in 20 cases of Behcet's disease**  
○Masato Ishikawa, Yasunobu Kato, Toshiyuki Yamamoto  
Department of Dermatology, Fukushima Medical University, Fukushima, Japan
- P01-53 Anti-inflammatory and Anti-Bacterial Properties of SIG1273: A Skin Protecting Cosmetic Functional Ingredient**  
José R. Fernández<sup>1</sup>, Karl Rouzard<sup>1</sup>, Michael Voronkov<sup>1</sup>, Kristen L. Huber<sup>1</sup>, Jeffrey B. Stock<sup>2</sup>, Maxwell Stock<sup>1</sup>, Joel S. Gordon<sup>1</sup>,  
○Eduardo Pérez<sup>1</sup>  
<sup>1</sup>Signum Dermalogix, Princeton, NJ, <sup>2</sup>Princeton University, Department of Molecular Biology, Princeton, NJ
- P01-54 Lysophosphatidic acid receptors (LPA1 and LPA3) antagonist inhibits dermal sclerosis in bleomycin-induced murine scleroderma**  
○Takenobu Ohashi, Toshiyuki Yamamoto  
Department of Dermatology, Fukushima Medical University, Fukushima, Japan

## Category 2(P02): Carcinogenesis/Growth Factors/ Signal Transduction/Cancer Genetics

- P02-01 [II-2] The role of versican on the pathogenesis of Sèzary syndrome**  
○Kazuyasu Fujii<sup>1,2,3</sup>, Maria Karpova<sup>1</sup>, Phil Cheng<sup>1</sup>, Takuro Kanekura<sup>3</sup>, Keiji Iwatsuki<sup>2</sup>, Reinhard Dummer<sup>1</sup>, Mirjana Urosevic-Maiwald<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Zurich, Zurich, Switzerland, <sup>2</sup>Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan, <sup>3</sup>Department of Dermatology, Kagoshima University Graduate School of Medical and Dental Science, Kagoshima, Japan
- P02-02 [C02-01] Epigenetic regulation of E-cadherin in the reprogramming gene-introduced cancer cells**  
○Mikiro Takaishi<sup>1</sup>, Masahito Tarutani<sup>1</sup>, Junji Takeda<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan, <sup>2</sup>Department of Social and Environmental Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan
- P02-03 [C02-02] Endoplasmic reticulum stress-induced keratinocyte necrosis is a new mechanism of epidermal cell death in SJS/TEN**  
○Mikiko Tohyama, Xiuju Dai, Ken Shiraishi, Masamoto Murakami, Koji Sayama  
Department of Dermatology, Ehime University Graduate School of Medicine
- P02-04 Imiquimod Induces STAT3- Mediated Autophagy via ROS Production in Cancer Cells**  
○Shu Hao Chang<sup>1</sup>, Jeng-Jer Shieh<sup>1,2</sup>, Shi-Wei Huang<sup>1</sup>  
<sup>1</sup>Institute of Biomedical Sciences, National Chung Hsing University, Taichung, Taiwan, <sup>2</sup>Department of Education and Research, Taichung Veteran General Hospital, Taichung, Taiwan
- P02-05 [C02-03] Role of endothelin-1/endothelin receptor signaling in fibrosis and calcification in nephrogenic systemic fibrosis**  
○Sei-ichiro Motegi<sup>1</sup>, Akihiko Uchiyama<sup>1</sup>, Kazuya Yamada<sup>1</sup>, Buddhini Perera<sup>1</sup>, Sachiko Ogino<sup>1</sup>, Yoko Yokoyama<sup>1</sup>, Yuko Takeuchi<sup>1</sup>, Fumiko Sato<sup>2</sup>, Tamio Suzuki<sup>2</sup>, Osamu Ishikawa<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, <sup>2</sup>Department of Dermatology, Faculty of Medicine, Yamagata University, Yamagata, Japan
- P02-06 [C02-04] Injury promotes melanoma metastasis via wound healing process with periostin**  
○Keitaro Fukuda<sup>1,2</sup>, Eiji Sugihara<sup>2</sup>, Shoichiro Ohta<sup>3</sup>, Kenji Izuhara<sup>4</sup>, Masayuki Amagai<sup>1</sup>, Hideyuki Saya<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, <sup>2</sup>Division of Gene Regulation, Institute for Advanced Medical Research, Keio University School of Medicine, Tokyo, Japan, <sup>3</sup>Department of Laboratory Medicine, Saga Medical School, Saga, Japan, <sup>4</sup>Division of Medical Biochemistry, Department of Biomolecular Sciences, Saga Medical School, Saga, Japan
- P02-07 Regulation of ROS level by BMAL1, a core component of the molecular clock system, in the skin**  
○Shigeki Shimba<sup>1</sup>, Kenichi Ito<sup>2</sup>, Tonoji Hamada<sup>2</sup>, Arunasiri Iddamalagoda<sup>2</sup>  
<sup>1</sup>Department of Health Science, School of Pharmacy, Nihon University, Funabashi, Japan, <sup>2</sup>Research & Development dept., Ichimaru Pharcos Co., Ltd., Gifu, Japan

- P02-08 IMQ induced AMPK activation causes translation inhibition and apoptosis but not autophagy**  
 ○Sin-Ting Wang<sup>1</sup>, Jeng-Jer Shieh<sup>1,2,3</sup>, Shi-Wei Huang<sup>1</sup>, Chun-Ying Wu<sup>4</sup>  
<sup>1</sup>Institute of Biomedical Sciences, National Chung Hsing University, Taichung, Taiwan, <sup>2</sup>Department of Education and Research, Taichung Veterans General Hospital, Taichung, Taiwan, <sup>3</sup>Rong Hsing Research Center for Translational Medicine, National Chung Hsing University, <sup>4</sup>Division of Gastroenterology and Hepatology, Taichung Veterans General Hospital, Taichung, Taiwan
- P02-09 [C02-05] Acantholytic variants of SCC are related to the frequent local recurrence and mostly caused by the internalization of desmosomal proteins**  
 ○Ryoko Awazawa, Daisuke Utsumi, Yoshiyuki Kariya, Hiroshi Uezato, Kenzo Takahashi  
 Department of Dermatology, University of the Ryukyus, Okinawa, Japan
- P02-10 [C02-06] Aberrant expression of chemokine receptors in lymphoma cells through flow cytometry-based segregation in patients with mycosis fungoides**  
 ○Mika Teraishi<sup>1</sup>, Hideki Nakajima<sup>1</sup>, Sayo Kataoka<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Nankoku, Japan, <sup>2</sup>Science Research Center, Kochi University, Nankoku, Japan
- P02-11 Extracellular pH in microenvironment affects anti-tumor activity of inhibitors of mitochondrial respiration against melanoma**  
 ○Fumihito Noguchi  
 Department of Regenerative Dermatology, Graduate School of Medicine, Osaka University, Osaka, Japan
- P02-12 Heat shock factor 1 is required for migration and invasion of human melanoma in vitro and in vivo**  
 ○Yoshitaka Nakamura, Sonoko Fukushima, Akiko Nakamura, Masahiko Muto  
 Department of Dermatology, Yamaguchi University Graduate School of Medicine, Ube, Japan
- P02-13 Cancer testis antigens are expressed in invasive squamous cell carcinoma**  
 ○Hiroshi Mitsui<sup>1,2</sup>, Lauren M. Taylor<sup>3</sup>, Mayte Suárez-Fariñas<sup>2</sup>, Kejal R. Shah<sup>4</sup>, Diane Felsen<sup>5</sup>, Shinji Shimada<sup>1</sup>, James G. Krueger<sup>2</sup>, John A. Carucci<sup>3</sup>  
<sup>1</sup>Department of Dermatology, Faculty of Medicine, University of Yamanashi, Japan, <sup>2</sup>Laboratory for Investigative Dermatology, the Rockefeller University, USA, <sup>3</sup>Ronald O. Perelman Department of Dermatology, New York University Langone Medical Center, USA, <sup>4</sup>Texas Dermatology Associates, Baylor University Medical Center, USA, <sup>5</sup>Department of Urology, Weill Cornell Medical College, USA
- P02-14 FTY720 and cisplatin induce cell death of cisplatin-resistant melanoma cells through PI3K pathway and decrease in EGFR expression**  
 ○Asako Ishitsuka, Etsuko Fujine, Yoshiko Banno, Hiroyuki Kanoh, Mariko Seishima  
 Department of Dermatology, Gifu University Graduate School of Medicine, Gifu, Japan
- P02-15 Expression of langerhans cells, dermal dendritic cells and plasmacytoid dendritic cells in early stage mycosis fungoides; case control study**  
 Marwa M. Fawzy<sup>1</sup>, ○ Mostafa I. Abd El-Latif<sup>1</sup>, Rehab A. Hegazy<sup>1</sup>, Amira El Tawdy<sup>1</sup>, Ichiro Katayama<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Cairo University, Cairo, Egypt, <sup>2</sup>Department of Dermatology, Graduate School of Medicine, Osaka University, Osaka, Japan
- P02-16 The expression of c-Jun in various skin tumors**  
 ○Bum Joon Ko<sup>1</sup>, Euy Hyun Chung<sup>3</sup>, Ye Seul Kim<sup>2</sup>, Je Min An<sup>1</sup>, Kyung O Kim<sup>2</sup>, Young Lip Park<sup>2</sup>, Jong Suk Lee<sup>3</sup>, Kyu Ung Whang<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Soonchunhyang University College of Medicine, Seoul, Korea, <sup>2</sup>Department of Dermatology, Soonchunhyang University College of Medicine, Bucheon, Korea, <sup>3</sup>Department of Dermatology, Soonchunhyang University College of Medicine, Cheonan, Korea
- P02-17 Identified early stage mycosis fungoides from psoriasis and atopic dermatitis by using non-invasive color contrast enhancement**  
 ○Yu-Ping Hsiao<sup>1</sup>, Hsiang-Chen Wang<sup>3,4</sup>, Cheng-Hsien Hsu<sup>3,4</sup>, Yung-Sheng Chen<sup>3,4</sup>, Chung-Hung Tsai<sup>2,5</sup>, Jen-Hung Yang<sup>6,7</sup>  
<sup>1</sup>Dermatology Department, Chung Shan Medical University Hospital, Taichung, Taiwan, <sup>2</sup>Institute of Medicine, School of Medicine, Chung Shan Medical University, Taiwan, <sup>3</sup>Graduate Institute of Opto-Mechatronics, National Chung Cheng University, Taiwan, <sup>4</sup>Advanced Institute for Manufacturing with High-tech Innovations (AIM-HI), National Chung Cheng University, Taiwan, <sup>5</sup>Department of Pathology, Chung Shan Medical University Hospital, Taiwan, <sup>6</sup>School of Medicine, Tzu Chi University, Taiwan, <sup>7</sup>Department of Dermatology, Buddhist Tzu Chi General Hospital, Taiwan

## Category 3(P03): Cell Adhesion/Matrix/Vascular Biology

- P03-01 [III-5] Super resolution microscopy reveals altered desmosome organization, endocytosis and desmosome splitting in pemphigus vulgaris epidermis**  
○Sara N. Stahley, Maxine F. Warren, Ron J Feldman, Alexa L. Mattheyses, Andrew P. Kowalczyk  
Emory University, Atlanta, GA, United States
- P03-02 [C08-06] A combination of pemphigus foliaceus IgG monoclonal antibodies promotes desmoglein 1 clustering which induces synergistic pathogenic effect**  
○Kenji Yoshida<sup>1</sup>, Ken Ishii<sup>1</sup>, Atsushi Shimizu<sup>1</sup>, Mariko Yokouchi<sup>2</sup>, Masayuki Amagai<sup>2</sup>, John R Stanley<sup>3</sup>, Akira Ishiko<sup>1</sup>  
<sup>1</sup>Dermatology, Toho University School of Medicine, Tokyo, Japan, <sup>2</sup>Dermatology, Keio University School of Medicine, Tokyo, Japan, <sup>3</sup>Dermatology, University of Pennsylvania, Philadelphia, PA
- P03-03 [C08-07] Context-dependent tight regulation of collagen XVII ectodomain shedding in skin**  
○Wataru Nishie, Ken Natsuga, Kentaro Izumi, Hideyuki Ujiie, Hiroo Hata, Hiroshi Shimizu  
Department of Dermatology, Hokkaido University Graduate School of Medicine, Sapporo, Japan
- P03-04 [C08-08] Biological effect of vascular endothelial growth factor-C on culture lymphatic endothelial cells**  
○Satoshi Hirakawa<sup>1</sup>, Manami Iwasaki<sup>1</sup>, Akihiro Nishiguchi<sup>2</sup>, Michiya Matsusaki<sup>2</sup>, Mitsuru Akashi<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Hamamatsu University School of Medicine, Japan, <sup>2</sup>Department of Applied Chemistry, Graduate School of Engineering, Osaka University, Japan
- P03-05 Inhibitory action against fibrosis in systemic sclerosis by apelin**  
○Yoko Yokoyama, Akihiko Uchiyama, Kazuya Yamada, Sachiko Ogino, Osamu Ishikawa, Sei-ichiro Motegi  
Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
- P03-06 An alternate endocytic motif mediates VE-cadherin degradation by Kaposi sarcoma-associated herpesvirus**  
Benjamin A. Nanes<sup>1</sup>, Brian S. Robinson<sup>1</sup>, Marina Mosunjac<sup>1</sup>, Klaus Fruh<sup>2</sup>, ○ Andrew P. Kowalczyk<sup>1</sup>  
<sup>1</sup>Emory University, Atlanta, GA, United States, <sup>2</sup>Vaccine and Gene Therapy Institute, Oregon Health and Science University, Beaverton
- P03-07 Three dimensional real-time analysis of Rho/Rho kinase pathway in cultured endothelial cells by low-coherent quantitative phase microscope**  
○Masahiro Aoshima<sup>1</sup>, Toyohiko Yamauchi<sup>2</sup>, Yoshiki Tokura<sup>1</sup>, Satoshi Hirakawa<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Hamamatsu University School of Medicine, Japan, <sup>2</sup>Hamamatsu Photonics K.K., Japan.
- P03-08 Cartilage Oligomeric Matrix Protein (COMP) has the important role for the collagen network architecture and elasticity of the skin**  
○Shujiro Hayashi<sup>1</sup>, Jan-N Schulz<sup>2</sup>, Anja Niehoff<sup>3</sup>, Thomas Krieg<sup>2</sup>, Beate Eckes<sup>2</sup>, Atsushi Hatamochi<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Dokkyo Medical University, School of Medicine, Mibu, Tochigi, Japan, <sup>2</sup>Dermatology University of Cologne, Cologne, Germany, <sup>3</sup>German Sport University, Cologne, Germany
- P03-09 Mechanical stress-induced nuclear dysfunction, exacerbating inflammatory response against external stimuli in human dermal fibroblasts**  
○Hirofumi Takeuchi, Kazuyuki Yo, Mayumi Shishido, Yu Ikeda, Michiko Shono, Takamasa Gomi  
POLA Chemical Industries, Inc.
- P03-10 Different responses to low intensity mechanical stress in normal human dermal fibroblasts**  
○Kenta Shingaki<sup>1</sup>, Shigeyuki Kanazawa<sup>2</sup>, Sachi Kawaguchiya<sup>1</sup>, Kosuke Torii<sup>1</sup>, Ko Hosokawa<sup>2</sup>  
<sup>1</sup>Department of Research & Development, Noevir Co., Ltd., Shiga, Japan, <sup>2</sup>Department of Plastic Surgery, Osaka university Graduate School of Medicine, Osaka, Japan

## Category 4(P04): Cell Adhesion/Matrix/Vascular Biology

- P04-01 [I-5] Topical rapamycin treatment is effective in hypopigmented macules of tuberous sclerosis**  
○Fei Yang<sup>1</sup>, Mari Wataya-Kaneda<sup>1</sup>, Mari Tanaka<sup>1</sup>, Lingli Yang<sup>1</sup>, Daisuke Tsuruta<sup>2</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, <sup>2</sup>Department of Dermatology, Osaka City University Graduate School of Medicine
- P04-02 [I-6] Non-invasive three-dimensional diagnostic approach to extramammary Paget's disease by two-photon microscopy**  
○Teruasa Murata, Tetsuya Honda, Kenji Kabashima  
Department of Dermatology, Kyoto University, Kyoto, Japan
- P04-03 [C03-01] Detection of subclinical enthesitis as a potential predictor of psoriatic arthritis in Japanese psoriasis patients**  
○Tomoya Takata<sup>1</sup>, Aya Takahashi<sup>1</sup>, Yoshinori Taniguchi<sup>2</sup>, Yoshio Terada<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi University, Kochi, Japan, <sup>2</sup>Department of Endocrinology, Metabolism and Nephrology, Kochi Medical School, Kochi University

- P04-04 [C03-02] Effect of topical steroid on the stratum corneum compositions by using confocal Raman microscopy**  
 ○Hideaki Tanizaki, Wataru Amano, Pawinee Rerknimitr, Yoshiki Miyachi, Kenji Kabashima  
 Kyoto University Graduate School of Medicine, Kyoto, Japan
- P04-05 [C03-03] Detection of IFN- $\alpha$  response induced by plasmacytoid dendritic cells via LL37 in the lesional skin of drug-induced hypersensitivity syndrome**  
 ○Pawinee Rerknimitr, Saeko Nakajima, Akihiko Kitoh, Yoshiki Miyachi, Kenji Kabashima  
 Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P04-06 [C03-04] High titer of anti-phosphatidylserine-prothrombin complex antibodies in patients and model rats with rheumatoid vasculitis**  
 ○Tamihiro Kawakami<sup>1</sup>, Sora Takeuchi<sup>1</sup>, Yoshinao Soma<sup>1</sup>, Ai Kawakami<sup>2</sup>, Utano Tomaru<sup>3</sup>, Akihiro Ishizu<sup>4</sup>  
<sup>1</sup>Department of Dermatology, St. Marianna University School of Medicine, Kawasaki, Japan, <sup>2</sup>Graduate School of Health Sciences, Hokkaido University, Sapporo, Japan, <sup>3</sup>Department of Pathology, Hokkaido University Graduate School of Medicine, Sapporo, Japan, <sup>4</sup>Faculty of Health Sciences, Hokkaido University, Sapporo, Japan
- P04-07 [C03-05] The expression of CADM1/TSLC1 in leukemic cutaneous T-cell lymphoma: a possible diagnostic marker for Sézary syndrome**  
 ○Mari Yamaguchi<sup>1</sup>, Toshihisa Hamada<sup>1</sup>, Masahide Imada<sup>2</sup>, Toshiyuki Watanabe<sup>2</sup>, Ken Okada<sup>2</sup>, Keiji Iwatsuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan, <sup>2</sup>Division of medical support of Okayama University Hospital, Okayama, Japan
- P04-08 [C03-06] The serum levels of squamous cell carcinoma antigens 1 and 2 are associated with severity and clinical types of atopic dermatitis**  
 ○Tomoko Okawa<sup>1</sup>, Yukie Yamaguchi<sup>1</sup>, Kevin Kou<sup>1</sup>, Junya Ono<sup>2</sup>, Yusuke Inoue<sup>1</sup>, Masumi Kohno<sup>3</sup>, Setsuko Matsukura<sup>3</sup>, Takeshi Kambara<sup>3</sup>, Shoichiro Ohta<sup>4</sup>, Kenji Izuhara<sup>5</sup>, Michiko Aihara<sup>1</sup>  
<sup>1</sup>Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan, <sup>2</sup>Shino-Test Corporation, Sagamihara, Japan, <sup>3</sup>Department of Dermatology, Yokohama City University Medical Center, Yokohama, Japan, <sup>4</sup>Department of Laboratory Medicine, Saga Medical School, Saga, Japan, <sup>5</sup>Division of Medical Biochemistry, Department of Biomolecular Sciences, Saga Medical School, Saga, Japan
- P04-09 [C03-07] Elevated IL-10 levels are associated with beneficial responses to plasmapheresis while predicting progression to cytomegalovirus disease**  
 ○Yumi Aoyama<sup>1</sup>, Shin Morizane<sup>1</sup>, Toshihisa Hamada<sup>1</sup>, Tetsuo Shiohara<sup>2</sup>, Keiji Iwatsuki<sup>1</sup>  
<sup>1</sup>Dermatology, Okayama University, Okayama, Japan, <sup>2</sup>Dermatology, Kyorin University, Mitaka city, Tokyo, Japan
- P04-10 [C03-08] Secukinumab Treatment Rapidly Leads to Positive Proteomic and Transcriptional Changes in Psoriatic Skin**  
 ○Frank Kolbinger<sup>1</sup>, Gerardus Bruin<sup>1</sup>, Marie-Anne Valentin<sup>1</sup>, Thomas Peters<sup>1</sup>, Edward Khokhlovich<sup>1</sup>, Xiuyun Jiang<sup>1</sup>, Irina Koroleva<sup>1</sup>, David Lee<sup>1</sup>, Frank Sinner<sup>2</sup>, Thomas Pieber<sup>2</sup>, Christian Dragatin<sup>2</sup>, Manfred Bodenlenz<sup>2</sup>, Christian Loesche<sup>1</sup>  
<sup>1</sup>Novartis Institutes for BioMedical Research, Basel, Switzerland, <sup>2</sup>HEALTH - Institute for Biomedicine and Health Sciences of the Joanneum Research Forschungsgesellschaft mbH, Graz, Austria
- P04-11 Novel microperfusion method confirms higher IL-17A and  $\beta$ -defensin-2 levels in psoriasis lesional skin compared to non-lesional skin**  
 ○Christian Loesche<sup>1</sup>, Gerardus Bruin<sup>1</sup>, Marie-Anne Valentin<sup>1</sup>, Florine Polus<sup>1</sup>, Frank Kolbinger<sup>1</sup>, Frank Sinner<sup>2</sup>  
<sup>1</sup>Novartis Institutes for BioMedical Research, Basel, Switzerland, <sup>2</sup>JOANNEUM RESEARCH, Institute for Biomedicine and Health Sciences; Medical University, Graz, Austria
- P04-12 Three dimensional analysis of suppressive mechanism of mental sweating in patients with adult onset atopic dermatitis**  
 ○Aya Nishizawa<sup>1</sup>, Kohei Katoh<sup>1</sup>, Yoshihiko Sugawa<sup>2</sup>, Masato Ohmi<sup>2</sup>, Hiroo Yokozeki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School, Tokyo Medical and Dental University, Tokyo, Japan, <sup>2</sup>Course of Health Science, Graduate School of Medicine, Osaka University, Osaka, Japan
- P04-13 Withdrawn**
- P04-14 Tight Junction Protein Expression Delineates Ductal Differentiation in Sweat Gland Tumors and Reversed Polarity of Mucinous Carcinoma**  
 ○Yusuke Nagasawa, Akemi Ishida-Yamamoto  
 Department of Dermatology, Asahikawa Medical University, Hokkaido, Japan
- P04-15 Apoptotic gene expression profile in Sinecatechin-treated external and genital warts**  
 ○Hung Q. Doan<sup>1</sup>, Harrison P. Nguyen<sup>2</sup>, David J. Brunell<sup>3</sup>, Peter L. Rady<sup>1</sup>, Stephen K. Tyring<sup>1</sup>  
<sup>1</sup>Department of Dermatology, The University of Texas Health Science Center at Houston, Houston, Texas, <sup>2</sup>Baylor College of Medicine, <sup>3</sup>Texas A&M Health Science Center
- P04-16 Effect of pregabalin on acute herpes zoster pain**  
 ○Rui Tanaka<sup>1</sup>, Takashi Ando<sup>1</sup>, Takeshi Yanagishita<sup>1</sup>, Yuki Kohara<sup>2</sup>, Morihiro Kawata<sup>2</sup>, Noriko Kimura<sup>3</sup>, Yoshimi Oshitani<sup>3</sup>, Hirono Sugaya<sup>4</sup>, Taku Watanabe<sup>4</sup>, Yoichi Akita<sup>1</sup>, Daisuke Watanabe<sup>1</sup>  
<sup>1</sup>Aichi Medical University, <sup>2</sup>Kainan Hospital, <sup>3</sup>Chubu Rosai Hospital, <sup>4</sup>Toyota Memorial Hospital

- P04-17 Involvement of HHV-6 infection in renal damage associated with DIHS**  
○Kazuya Miyashita, Chinatsu Shoubatake, Fumi Miyagawa, Nobuhiko Kobayashi, Rie Ommori, Hideo Asada  
Department of Dermatology, Nara Medical University, Nara, Japan
- P04-18 In vivo retinoid molecular profile of retinaldehyde in human photoaged skin**  
Florence Nadal-Wollbold<sup>1</sup>, Cecile Viode<sup>1</sup>, Sandrine Alvarez-Georges<sup>1</sup>, Ophelie Lejeune<sup>1</sup>, Gwendal Josse<sup>1</sup>, Christiane Casas<sup>1</sup>, Valerie Mengeaud<sup>1</sup>, Daniel Redoules<sup>1</sup>, ○Anne-Marie Schmitt<sup>1,2</sup>  
<sup>1</sup>European Skin Research Center, <sup>2</sup>Dermatology Department, Larrey Hospital, Toulouse, France
- P04-19 Clearance Efficacy of Autoantibodies in Double Filtration Plasmapheresis for Pemphigus Foliaceus**  
○Akira Kasuya, Kazuki Tatsuno, Yoshiki Tokura  
Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan
- P04-20 Dietary royal jelly improves epidermal hydration with increased levels of ceramides in the epidermis of mid-aged healthy human subjects**  
○Yunhi Cho<sup>1</sup>, Jongyei Kim<sup>1</sup>, Jihye Shin<sup>1</sup>, Myongil Bae<sup>2</sup>, Min-kyung Shin<sup>2</sup>  
<sup>1</sup>Department of Medical Nutrition, Graduate School of East-West Medical Science, Kyung Hee University, Yongin-si, Korea, <sup>2</sup>Department of Dermatology, Kyung Hee University Medical Center, Seoul, Korea
- P04-21 Assessment of melanomaintiating cell markers and conventional parameters in sentinel lymph nodes of malignant melanoma**  
○Norihito Suzuki<sup>1</sup>, Minoru Takata<sup>1</sup>, Yoshinori Shirafuji<sup>1</sup>, Masaki Ohtsuka<sup>1</sup>, Osamu Yamasaki<sup>1</sup>, Kenji Asagoe<sup>2</sup>, Naohito Hatta<sup>3</sup>, Keiji Iwatsuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry, Pharmaceutical Sciences, Okayama, Japan, <sup>2</sup>Department of Dermatology, Okayama Medical Center, Okayama, Japan, <sup>3</sup>Department of Dermatology, Toyama Prefectural Central Hospital, Toyama, Japan
- P04-22 Morphological alteration of the eccrine sweat apparatus in amputated feet and legs of patients with diabetes mellitus**  
○Mikiko Sugiyama<sup>1,5</sup>, Yuuka Suzuki<sup>2</sup>, Tokio Nakada<sup>2</sup>, Hitoshi Nemoto<sup>3</sup>, Hiroshi Suzuki<sup>4</sup>, Shigeki Nagata<sup>5</sup>, Hirohiko Sueki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Higashi Hospital, Showa University School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Dermatology, Fujigaoka Hospital, Showa University School of Medicine, Yokohama, Japan, <sup>3</sup>Department of Plastic Surgery, Fujigaoka Hospital, Showa University School of Medicine, Yokohama, Japan, <sup>4</sup>Department of Cardiology, Fujigaoka Hospital, Showa University School of Medicine, Yokohama, Japan, <sup>5</sup>Department of Dermatology, Koto-Toyosu Hospital, Showa University School of Medicine, Tokyo, Japan
- P04-23 High levels of serum amyloid A in patients with generalized pustular psoriasis**  
○Tatsuhiko Mori, Toshiyuki Yamamoto  
Dermatology, Fukushima Medical University, Fukushima, Japan
- P04-24 Comparison of indigo naturalis extract in oil (Lindioil) to calcipotriol solution in treating psoriatic nails: a randomized trial**  
○Yin-Ku Lin<sup>1,2</sup>  
<sup>1</sup>Department of Traditional Chinese Medicine, Chang Gung Memorial Hospital at Keelung, Taiwan, <sup>2</sup>School of Traditional Chinese Medicine, Chang Gung University, Taoyuan, Taiwan

## Category 5(P05): Epidermal Structure and Function

- P05-01 [II-1] Epidermis-specific ablation of claudin-1 in adult mice demonstrates the essential role of a tight junction barrier in skin homeostasis**  
○Takashige Hirano<sup>1,2</sup>, Mariko Yokouchi<sup>1</sup>, Toru Atsugi<sup>1,3</sup>, Masayuki Amagai<sup>1</sup>, Akiharu Kubo<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Keio University, Tokyo, Japan, <sup>2</sup>Maruho Co., Kyoto, Japan, <sup>3</sup>KOSÉ Co., Tokyo, Japan
- P05-02 [II-3] Role of a Desmosome-COP9 signalosome complex in epidermal differentiation**  
○Nicole A. Najor<sup>1</sup>, Kathleen J. Green<sup>1,2</sup>  
<sup>1</sup>The Department of Pathology, Northwestern University Feinberg School of Medicine, <sup>2</sup>The Department of Dermatology, Northwestern University Feinberg School of Medicine
- P05-03 [C11-01] Proteome analysis of stratum corneum from atopic dermatitis patients by hybrid quadrupole-orbitrap mass spectrometer**  
Jun-ichi Sakabe, Koji Kamiya, ○Yoshiki Tokura  
Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan
- P05-04 [C11-02] Dose-dependent role of claudin-1 in epidermal differentiation and inflammation**  
Reitaro Tokumasu<sup>1</sup>, Yuji Yamazaki<sup>1,2</sup>, Hiroyuki Murota<sup>3</sup>, ○Kosuke Yamaga<sup>1,3</sup>, Koya Suzuki<sup>1</sup>, Atsushi Tamura<sup>1</sup>, Hiroshi Kiyonari<sup>4</sup>, Ichiro Katayama<sup>3</sup>, Sachiko Tsukita<sup>1</sup>  
<sup>1</sup>Laboratory of Biological Science, Graduate School of Frontier Biosciences and Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>2</sup>Departments of Molecular and Cell Biology, University of California at Berkeley, Berkeley, CA, USA, <sup>3</sup>Department of Dermatology Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>4</sup>Laboratory for Animal Resources and Genetic Engineering, RIKEN Center for Developmental Biology, Kobe, Japan

- P05-05 [C11-03] IL-17A weakens the tight junction (TJ) barrier in a human-skin-equivalent model: A possible mechanism of impaired TJ in atopic dermatitis**  
 ○Takuo Yuki<sup>1</sup>, Ayumi Kusaka<sup>1</sup>, Aya Komiya<sup>1</sup>, Megumi Tobiishi<sup>1</sup>, Tukiko Ota<sup>1</sup>, Yoshiki Tokura<sup>2</sup>  
<sup>1</sup>Kao Biological Science Laboratories, Kao Corporation, Odawara, Japan, <sup>2</sup>Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan
- P05-06 [C11-04] The role of 11 $\beta$ -hydroxysteroid dehydrogenase 1 in UVB-induced skin inflammation**  
 ○Saori Itoi, Mika Terao, Hiroyuki Murota, Ichiro Katayama  
 Department of Dermatology, Osaka University Graduate School of Medicine
- P05-07 [C11-05] Human keratin 5-Cre transgenic mice harbor a risk of ubiquitous Cre-recombination**  
 ○Yujin Nakagawa, Gyohei Egawa, Yoshiki Miyachi, Kenji Kabashima  
 Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P05-08 [C11-06] Co-stimulation with interleukin-4 and tumor necrosis factor- $\alpha$  increases epidermal innervation accompanied by suppression of semaphorin 3A**  
 ○Takashi Sakai<sup>1</sup>, Daisuke Takahashi<sup>2</sup>, Kousei Nikaido<sup>2</sup>, Kanako Okauchi<sup>2</sup>, Naomi Mori<sup>2</sup>, Ryosuke Irie<sup>2</sup>, Yutaka Hatano<sup>1</sup>, Sakuhei Fujiwara<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Faculty of Medicine, Oita University, Oita, Japan, <sup>2</sup>Medical students, Faculty of Medicine, Oita University
- P05-09 [C11-07] Loss of phospholipase C  $\delta$ 1 impairs keratinocyte differentiation and epidermal barrier**  
 ○Kaori Kanemaru, Yoshikazu Nakamura, Kiyoko Fukami  
 Laboratory of Genome and Biosignals, School of Life Sciences, Tokyo University of Pharmacy and Life Sciences, Tokyo, Japan
- P05-10 Extracellular syntaxin4 accelerates epidermal cornification via its functional core (AIEPQK)**  
 ○Nanako Kadono, Yohei Hirai  
 The Department of Bioscience, Science and Technology, Kwansei Gakuin University, Hyogo, Japan
- P05-11 Involvement of skin surface pH on development of atopic dermatitis**  
 ○Hyosun Jang<sup>1</sup>, Akira Matsuda<sup>2</sup>, Yosuke Amagai<sup>1</sup>, Hiroshi Matsuda<sup>1,2</sup>, Akane Tanaka<sup>1,3</sup>  
<sup>1</sup>Graduate School of Bio-Applications and System Engineering, Tokyo University of Agriculture and Technology, Tokyo, Japan, <sup>2</sup>Veterinary Molecular Pathology and Therapeutics, Tokyo University of Agriculture and Technology, Tokyo, Japan, <sup>3</sup>Comparative Animal Medicine, Division of Animal Life Science, Tokyo University of Agriculture and Technology, Tokyo, Japan
- P05-12 Isolation of all CD44 transcripts in human epidermis and regulation of their expression by various agents**  
 ○Kwesi Teye<sup>1</sup>, Sanae Numata<sup>1</sup>, Rafal P. Krol<sup>1</sup>, Takahiro Hamada<sup>1</sup>, Atsunari Tsuchisaka<sup>1</sup>, Tadashi Karashima<sup>1</sup>, Chika Ohata<sup>1</sup>, Minao Furumura<sup>1</sup>, Marek Haftek<sup>2</sup>, Norito Ishii<sup>1</sup>, Takashi Hashimoto<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kurume University School of Medicine, and Kurume University Institute of Cutaneous Cell Biology, <sup>2</sup>Laboratory for Dermatological Research, University Lyon 1, Lyon, France
- P05-13 DNA methylation analysis of psoriasis scales**  
 ○Yoshimasa Nobeyama, Yoshinori Umezawa, Hidemi Nakagawa  
 The Jikei University School of Medicine, Tokyo, Japan
- P05-14 A seasonal change of bleomycin hydrolase activity in the extract of human stratum corneum**  
 ○Michio Shibata<sup>1</sup>, Masashi Miyai<sup>1</sup>, Kumiko Morita<sup>2</sup>, Takeshi Chiba<sup>2</sup>, Yukihiro Ohya<sup>2</sup>, Toshihiko Hibino<sup>1</sup>  
<sup>1</sup>Shiseido Research Center, Yokohama, Japan, <sup>2</sup>Division of Allergy, National Center for Child Health and Development, Tokyo, Japan
- P05-15 Knockdown of nuclear IL-33 suppressed proliferation of keratinocytes through inhibition of cytokinesis**  
 ○Hidetoshi Tsuda<sup>1</sup>, Mayumi Komine<sup>1,2</sup>, Tomoyuki Ohshio<sup>1</sup>, Shin-ichi Tominaga<sup>2</sup>, Mamitaro Ohtsuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Jichi Medical University, <sup>2</sup>Department of BioChemistry, Jichi Medical University
- P05-16 Inductive influence of heparin-like polysaccharide on the keratinocyte differentiation**  
 ○Tomomi Hasegawa<sup>1</sup>, Nanako Kadono<sup>2</sup>, Kenichi Kuriyama<sup>1</sup>, Hiroko Yano<sup>1</sup>, Ayumi Nakashima<sup>1</sup>, Yohei Hirai<sup>2</sup>  
<sup>1</sup>R & D Healthcare Division, Kobayashi Pharmaceutical Co., LTD., Osaka, Japan, <sup>2</sup>Department of Bioscience, Kwansei Gakuin University, Hyogo, Japan
- P05-17 The ceramide deficiency induced by IL-4 in the stratum corneum can be abrogated by rosiglitazone in human epidermal equivalents**  
 ○Naoki Yoshida<sup>1</sup>, Genji Imokawa<sup>2</sup>  
<sup>1</sup>R&D Center, Ikedamohando Co., Ltd, Toyama, Japan, <sup>2</sup>Research Institute for Biological Functions, Chubu University
- P05-18 PPAR gamma coactivator 1 alpha decides the fate of mature sebocytes, resulting in excessive sebum accumulation and secretion related to acne**  
 ○Mai Sato<sup>1</sup>, Akira Hachiya<sup>1</sup>, Takayoshi Inoue<sup>1</sup>, Ryokichi Irisawa<sup>2</sup>, Tomonobu Ito<sup>2</sup>, Christos C. Zouboulis<sup>3</sup>, Shigeru Moriwaki<sup>1</sup>, Ryoji Tsuboi<sup>2</sup>  
<sup>1</sup>Biological Science Laboratories, Kao Corporation, Tochigi, Japan, <sup>2</sup>Department of Dermatology, Tokyo Medical University, Tokyo, Japan, <sup>3</sup>Department of Dermatology, Venereology, Allergology and Immunology, Dessau Medical Center, Dessau, Germany



- P05-19 Nuclear expression of IL-33 in epidermal keratinocyte is up-regulated in differentiated cells, while suppressed in proliferating cells**  
○Mayumi Komine<sup>1</sup>, Atsuko Sato<sup>1</sup>, Akimasa Adachi<sup>1</sup>, Jitlada Meephanan<sup>1,3</sup>, Hidetoshi Tsuda<sup>1</sup>, Shin-ichi Tominaga<sup>2</sup>, Mamitaro Ohtsuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Jichi Medical University, <sup>2</sup>Department of Biochemistry, Jichi Medical University, <sup>3</sup>Department of Dermatology, International College of Medicine, Thammasat University
- P05-20 Th2 cytokines enhance TrkA expression and upregulate proliferation and downregulate differentiation of keratinocytes**  
○Sayaka Matsumura, Mika Terao, Hiroyuki Murota, Ichiro Katayama  
Department of Dermatology, Osaka University Graduate School of Medicine
- P05-21 A possible pathway for the elevation of sensory sensitivity by skin dryness**  
○Ryota Mori, Taeko Mizutani, Yuri Okano, Hitoshi Masaki  
School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, Japan
- P05-22 Effect of low molecular weight soy bean peptide on mRNA and protein expression of VEGF-A and TSP-1 in UV irradiated human keratinocytes**  
○Yoshihiro Tokudome<sup>1</sup>, Kyosuke Nakamura<sup>1</sup>, Mai Sakamoto<sup>2</sup>, Toshimitsu Baba<sup>2</sup>, Kenji Sugibayashi<sup>1</sup>, Fumie Hashimoto<sup>1</sup>  
<sup>1</sup>Laboratory of Dermatological Physiology, Faculty of Pharmaceutical Sciences, Josai University, Saitama, Japan, <sup>2</sup>Fuji Oil Co., Ltd.

## Category 6(P06): Epidemiology/Health Service Research

- P06-01 [C06-04] Risk of incident chronic kidney disease and end-stage renal disease in people with psoriasis: a nationwide population-based cohort study**  
○Ching-Chi Chi<sup>1,2</sup>, Jui Wang<sup>3</sup>, Yu-Fen Chen<sup>4</sup>, Shu-Hui Wang<sup>5</sup>, Tao-Hsin Tung<sup>6</sup>  
<sup>1</sup>Department of Dermatology and Centre for Evidence-Based Medicine, Chang Gung Memorial Hospital, Chiayi, Taiwan, <sup>2</sup>College of Medicine, Chang Gung University, Taoyuan, Taiwan, <sup>3</sup>Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taipei, Taiwan, <sup>4</sup>Department of Health, Taipei City Government, Taipei, Taiwan, <sup>5</sup>Department of Dermatology, Far Eastern Memorial Hospital, New Taipei, Taiwan, <sup>6</sup>Department of Medical Research and Education, Cheng Hsin General Hospital, Taipei, Taiwan
- P06-02 Cost efficacy of biologic therapies for moderate to severe psoriasis from the perspective of the Taiwanese healthcare system**  
○Shu-Hui Wang<sup>1</sup>, Ching-Chi Chi<sup>2,3</sup>  
<sup>1</sup>Department of Dermatology, Far Eastern Memorial Hospital, <sup>2</sup>Department of Dermatology and Centre for Evidence-Based Medicine, Chang Gung Memorial Hospital, Chiayi, Taiwan, <sup>3</sup>College of Medicine, Chang Gung University, Taoyuan, Taiwan
- P06-03 A cell-based assay system for high-throughput screening of anti-photoaging agents in Fibroblast transfectants**  
○Seungjun Lee, Jaeho Lee, Eunsun Jung, Deokhoon Park  
Biospectrum Life Science Institute, Seongnam City, Gyeonggi Do, Republic of Korea
- P06-04 Desire for a youthful look is associated with daily sunscreen use**  
Gyeong Yul Park<sup>1</sup>, Sohee Oh<sup>2</sup>, Hyun Sun Park<sup>1</sup>, Soyun Cho<sup>1</sup>, ○ Hyun-Sun Yoon<sup>1</sup>  
<sup>1</sup>Departments of Dermatology, Seoul National University Boramae Hospital, Seoul, Korea, <sup>2</sup>Departments of Biostatistics, Seoul National University Boramae Hospital, Seoul, Korea

## Category 7(P07): Genetic Disease/Gene Regulation and Gene Therapy

- P07-01 [I-2] Generation of induced pluripotent stem cells from revertant keratinocytes**  
○Noriko Umegaki<sup>1</sup>, Noriko Umegaki<sup>1,2</sup>, Anna M.G. Pasmooij<sup>4</sup>, Munenari Itoh<sup>1,5</sup>, Jane E. Cerise<sup>1</sup>, Zongyou Guo<sup>1</sup>, Brynn Levy<sup>6</sup>, Antoni Gostynski<sup>4</sup>, Lisa Chung-Rothman<sup>1</sup>, Marcel F. Jonkman<sup>4</sup>, Angela M. Christiano<sup>1,3</sup>  
<sup>1</sup>Department of Dermatology, Columbia University, New York, NY, USA, <sup>2</sup>Department of Dermatology, Keio University, Tokyo, Japan, <sup>3</sup>Department of Genetics and Development, Columbia University, New York, USA, <sup>4</sup>Department of Dermatology, University of Groningen, University Medical Center Groningen, Groningen, Netherlands, <sup>5</sup>Department of Dermatology, Jikei University School of Medicine, Tokyo, Japan, <sup>6</sup>Department of Pathology & Cell Biology, Columbia University, New York, USA
- P07-02 [C12-01] Revertant mutation released a lethal mutation concealed in a healthy parent: a previously unreported pathogenesis of hereditary disorders**  
○Yasushi Ogawa<sup>1</sup>, Takuya Takeichi<sup>1</sup>, Michihiro Kono<sup>1</sup>, Nobuyuki Hamajima<sup>2</sup>, Toshimichi Yamamoto<sup>3</sup>, Kazumitsu Sugiura<sup>1</sup>, Masashi Akiyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, <sup>2</sup>Department of Healthcare Administration, Nagoya University Graduate School of Medicine, <sup>3</sup>Department of Legal Medicine and Bioethics, Nagoya University Graduate School of Medicine

- P07-03 [C12-02] One amino acid deletion in collagen XVII-binding domain of plectin with a truncation mutation underlies epidermolysis bullosa simplex**  
 ○Ken Natsuga, Machiko Nishimura, Hideki Nakamura, Wataru Nishie, Hiroshi Shimizu  
 Department of Dermatology, Hokkaido University Graduate School of Medicine, Sapporo, Japan
- P07-04 [C12-03] The reduction of DSG1 in hereditary palmo-planter keratoderma causes the impaired differentiation and proliferation of sole epidermis**  
 ○Daisuke Utsumi, Hiroshi Uezato, Kenzo Takahashi  
 Department of Dermatology, Graduate School of Medicine, University of the Ryukyus, Okinawa, Japan
- P07-05 [C12-04] Molecular diagnosis of Nagashima-type palmoplantar keratoderma**  
 ○Rafal P. Krol, Sanae Numata, Kwesi Teye, Takahiro Hamada, Mitsuhiro Matsuda, Norito Ishii, Bungo Ohyama, Chika Ohata, Minao Furumura, Takashi Hashimoto  
 Department of Dermatology and Institute of Cutaneous Cell Biology, Kurume University, Kurume, Japan
- P07-06 Mutation and pathogenic study for 9 genes in 23 unrelated patients with autosomal recessive congenital ichthyosis in Japan and Malaysia**  
 ○Sanae Numata<sup>1</sup>, Kwesi Teye<sup>1</sup>, Rafal P Krol<sup>1</sup>, Tadashi Karashima<sup>1</sup>, Shunpei Fukuda<sup>1</sup>, Mitsuhiro Matsuda<sup>1</sup>, Norito Ishii<sup>1</sup>, Minao Furumura<sup>1</sup>, Chika Ohata<sup>1</sup>, Sasi D Saminathan<sup>2</sup>, Roziana Ariffin<sup>2</sup>, Zacharias A D Pramono<sup>3</sup>, Kin Fon Leong<sup>4</sup>, Takahiro Hamada<sup>1</sup>, Takashi Hashimoto<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kurume University School of Medicine, and Kurume University Institute of Cutaneous Cell Biology, Kurume, Japan, <sup>2</sup>Department of Medical Genetics, Kuala Lumpur hospital, Malaysia, <sup>3</sup>Department of Research, National Skin Centre, Singapore, Singapore, <sup>4</sup>Department of Dermatology, General hospital, Kuala Lumpur, Malaysia
- P07-07 Cytological and Transcriptomic Analysis Reveals New Features of Multiple Self-healing Squamous Epithelioma (MSSE)**  
 ○Yi-Zhen Ng<sup>1</sup> and Lukas Lacina<sup>1</sup>, Declan P Lunny<sup>1</sup>, Paula-Beth Benny<sup>1</sup>, Anne-Marie Gerdes<sup>2</sup>, Sigurd Broesby-Olsen<sup>2</sup>, Ludovic Martin<sup>3</sup>, Laurent Parmentier<sup>4</sup>, Camron Ebzery<sup>5</sup>, Annabel Goodwin<sup>5</sup>, Daniel Hohl<sup>6</sup>, Ildiko Szevevényi<sup>1</sup>, E Birgitte Lane<sup>1</sup>  
<sup>1</sup>Epithelial Biology Group, Institute of Medical Biology, Singapore, <sup>2</sup>Department of Clinical Genetics, Odense University Hospital, Odense, Denmark, <sup>3</sup>Department of Dermatology, Angers University Hospital, Angers, France, <sup>4</sup>University Hospital Bern, Bern, Switzerland, <sup>5</sup>Department of Molecular & Clinical Genetics, Royal Prince Alfred Hospital, Camperdown, Australia, <sup>6</sup>Service of Dermatology and Venereology, Beaumont Hospital CHUV, Lausanne, Switzerland
- P07-08 The role of the hairless (*hr*) gene in the development of atopic dermatitis-like pruritus caused by feeding a special diet to mice**  
 ○Masanori Fujii<sup>1</sup>, Fumiko Endo-Okuno<sup>1</sup>, Asuka Iwai<sup>1</sup>, Keisuke Doi<sup>1</sup>, Yoshiki Matsumoto<sup>1</sup>, Rieko Matsui<sup>1</sup>, Yumeka Yamada<sup>1</sup>, Naoki Inagaki<sup>2</sup>, Takeshi Nabe<sup>3,4</sup>, Susumu Ohya<sup>1</sup>  
<sup>1</sup>Department of Pharmacology, Division of Pathological Sciences, Kyoto Pharmaceutical University, <sup>2</sup>Laboratory of Pharmacology, Department of Bioactive Molecules, Gifu Pharmaceutical University, <sup>3</sup>Laboratory of Toxicology, Faculty of Pharmaceutical Sciences, Setsunan University
- P07-09 HLA-C\*12:02 is a susceptibility factor in late-onset type of psoriasis in Japanese**  
 ○Tomotaka Mabuchi<sup>1</sup>, Tami Ota<sup>1</sup>, Yasuaki Manabe<sup>1</sup>, Norihiro Ikoma<sup>1</sup>, Akira Ozawa<sup>1</sup>, Tadashi Terui<sup>2</sup>, Shigaku Ikeda<sup>3</sup>, Hidetoshi Inoko<sup>4</sup>, Akira Oka<sup>5</sup>  
<sup>1</sup>Department of Dermatology, Tokai University School of Medicine, Kanagawa, Japan, <sup>2</sup>Department of Dermatology, Nihon University School of Medicine, Tokyo, Japan, <sup>3</sup>Department of Dermatology, Juntendo University School of Medicine, Tokyo, Japan, <sup>4</sup>Molecular Life Science, Tokai University School of Medicine, Kanagawa, Japan, <sup>5</sup>The Institute of Medical Science, Tokai University School of Medicine, Kanagawa, Japan
- P07-10 A homozygous single T deletion found in the GGCX gene with PXE-like phenotypes**  
 ○Kosuke Yoshimi, Yumi Okubo, Susumu Ikehara, Yuta Koike, Yutaka Kuwatsuka, Atsushi Utani  
 The Department of Dermatology, Nagasaki University, Nagasaki, Japan
- P07-11 Postzygotic KRAS G12C mutation, associated with various malignancies, is also underling epidermal nevus syndrome**  
 ○Satomi Igawa<sup>1</sup>, Masaru Honma<sup>1</sup>, Masako Minami-Hori<sup>1</sup>, Etsushi Tsuchida<sup>2</sup>, Hajime Iizuka<sup>1</sup>, Akemi Ishida-Yamamoto<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Asahikawa Medical University, Asahikawa, Japan, <sup>2</sup>Department of Pediatrics, Asahikawa Medical University, Asahikawa, Japan
- P07-12 Antiaging effect of Pleurotus cornucopiae Extracts**  
 ○Kum Hyun Woo, Seoung Woo Shin, Eunsun Jung, Deok Hoon Park, Min kyung Kim, Rin a Lee  
 Life Science Institute, Seongnam City, Gyeonggi Do, Republic of Korea

## Category 8(P08): Tissue Regeneration/Stem Cell and Wound Healing

- P08-01 [I-1] A Cell Polarity Protein, aPKC $\lambda$ , is Essential for Maintaining Hair Follicle Stem Cell Quiescence and Hair Follicle Regeneration**  
○Shin-Ichi Osada<sup>1</sup>, Naoko Minematsu<sup>1</sup>, Fumino Oda<sup>1</sup>, Kazunori Akimoto<sup>2</sup>, Seiji Kawana<sup>1</sup>, Shigeo Ohno<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Nippon Medical School, Tokyo, Japan, <sup>2</sup>Department of Molecular Biology, Yokohama City University Graduate School of Medical Science, Yokohama, Kanagawa, Japan
- P08-02 [I-4] HMGB1 accelerates skin regeneration by inducing bone marrow mesenchymal stromal cells**  
○Eriko Aikawa<sup>1</sup>, Yuki Komurasaki<sup>1,3</sup>, Ryo Fujita<sup>2</sup>, Yasufumi Kaneda<sup>2</sup>, Ichiro Katayama<sup>3</sup>, Katsuo Tamai<sup>2</sup>  
<sup>1</sup>Department of Stem Cell Therapy Science Graduate School of Medicine, Osaka University, Osaka, Japan, <sup>2</sup>Division of Gene Therapy Science, Graduate School of Medicine, Osaka University, Japan, <sup>3</sup>Department of Dermatology Course of Integrated Medicine Graduate School of Medicine, Osaka University, Japan
- P08-03 [C12-05] Cell motion predicts human epidermal stemness**  
○Daisuke Nanba<sup>1,2</sup>, Fujio Toki<sup>2</sup>, Sota Tate<sup>2</sup>, Matome Imai<sup>2</sup>, Natsuki Matsushita<sup>3</sup>, Hiroshi Toki<sup>4</sup>, Shigeki Higashiyama<sup>1,2</sup>, Yann Barrandon<sup>5,6</sup>  
<sup>1</sup>Division of Cell Growth and Tumor Regulation, Proteo-Science Center, Ehime University, Ehime, Japan, <sup>2</sup>Department of Biochemistry and Molecular Genetics, Graduate School of Medicine, Ehime University, Ehime, Japan, <sup>3</sup>Translational Research Center, Ehime University Hospital, Ehime University, Ehime, Japan, <sup>4</sup>Research Center for Nuclear Physics, Osaka University, Osaka, Japan, <sup>5</sup>Laboratory of Stem Cell Dynamics, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, <sup>6</sup>Department of Experimental Surgery, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland
- P08-04 [C12-06] Protective effect of MFG-E8 after cutaneous ischemia-reperfusion injury**  
○Akihiko Uchiyama, Kazuya Yamada, Buddhini Perera, Sachiko Ogino, Yoko Yokoyama, Yuko Takeuchi, Osamu Ishikawa, Sei-ichiro Motegi  
Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
- P08-05 [C12-07] MFG-E8 promotes mesenchymal stem cells-induced angiogenesis in malignant melanoma**  
○Kazuya Yamada, Akihiko Uchiyama, Sachiko Ogino, Buddhini Perera, Yoko Yokoyama, Yuko Takeuchi, Osamu Ishikawa, Sei-ichiro Motegi  
Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
- P08-06 [C06-05] The Role of Nestin-Expressing Cells During Whisker Sensory-Nerves Extention In Long-Term 3D Culture and In Vivo**  
○Sumiyuki Mii<sup>1,2,3</sup>, Jennifer Duong<sup>2</sup>, Yasunori Tome<sup>2</sup>, Aisada Uchugonova<sup>2,4</sup>, Fang Liu<sup>2,5</sup>, Benjamin Tran<sup>2</sup>, Kensei Katsuoka<sup>1</sup>, Yasuyuki Amoh<sup>1</sup>, Robert M. Hoffman<sup>2,3</sup>  
<sup>1</sup>Department of Dermatology Kitasato University School of Medicine, <sup>2</sup>Anti Cancer Inc, <sup>3</sup>Department of Surgery University of California, <sup>4</sup>Department of Biophotonics and Laser Technology Saarland University, <sup>5</sup>Department of Anatomy Second Military Medical University
- P08-07 The relevance of collagen XVII expression in epidermal differentiation and proliferation**  
○Mika Watanabe, Ken Natsuga, Wataru Nishie, Hiroshi Shimizu  
Department of Dermatology, Hokkaido University Graduate School of Medicine, Sapporo, Japan
- P08-08 Hair-follicle-associated pluripotent (HAP) stem cells**  
○Robert M. Hoffman<sup>1,2</sup>, Lingna Li<sup>1</sup>, Sumiyuki Mii<sup>3</sup>, Ryoichi Aki<sup>3</sup>, Jennifer Duong<sup>1</sup>, Aisada Uchugonova<sup>4</sup>, Fang Liu<sup>5</sup>, Wenluo Cao<sup>1,2,5</sup>, Benjamin Tran<sup>1</sup>, Kensei Katsuoka<sup>3</sup>, Yasuyuki Amoh<sup>3</sup>  
<sup>1</sup>AntiCancer Inc., San Diego, CA, <sup>2</sup>Department of Surgery, University of California, San Diego, CA, <sup>3</sup>Department of Dermatology, Kitasato University School of Medicine, Kanagawa, Japan, <sup>4</sup>Department of Biophotonics and Laser Technology, Saarland University, Saarbruecken, Germany, <sup>5</sup>Department of Anatomy, Second Military Medical University, Shanghai, China
- P08-09 In vitro mesenchymal-epithelial interaction facilitates de novo hair follicle formation**  
○Wei-Hung Wang<sup>1</sup>, Sung-Jan Lin<sup>1,2,3</sup>, Mai-Yi Fan<sup>1</sup>, Chih-Chieh Chan<sup>2</sup>  
<sup>1</sup>Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, <sup>2</sup>Department of Dermatology, National Taiwan University Hospital and College of Medicine, Taipei, Taiwan, <sup>3</sup>Research Center for Developmental Biology and Regenerative Medicine, National Taiwan University, Taipei, Taiwan
- P08-10 Dermal stem cells are closely associated with regeneration of the dermis in wound healing process**  
○Yohei Iwata<sup>1</sup>, Yuichi Hasebe<sup>2</sup>, Seiji Hasegawa<sup>1,2,3</sup>, Hiroshi Mizutani<sup>2</sup>, Satoru Nakata<sup>2</sup>, Akiko Yagami<sup>1</sup>, Hirohiko Akamatsu<sup>4</sup>, Kayoko Matsunaga<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Fujita Health University School of Medicine, Aichi, Japan, <sup>2</sup>Research Laboratories, Nippon Menard Cosmetic Co., Ltd., Aichi, Japan, <sup>3</sup>MENARD Collaborative Research Chair, Nagoya University Graduate School of Medicine, Aichi, Japan, <sup>4</sup>Department of Applied Cell and Regenerative Medicine, Fujita Health University School of Medicine, Aichi, Japan
- P08-11 Keratinocyte progenitor cells in human subcutaneous adipose tissue**  
○Hideo Iida<sup>1</sup>, Toshio Hasegawa<sup>1</sup>, Atsushi Sakamoto<sup>1</sup>, Akino Wada<sup>1</sup>, Tatsuo Fukai<sup>1</sup>, Shigaku Ikeda<sup>1,2</sup>  
<sup>1</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine
- P08-12 Search of the skin constancy maintenance factor using the proteomics method**  
○Daisuke Niimori<sup>1</sup>, Kanako Niimori<sup>2</sup>, Hironobu Ihn<sup>1</sup>  
<sup>1</sup>Department of Dermatology and Plastic Surgery, Graduate School of Life Science, Kumamoto University, Kumamoto, Japan, <sup>2</sup>Department of Pathology and Experimental Medicine, Kumamoto University Graduate School of Medical Sciences

## Category 9(P09): Hair and Cutaneous Development

- P09-01 [I-3]** **Use of human induced pluripotent stem cell-derived CD271+CD90+ mesenchymal stem cells for the generation of hair inductive dermal cells**  
 Ophelia Veraitch<sup>1,2</sup>, Yo Mabuchi<sup>3,4</sup>, Yumi Matsuzaki<sup>3,5</sup>, Takashi Sasaki<sup>1</sup>, Aki Tsukashima<sup>1</sup>, Masayuki Amagai<sup>1</sup>, Hideyuki Okano<sup>3</sup>, Manabu Ohyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Keio University School of Medicine, <sup>2</sup>St John's Institute of Dermatology, St Thomas' Hospital, <sup>3</sup>Department of Physiology, Keio University School of Medicine, <sup>4</sup>Department of Biochemistry and Biophysics, Graduate School of Health Care Sciences, Tokyo Medical and Dental University, <sup>5</sup>Laboratory of Tumor Biology, Department of Life Sciences, Faculty of Medicine, Shimane University
- P09-02 [C05-01][SE]** **Molecular cues for asymmetric cell division in epidermis**  
 Teruki Dainichi<sup>1,2</sup>, Matthew S. Hayden<sup>2,3</sup>, Yoshiki Miyachi<sup>1</sup>, Kenji Kabashima<sup>1</sup>, Sankar Ghosh<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Kyoto University, Kyoto, Japan, <sup>2</sup>Department of Microbiology & Immunology, Columbia University College of Physicians & Surgeons, New York, NY, United States, <sup>3</sup>Department of Dermatology, Columbia University College of Physicians & Surgeons, New York, NY, United States
- P09-03 [C05-02]** **Mesenchymal cell specific deletion of *Tsc2* regulates hair follicle development and patterning**  
 Rajesh Thangapazham<sup>1</sup>, Peter Klover<sup>1</sup>, Neera Nathan<sup>1,2</sup>, Ji-an Wang<sup>1</sup>, Jiro Kato<sup>2</sup>, Shaowei Li<sup>1</sup>, Joel Moss<sup>2</sup>, Thomas Darling<sup>1</sup>  
<sup>1</sup>Uniformed Services University of the Health Sciences, Bethesda, MD, USA, <sup>2</sup>Cardiovascular and Pulmonary Branch, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD
- P09-04 [C05-03]** ***PVRL1* and *PVRL4*, of which mutations cause ectodermal dysplasia syndromes, are potential direct target genes of p63**  
 Ryota Hayashi<sup>1,2</sup>, Masaaki Ito<sup>1</sup>, Yutaka Shimomura<sup>2</sup>  
<sup>1</sup>Division of Dermatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, <sup>2</sup>Laboratory of Genetic Skin Diseases, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan
- P09-05 [C05-04]** **Localized EGFL6 regulates the architecture and location of sensory terminals in the hair follicle**  
 Chun-Chun Cheng<sup>1</sup>, Fiona Watt<sup>2</sup>, Hironobu Fujiwara<sup>1</sup>  
<sup>1</sup>RIKEN CDB, <sup>2</sup>King's College London, UK
- P09-06 [C05-05]** **BNIP3 plays crucial roles in the differentiation and maintenance of epidermal keratinocytes**  
 Mariko Moriyama, Junki Uda, Hiroyuki Moriyama, Takao Hayakawa  
 Pharmaceutical and Technology Institute, Kindai University, Osaka, Japan
- P09-07** **Plasmacytoid dendritic cells as a key player in the induction of alopecia areata**  
 Taisuke Ito, Takahiro Suzuki, Jun-ichi Sakabe, Atsuko Funakoshi, Yoshiki Tokura  
 Department of Dermatology, Hamamatsu University School of Medicine
- P09-08** **Human scalp-derived fibroblasts modulate FGF expression profile to be putatively folliculogenic in response to WNT activation**  
 Misaki Ise, Aki Tsukashima, Masayuki Amagai, Manabu Ohyama  
 Department of Dermatology, Keio University School of Medicine, Tokyo, Japan
- P09-09** **TRPS1 haploinsufficiency results in increased *STAT3* and *SOX9* mRNA expression in hair follicles in trichorhinophalangeal syndrome**  
 Akitaka Shibata, Kana Tanahashi, Kazumitsu Sugiura, Masashi Akiyama  
 The Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan
- P09-10** **Canonical Wnt-10b signaling exert an ability of maintaining mouse dermal papilla cells**  
 Yukiteru Oujii, Fkumi Nakamura-Uchiyama, Masahide Yoshikawa  
 Department of Pathogen, Infection and Immunity, Nara Medical University, Nara, Japan
- P09-11** **FGF Signaling for Hair Cycle Resting Phase Alleviates Radiation Alopecia**  
 Fumiaki Nakayama<sup>1</sup>, Sachiko Umeda<sup>1</sup>, Takashi Yasuda<sup>2</sup>, Toru Imamura<sup>3,4</sup>, Takashi Imai<sup>1</sup>  
<sup>1</sup>Advanced Radiation Biology Research Program, Research Center for Charged Particle Therapy, National Institute of Radiological Sciences (NIRS), Chiba, Japan, <sup>2</sup>Radiation Emergency Medicine Research Program, Research Center for Radiation Emergency Medicine, National Institute of Radiological Sciences (NIRS), Chiba, Japan, <sup>3</sup>Signaling Molecules Research Group, Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, <sup>4</sup>School of Bioscience and Biotechnology, Tokyo University of Technology, Hachioji, Japan
- P09-12** **Unexpectedly high carrier rates and genotype/phenotype correlation; *LIPH* mutations in Japanese autosomal recessive woolly hair/hypotrichosis**  
 Kana Tanahashi<sup>1</sup>, Kazumitsu Sugiura<sup>1</sup>, Michihiro Kono<sup>1</sup>, Hiromichi Takama<sup>2</sup>, Nobuyuki Hamajima<sup>3</sup>, Masashi Akiyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>2</sup>Takama Dermatology Clinic, Kasugai, Japan, <sup>3</sup>Department of Healthcare Administration, Nagoya University Graduate School of Medicine, Nagoya, Japan
- P09-13** **Inducing hair follicle neogenesis by defined extracellular factors**  
 Mai-Yi Fan<sup>1</sup>, Wei-Hung Wang<sup>1</sup>, Chih-Chieh Chan<sup>2</sup>, Chien-Mei Yen<sup>2</sup>, Sung-Jan Lin<sup>1,2,3</sup>  
<sup>1</sup>Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, <sup>2</sup>Department of Dermatology, National Taiwan University Hospital and College of Medicine, Taipei, Taiwan, <sup>3</sup>Research Center for Developmental Biology and Regenerative Medicine, National Taiwan University, Taipei, Taiwan

- P09-14 Squarticles as a nanocarrier for targeting minoxidil to hair follicles and dermal papilla cells**  
○Jia-You Fang<sup>1,2</sup>, Feng-Ming Shen<sup>2</sup>, Chi-Ting Huang<sup>2</sup>  
<sup>1</sup>Graduate Institute of Health Industry Technology, Chang Gung University of Science and Technology, Kweishan, Taoyuan, Taiwan, <sup>2</sup>Pharmaceutics Laboratory, Graduate Institute of Natural Products, Chang Gung University, Kweishan, Taoyuan, Taiwan
- P09-15 Morphological study in a mechanism of congenital pili torti formation: Björnstad syndrome**  
○Yuki Marubashi<sup>1,2</sup>, Takeshi Yanagishita<sup>1</sup>, Nobuhiko Taguchi<sup>1,2</sup>, Kazumitsu Sugiura<sup>3</sup>, Yoshiyuki Kawamoto<sup>4</sup>, Keiko Ito<sup>1</sup>, Masashi Akiyama<sup>3</sup>, Daisuke Watanabe<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Aichi Medical University School of Medicine, Nagakute, Aichi, Japan, <sup>2</sup>General Research & Development Institute, Hoyo Co., Ltd., Nagakute, Aichi, Japan, <sup>3</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Aichi, Japan, <sup>4</sup>Department of Biomedical Sciences, College of Life and Health Sciences, Chubu University, Kasugai, Aichi, Japan
- P09-16 Change of the number of dermal mast cells in cutaneous lupus erythematosus**  
Mikiko Uede, Yuki Yamamoto, ○Fukumi Furukawa  
Department of Dermatology, Wakayama Medical University

## Category 10(P10): Immunology 1: Adaptive Immunity

- P10-01 [III-1] IL-36 signaling is a gatekeeper for both keratinocytes and dendritic cells linking innate immunity to psoriatic nature**  
○Kentarō Ohko, Kimiko Nakajima, Shigetoshi Sano  
Department of Dermatology, KOCHI Medical School, Kochi University Kochi, Japan
- P10-02 [C01-08] Skin-infiltrating CD4+ lymphoma cells depend on hair follicle-derived IL-7**  
○Takeya Adachi<sup>1</sup>, Tetsuro Kobayashi<sup>1</sup>, Eiji Sugihara<sup>2</sup>, Keitaro Fukuda<sup>1,2</sup>, Manabu Ohyama<sup>1</sup>, Hideyuki Saya<sup>2</sup>, Taketo Yamada<sup>3</sup>, Masayuki Amagai<sup>1</sup>, Keisuke Nagao<sup>1,4</sup>  
<sup>1</sup>Department of Dermatology, Keio University School of Medicine, <sup>2</sup>Division of Gene Regulation, Institute for Advanced Medical Research, Keio University School of Medicine, <sup>3</sup>Department of Pathology, Keio University School of Medicine, <sup>4</sup>Dermatology Branch, National Cancer Institute, Center for Cancer Research, National Institutes of Health
- P10-03 [III-3] New insights into immunological function of Langerhans cells in HIV *in vitro* and *ex vivo* infection**  
○Takamitsu Matsuzawa<sup>1</sup>, Tatsuyoshi Kawamura<sup>1</sup>, Youichi Ogawa<sup>1</sup>, Hiroaki Mitsuya<sup>2</sup>, Shinji Shimada<sup>1</sup>  
<sup>1</sup>Dermatology, University of Yamanashi, Yamanashi, Japan, <sup>2</sup>Department of Infectious Diseases and Department of Hematology, Kumamoto University School of Medicine, Kumamoto, Japan
- P10-04 [C01-01] Local cortisol activation by 11β-hydroxysteroid dehydrogenase 1 in keratinocytes down regulates skin inflammation**  
○Mika Terao, Saori Itoi, Shun Kitaba, Hiroyuki Murota, Ichiro Katayama  
Department of Dermatology, Osaka University Graduate School of Medicine
- P10-05 [C01-02] Blockade for CD155-TIGIT interaction elicits anti-melanoma T cell responses *in vitro* and *in vivo***  
○Takashi Inozume<sup>1</sup>, Tomonori Yaguchi<sup>2</sup>, Junpei Furuta<sup>1</sup>, Mamoru Itoh<sup>3</sup>, Yutaka Kawakami<sup>2</sup>, Shinji Shimada<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Yamanashi, Yamanashi, Japan, <sup>2</sup>Division of Cellular Signaling, Institute for Advanced Medical Research, Keio University School of Medicine, <sup>3</sup>Central Institute for Experimental Animals
- P10-06 [C01-03] Aquaporin-9-expressing neutrophils are required for the establishment of contact hypersensitivity**  
○Catharina Sagita Moniaga, Mariko Hara-Chikuma  
Center for Innovation in Immunoregulative Technology and Therapeutics Graduate School of Medicine Kyoto University
- P10-07 [C01-04] The possible mechanisms of the recruitment of Tregs in the lesional skin of extramammary Paget's disease by RANKL/ RANK pathways**  
○Taku Fujimura, Yumi Kambayashi, Sadanori Furudate, Masayuki Asano, Aya Kakizaki, Setsuya Aiba  
Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan
- P10-08 [C01-05] Interaction of adhesion molecules of keratinocytes and Langerhans cells in the epidermis in contact hypersensitivity**  
○Akiko Nishibu, Takashi Mochizuki  
The Department of Dermatology, Kanazawa Medical University
- P10-09 [C01-06] Skin controls maintenance of thymus-derived Foxp3<sup>+</sup> regulatory cells in the periphery through ultraviolet B exposure**  
○Sayuri Yamazaki<sup>1</sup>, Akiko Nishioka<sup>1</sup>, Saori Kasuya<sup>1</sup>, Naganari Ohkura<sup>2</sup>, Hiroaki Hemmi<sup>3</sup>, Tsuneyasu Kaisho<sup>3,4</sup>, Osamu Taguchi<sup>1</sup>, Shimon Sakaguchi<sup>2</sup>, Akimichi Morita<sup>1</sup>  
<sup>1</sup>Department of Geriatric and Environmental Dermatology, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, <sup>2</sup>Department of Experimental Immunology, World Premier International Research Center Initiative, Immunology Frontier Research Center, Osaka University, Osaka, <sup>3</sup>Laboratory for Immune Regulation, World Premier International Research Center Initiative, Immunology Frontier Research Center, Osaka University, Osaka, <sup>4</sup>Laboratory for Inflammatory Regulation, RIKEN Center for Integrative Medical Sciences, IMS-RCAI, Yokohama

- P10-10 [C01-07] TSLPR expressing CD4+ T cells produce enhanced IL-4 by directly responding to TSLP in AD**  
 ◦Kazuki Tatsuno, Toshiharu Fujiyama, Hayato Yamaguchi, Michihiko Waki, Yoshiki Tokura  
 Hamamatsu University School of Medicine
- P10-11 Reciprocal functions of STAT3 and STAT6 signals in basophil-dependent prurigo-like reactions**  
 ◦Takashi Hashimoto<sup>1</sup>, Takahiro Satoh<sup>1,2</sup>, Hiroo Yokozeki<sup>2</sup>  
<sup>1</sup>Department of Dermatology, National Defense Medical College, Saitama, Japan, <sup>2</sup>Department of Dermatology, Graduate School, Tokyo Medical and Dental University
- P10-12 [SE] Important role of platelets in the induction of low zone tolerance to contact allergens**  
 ◦Risa Tamagawa-Mineoka, Hiromi Mizutani, Risa Yasuike, Naomi Nakamura, Norito Katoh  
 Department of Dermatology, Kyoto Prefectural University of Medicine Graduate School of Medical Science, Kyoto, Japan
- P10-13 Comparison of anti-IL-17A, IL-17F and TNF- $\alpha$  antibodies on host resistance to acute Mycobacterium tuberculosis infection in mice**  
 ◦Michael Kammüller<sup>1</sup>, Franco DiPadova<sup>1</sup>, Salahdine Chibout<sup>1</sup>, Timothy Wright<sup>2</sup>, Marie-Laure Bourigault<sup>3</sup>, Noria Segueni<sup>3</sup>, Stephanie Rose<sup>3</sup>, Bernhard Ryffel<sup>3</sup>, Valerie Quesniaux<sup>3</sup>  
<sup>1</sup>Novartis Institutes for BioMedical Research, Basel, Switzerland, <sup>2</sup>Novartis Pharma AG, Basel, Switzerland, <sup>3</sup>UMR7355 CNRS and University of Orleans, France
- P10-14 Oligosaccharide modification by GnT-V augments oxazolone-induced atopic dermatitis-like symptoms**  
 ◦Mizuki Yutani<sup>1</sup>, Mika Terao<sup>1</sup>, Arisa Kato<sup>1,2</sup>, Hiroyuki Murota<sup>1</sup>, Eiji Miyoshi<sup>2</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Osaka University Graduate School of Medicine, <sup>2</sup>Department of Molecular Biochemistry and Clinical Investigation, Osaka University Graduate School of Medicine
- P10-15 Establishment of a mast cell line, NCL-2, without Kit mutation, derived from NC mouse bone marrow**  
 ◦Takaaki Hiragun, Yuhki Yanase, Tsutomu Okabe, Makiko Hiragun, Mikio Kawai, Michihiro Hide  
 Department of Dermatology, Hiroshima University
- P10-16 Vitamin D3 analogue depresses cutaneous inflammation-inducing activities of plasmacytoid dendritic cells (DCs) but not inflammatory DCs**  
 ◦Takahiro Suzuki, Yoshiki Tokura  
 The Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan
- P10-17 Candida albicans morphology and DC subsets determines T helper differentiation**  
 ◦Sakeen W. Kashem, Botond Igyarto, Daniel Kaplan  
 Department of Dermatology, Centre for Immunology, University of Minnesota, Minneapolis, MN
- P10-18 Effect of cis-urocanic acid on atopic dermatitis in NC/Nga mice**  
 ◦Kabashima-Kubo Rieko, Nakamura Motonobu  
 Department of Dermatology, University of Occupational and Environmental Health, Kitakyushu, Japan
- P10-19 The histamine released from epidermal keratinocytes is involved in  $\alpha$ -melanocyte-stimulating hormone-induced itching in mice**  
 ◦Kyoko Shimizu<sup>1</sup>, Tsugunobu Andoh<sup>2</sup>, Yoko Yoshihisa<sup>1</sup>, Tadamichi Shimizu<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, <sup>2</sup>Department of Applied Pharmacology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan
- P10-20 Comprehensive study of oral allergy syndrome: Link between patient clinical course and outcome from ISAC analysis**  
 ◦Emi Ono, Chika Matsumura, Saki Matsui, Shun Kitaba, Hiroyuki Murota, Ichiro Katayama  
 Department of Dermatology, University of Osaka, Osaka, Japan
- P10-21 Intratumoral CD4+ cell depletion sensitizes poorly immunogenic melanomas to immunotherapy with an OX40 agonist**  
 ◦Susumu Fujiwara<sup>1</sup>, Hiroshi Nagai<sup>1</sup>, Noriko Shimoura<sup>1</sup>, Shuntaro Oniki<sup>1</sup>, Takayuki Yoshimoto<sup>2</sup>, Chikako Nishigori<sup>1</sup>  
<sup>1</sup>Division of Dermatology, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe, Japan, <sup>2</sup>Intractable Disease Research Center, Tokyo Medical University, Tokyo, Japan
- P10-22 Profiles of tumor-associated macrophages in the lesional skin of mycosis fungoides at different tumor stages**  
 ◦Sadanori Furudate, Taku Fujimura, Yumi Kambayashi, Aya Kakizaki, Setsuya Aiba  
 The Department of Dermatology, University of Tohoku, Miyagi, Japan
- P10-23 In vitro screening of drug-reactive T-cells in mice**  
 ◦Kenichi Kato, Hiroaki Azukizawa, Takaaki Hanafusa, Ichiro Katayama  
 Department of Dermatology, Course of Integrated Medicine, Osaka University, Osaka, Japan

**P10-24 Antihelminthic niclosamide modulates dendritic cells activation and function**  
○Chieh-Shan Wu<sup>1</sup>, Wen-Ho Chuo<sup>2</sup>, Yi-Rong Li<sup>3</sup>, Jeremy J.W. Chen<sup>3</sup>, Ying-Che Chen<sup>3</sup>, Cjiang-Liang Chu<sup>4</sup>, I-Hong Pan<sup>5</sup>, Yu-Shan Wu<sup>6</sup>, Chi-Chen Lin<sup>3</sup>  
<sup>1</sup>Department of Dermatology, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, <sup>2</sup>Department of Pharmacy, Tajen University, Pingtung, Taiwan, <sup>3</sup>Institute of Biomedical Science, National Chung-Hsing University, Taichung, Taiwan, <sup>4</sup>Graduate Institute of Immunology, College of Medicine, National Taiwan University, Taiwan, <sup>5</sup>Biomedical Technology and Device Research Laboratories, Industrial Technology Research Institute, Hsinchu, Taiwan, <sup>6</sup>Department of Chemistry, Tunghai University, Taichung, Taiwan

**P10-25 The Antibiotic Azithromycin Improves the Severity of Imiquimod-Induced Psoriasis-Like Skin Inflammation in Mice**  
○Shi-Wei Huang<sup>1</sup>, Jeng-Jer Shieh<sup>1,2,3</sup>  
<sup>1</sup>Institute of Biomedical Sciences, National Chung Hsing University, Taichung, Taiwan, <sup>2</sup>Department of Education and Research, Taichung Veterans General Hospital, Taichung, Taiwan, <sup>3</sup>Rong Hsing Research Center for Translational Medicine, National Chung Hsing University

## Category 11(P11): Immunology 2: Innate Immunity and Microbiology

**P11-01 [III-2] Leucine-rich alpha-2 glycoprotein is an innovative biomarker for psoriasis linked to systemic inflammation**  
○Hideki Nakajima<sup>1</sup>, Kimiko Nakajima<sup>1</sup>, Mikiro Takaishi<sup>1</sup>, Minoru Fujimoto<sup>2</sup>, Tetsuji Naka<sup>2</sup>, Shigetoshi Sano<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Kochi Medical School, Kochi University, Okohcho, Nankoku, Japan, <sup>2</sup>Laboratory of Immune Signal, National Institute of Biomedical Innovation, Ibaraki, Japan

**P11-02 [III-4] The IL-33/ST2 axis on mast cells contributes to protective immune responses to herpes simplex virus-2**  
○Rui Aoki<sup>1</sup>, Tatsuyoshi Kawamura<sup>1</sup>, Fumi Goshima<sup>2</sup>, Susumu Nakae<sup>3</sup>, Atsuhito Nakao<sup>4</sup>, Shinji Shimada<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of Yamanashi, Yamanashi, Japan, <sup>2</sup>Department of Virology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>3</sup>Laboratory of Systems Biology, Center for Experimental Medicine and Systems Biology, The Institute of Medical Science, The University of Tokyo, Japan, <sup>4</sup>Department of Immunology, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan

**P11-03 [C07-01] Atopic dermatitis susceptible gene NLRP10 suppresses inflammatory reaction and NLRP10 SNP mutation down-regulates NLRP10 expression**  
○Masashi Miyai<sup>1</sup>, Mami Yamamoto-Tanaka<sup>1,2</sup>, Kaori Inoue<sup>1</sup>, Ryoji Tsuboi<sup>2</sup>, Toshihiko Hibino<sup>1</sup>  
<sup>1</sup>Shiseido Research Center, Yokohama, Japan, <sup>2</sup>Department of Dermatology, Tokyo Medical University, Tokyo, Japan

**P11-04 [C07-02] Two Ceramide Metabolites, sphingosine-1-phosphate and ceramide-1-phosphate signal to stimulate Innate Immunity through Independent-mechanisms**  
○Yoshikazu Uchida<sup>1</sup>, Young-Il Kim<sup>1</sup>, Ho Seong Seo<sup>2</sup>, Jong Youl Kim<sup>3</sup>, Kyoung-Oh Shin<sup>4</sup>, Yong-Moon Lee<sup>4</sup>, Walter M. Holleran<sup>1</sup>, Peter M. Elias<sup>1</sup>, Kyungho Park<sup>1</sup>  
<sup>1</sup>Department of Dermatology, University of California, San Francisco, USA, <sup>2</sup>Radiation Research Division, Korea Atomic Energy Research Institute, Jeongseup, Republic of Korea, <sup>3</sup>Department of Endocrinology, Veterans Affairs Medical Center, San Francisco, USA, <sup>4</sup>College of Pharmacy, Chungbuk National University, Cheongju, Republic of Korea

**P11-05 [C07-03] High fat diet contributes to cutaneous IL-17 producing gamma delta T cell recruitment and exacerbates imiquimod-induced psoriatic dermatitis**  
○Satoshi Nakamizo, Gyohei Egawa, Yoshiki Miyachi, Kenji Kabashima  
Department of Dermatology, Kyoto University School of Medicine, Kyoto, Japan

**P11-06 [C07-04] Innate immune activation through ITAM-Syk-CARD9 signaling is essential for the sensitization of contact hypersensitivity**  
○Shinsuke Yasukawa<sup>1,2,3</sup>, Masutaka Furue<sup>1</sup>, Hiroki Yoshida<sup>2</sup>, Hiromitsu Hara<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, <sup>2</sup>Department of Biomolecular Sciences, Saga Medical School, Saga, Japan, <sup>3</sup>Department of Dermatology, Steel Memorial Yawata Hospital, Fukuoka, Japan

**P11-07 [C07-05] Induction of the steroid synthesis by the innate immune system in human keratinocytes**  
○Ryoko Shimada-Omori, Kenshi Yamasaki, Saaya Koike, Na Li, Setsuya Aiba  
Department of Dermatology Tohoku University Graduate School of Medicine, Miyagi, Japan

**P11-08 [C07-06] HOUSE DUST MITE ALLERGEN RELEASES IL-31 AND IL-33 FROM EPIDERMAL KERATINOCYTES VIA ATP SIGNALING**  
○Xiuju Dai, Mikiko Tohyama, Masamoto Murakami, Yasushi Hanakawa, Koji Sayama  
Department of Dermatology, Ehime University Graduate School of Medicine, Ehime, Japan

**P11-09 [C07-07] Pharmacological modulation of sphingosine kinase 1 activity enhances epidermal innate immunity through cathelicidin production**  
○Kyungho Park<sup>1</sup>, Sin Hee Lee<sup>2</sup>, Jeong Eun Jeon<sup>2</sup>, Bong-Woo Kim<sup>2</sup>, Young Il Kim<sup>1</sup>, Kyoung-Oh Shin<sup>3</sup>, Yong-Moon Lee<sup>3</sup>, Hyun Jong Kim<sup>4</sup>, Theodora Mauro<sup>1</sup>, Peter M. Elias<sup>1</sup>, Yoshikazu Uchida<sup>1</sup>, Se Kyoo Jeong<sup>2</sup>  
<sup>1</sup>Department of Dermatology, University of California, San Francisco, San Francisco, USA, <sup>2</sup>CRID Center, NeoPharm Co., Ltd., Daejeon, South Korea, <sup>3</sup>College of Pharmacy, Chungbuk National University, Cheongju, South Korea, <sup>4</sup>Department of Dermatology and Atopy Clinic, Seoul Medical Center, Seoul, South Korea

- P11-10 [C07-08] Monocytes are crucial for a shift away from a Treg to Th17 response in *Mycoplasma pneumoniae* infection and SJS/TEN**  
 ○Ryo Takahashi<sup>1</sup>, Yukiko Ushigome<sup>2</sup>, Tetsuo Shiohara<sup>1,2</sup>  
<sup>1</sup>Division of Flowcytometry, Kyorin University Graduate School of Medicine, <sup>2</sup>Department of Dermatology, Kyorin University School of Medicine, Tokyo, Japan
- P11-11 [C02-08] M2 macrophages and innate lymphoid type 2 cells promote metastasis in malignant melanoma via IL-1β-driven thymic stromal lymphopoietin**  
 ○Atsushi Otsuka, Reinhard Dummer, Emmanuel Contassot, Lars E French  
 Division of Dermatology, University Hospital Zurich, Switzerland
- P11-12 Skin inflammation through innate immunity contributes to the elevation of serum amyloid A protein level of psoriatic patients**  
 ○Shin Morizane, Tetsuya Takiguchi, Ai Tenta, Kazuko Mizuno, Keiji Iwatsuki  
 Department of Dermatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences
- P11-13 AG-30 enhances the production of cytokines/chemokines in human primary keratinocytes via MAPK and NF-κB activation**  
 ○Chanisa Kiatsurayanon<sup>1,2</sup>, François Niyonsaba<sup>1</sup>, Hiroko Ushio<sup>1</sup>, Shigaku Ikeda<sup>1,2</sup>, Ko Okumura<sup>1</sup>, Hideoki Ogawa<sup>1</sup>  
<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Dermatology, Juntendo University Graduate School of Medicine, Tokyo, Japan
- P11-14 Role of neutrophils in the pathogenesis of imiquimod-induced psoriasis-like skin lesions**  
 ○Nobuhiro Kusuba, Akihiko Kitoh, Yoshiki Miyachi, Kenji Kabashima  
 Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P11-15 IL-21-inducible TRPV6 is reduced in psoriatic skin**  
 ○Sung Hee Kim, Dae Suk Kim, Hee joo Kim, Jung Hwan Je, Do Young Kim, Dong Yoon Shin, Ogonzaya Ayush, Min-Geol Lee  
 Department of Dermatology, Yonsei University College of Medicine, Seoul, Korea
- P11-16 IL-33 promotes MHC class II expression in murine mast cells**  
 ○Tomonobu Ito<sup>1</sup>, Chizu Egusa<sup>1</sup>, Tatsuo Maeda<sup>1</sup>, Nobuhiro Nakano<sup>2</sup>, Chiharu Nishiyama<sup>2,3</sup>, Ryoji Tsuboi<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Tokyo Medical University, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University School of Medicine, <sup>3</sup>Department of Biological Science and Technology Tokyo University of Science
- P11-17 Cysteine proteases induce Th2 immune response through transcription activation of NF-κB response genes in keratinocytes**  
 ○Reiko Matsumoto, Teruki Dainichi, Kenji Sakurai, Yoshiki Miyachi, Kenji Kabashima  
 Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
- P11-18 Effect of hydrotherapy on the microbiome in atopic dermatitis lesions**  
 Virginie Ribet<sup>1</sup>, Muriel Bourrain<sup>1,2,3</sup>, Audrey Calvez<sup>1,2,3</sup>, Philippe Lebaron<sup>2,3</sup>, Anne-Marie Schmitt<sup>1,4</sup>  
<sup>1</sup>Centre de Recherche sur la Peau Pierre Fabre Dermocosmétique TOULOUSE, <sup>2</sup>UPMC UNIV PARIS 06, UMR 7621, LOMIC, Observatoire Océanologique 66650 BANYULS SUR MER FRANCE, <sup>3</sup>CNRS, UMR 7621, LOMIC, Observatoire Océanologique 66650 BANYULS SUR MER FRANCE, <sup>4</sup>DERMATOLOGY DEPARTMENT, LARREY HOSPITAL TOULOUSE FRANCE
- P11-19 Pathophysiological role of Toll like receptor 4 in mast cells in a rat model of atopic dermatiti**  
 ○Hee Joo Kim<sup>1</sup>, Heung Sik Na<sup>2</sup>, Seung Keun Back<sup>2</sup>, Hyunkyung Lee<sup>2</sup>, Min Geol Lee<sup>1</sup>, Il-Hwan Kim<sup>3</sup>  
<sup>1</sup>Department of Dermatology, Severance Hospital, Yonsei University College of Medicine, <sup>2</sup>Department of Physiology, Korea University College of Medicine, <sup>3</sup>Department of Dermatology, Korea University Ansan Hospital, Korea University College of Medicine
- P11-20 Roles of autophagy in degranulation and regranulation of mast cells**  
 ○Takahiko Yamada<sup>1,2</sup>, Hiroko Ushio<sup>2</sup>, François Niyonsaba<sup>2</sup>, Ko Okumura<sup>2</sup>, Shigaku Ikeda<sup>1,2</sup>, Hideoki Ogawa<sup>1,2</sup>  
<sup>1</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine
- P11-21 Malaria infection-induced NK cells ameliorate AD-like skin lesions in NC/Nga mice**  
 ○Chikako Kishi<sup>1</sup>, Hiroo Amano<sup>1</sup>, Mai Hattori<sup>1</sup>, Kazutomo Suzue<sup>2</sup>, Osamu Ishikawa<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, <sup>2</sup>Department of Parasitology, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
- P11-22 Effects of antimicrobial peptides on semaphorin 3A expression in normal human epidermal keratinocytes**  
 ○Yoshie Umehara<sup>1</sup>, Yayoi Kamata<sup>1</sup>, Mitsutoshi Tominaga<sup>1</sup>, François Niyonsaba<sup>2</sup>, Kenji Takamori<sup>1</sup>  
<sup>1</sup>Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Chiba, Japan, <sup>2</sup>Atopy (Allergy) Research Center, Juntendo University School of Medicine, Tokyo, Japan
- P11-23 Maturation of mucosal mast cells is promoted by Notch signaling**  
 ○Nobuhiro Nakano<sup>1</sup>, Chiharu Nishiyama<sup>1,2</sup>, Ko Okumura<sup>1</sup>, Shigaku Ikeda<sup>1,3</sup>, Hideoki Ogawa<sup>1,3</sup>  
<sup>1</sup>Atopy (Allergy) Research Center, Juntendo University Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Biological Science and Technology, Tokyo University of Science, Tokyo, Japan, <sup>3</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan



- P11-24 Epidermal growth factor receptor inhibitors selectively inhibit the expression of human  $\beta$ -defensins induced by Staphylococci**  
○Rie Ommori<sup>1</sup>, Kio Park<sup>2</sup>, Kyoko Imoto<sup>1</sup>, Hideo Asada<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nara Medical University, Nara, Japan, <sup>2</sup>Department of Dermatology, Yamato Takada Municipal Hospital, Nara, Japan
- P11-25 Effects of innate immunity and cytokines on HSV infection in Darier's disease**  
○Takenobu Yamamoto, Tetsuko Kimura, Wataru Fujimoto  
Department of Dermatology, Kawasaki medical school, Kurashiki, Japan
- P11-26 Estrogen inhibits acute and chronic contact hypersensitivity response in mice**  
○Chen Yue<sup>1,2</sup>, Hiroo Yokoze<sup>2</sup>, Kazumoto Katagiri<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Dokkyo Medical University Koshigaya Hospital, Saita, Japan, <sup>2</sup>Department of Dermatology, Tokyo Medical and Dental University, Tokyo, Japan

## Category 12(P12): Photobiology

- P12-01 [II-7] Establishment and characterization of iPS cells derived from XPA patients**  
○Chihiro Shimizuhira<sup>1</sup>, Hidaka Yokota<sup>1,2</sup>, Shinichi Moriwaki<sup>3</sup>, Yoshinori Yoshida<sup>2</sup>, Yoshiki Miyachi<sup>1</sup>, Shinya Yamanaka<sup>2</sup>, Kenji Kabashima<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan, <sup>2</sup>Department of Reprogramming Science, Center for iPS Cell Research and Application, Kyoto University, <sup>3</sup>Department of Dermatology, Osaka Medical College
- P12-02 [C06-02] Irradiation by excimer lamp induces intraepidermal nerve degeneration and inhibits itch-related behavior in a dry-skin mouse model**  
○Atsuko Kamo<sup>1,2</sup>, Mitsutoshi Tominaga<sup>1</sup>, Yayoi Kamata<sup>1</sup>, Kazuyuki Kaneda<sup>3</sup>, Kyi C Ko<sup>1</sup>, Hironori Matsuda<sup>1</sup>, Utako Kimura<sup>4</sup>, Kenji Takamori<sup>4</sup>  
<sup>1</sup>Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, <sup>2</sup>Department of Nursing, School of Health Sciences, Tokai University, <sup>3</sup>Ushio Inc., <sup>4</sup>Department of Dermatology, Juntendo University Urayasu Hospital, Japan
- P12-03 [C06-03] Withdrawn**
- P12-04 [C06-01] NER assay based on flow cytometry of pyrimidine dimer immunocytochemistry: comparison with unscheduled DNA synthesis using autoradiography**  
○Eiji Nakano, Seiji Takeuchi, Ryusuke Ono, Taro Masaki, Chikako Nishigori  
Division of Dermatology, Department of Internal Related, Graduate School of Medicine, Kobe University
- P12-05 Four cases of xeroderma pigmentosum diagnosed by non-radioactive system using ethynyluracil derivatives**  
○Saori Tomimura<sup>1</sup>, Yuka Nakazawa<sup>2</sup>, Sayaka Kuwatsuka<sup>1</sup>, Yutaka Kuwatsuka<sup>1</sup>, Tomoo Ogi<sup>2</sup>, Atsushi Utani<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Graduate School of Biomedical Sciences, Nagasaki University, <sup>2</sup>Department of Molecular Medicine, Graduate School of Biomedical Sciences, Nagasaki University
- P12-06 ROS generation from the stratum corneum under UV irradiation**  
○Taeko Mizutani, Hijiri Sumida, Yuki Sagawa, Yuri Okano, Hitoshi Masaki  
School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, Japan
- P12-07 Inflammatory Actions of Near-infrared Radiation by Increasing MMP-1 and IL-8 Production in Human Dermal Fibroblasts**  
○Hiroko Sugimoto<sup>1</sup>, Noriko Akimoto<sup>1</sup>, Shiho Tanaka<sup>2</sup>, Mana Hirayama<sup>3</sup>, Yuko Takenaka<sup>3</sup>, Yuichiro Tsunemi<sup>3</sup>, Makoto Kawashima<sup>3</sup>, Takashi Sato<sup>1</sup>  
<sup>1</sup>Department of Biochemistry, Tokyo University of Pharmacy and Life Sciences, Tokyo, Japan, <sup>2</sup>Aoyama Institute of Women's Medicine, Tokyo Women's Medical University, Tokyo, Japan, <sup>3</sup>Department of Dermatology, Tokyo Women's Medical University, Tokyo, Japan
- P12-08 Photoprotective effects of phloretin sulfonate against UVB-induced damage in skin cell model and human volunteers**  
○Seung Woo Shin, Hyunwoo Kum, Minkyung Kim, Eunsun Jung, Deokhoon Park  
BioSpectrum, Inc, Seongnam, Rep. of Korea
- P12-09 Microarray analysis in the keratinocyte and melanocyte exposed to Narrow-band UVB and Broad-band UVB**  
○Taro Masaki<sup>1</sup>, Seiji Takeuchi<sup>1</sup>, Toshiro Matsuda<sup>2</sup>, Chikako Nishigori<sup>1</sup>  
<sup>1</sup>Division of Dermatology, Clinical Molecular Medicine, Faculty of Medicine, Kobe University Graduate School of Medicine, Kobe, Japan, <sup>2</sup>Atomic Energy Research Institute, Kinki University, Osaka, Japan

## Category 13(P13): Pigmentation and Melanoma

- P13-01 [II-4]** **Coupling of the radiosensitivity of melanocyte stem cells to their dormancy during the hair cycle**  
 ○Makiko Ueno<sup>1</sup>, Takahiro Aoto<sup>2</sup>, Yasuaki Mohri<sup>2</sup>, Hiroo Yokozeki<sup>1</sup>, Emi K. Nishimura<sup>2</sup>  
<sup>1</sup>Department of Dermatology, Tokyo Medical and Dental University Graduate school of Medicine, Tokyo, Japan, <sup>2</sup>Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan
- P13-02 [II-5]** **Induction of melanocytes and fibroblasts from multilineage-differentiating stress-enduring (Muse) cells derived from human adipose tissue**  
 ○Takeshi Yamauchi<sup>1</sup>, Kenshi Yamasaki<sup>1</sup>, Kenichiro Tsuchiyama<sup>1</sup>, Saaya Koike<sup>1</sup>, Mai Inoue<sup>1</sup>, Fumitaka Ogura<sup>2</sup>, Shohei Wakao<sup>2</sup>, Mari Dezawa<sup>2</sup>, Setsuya Aiba<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan, <sup>2</sup>Department of Stem Cell Biology and Histology, Tohoku University Graduate School of Medicine
- P13-03 [C09-01]** **Expression of activation induced deaminase (AID) and BRAF<sup>V600E</sup> mutation in malignant melanoma**  
 ○Daisuke Omoto, Emi Mashima, Yumiko Sakuragi, Natsuko Saito, Takashi Yamaguchi, Reiko Watabe, Haruna Yoshioka, Kana Hiromasa, Sanehito Haruyama, Rieko Kubo, Manabu Yoshioka, Daisuke Nishio, Motonobu Nakamura  
 Department of Dermatology, University of Occupational and Environmental Health
- P13-04 [C09-02]** **Suppressor of cytokine signaling-1 inhibits melanoma cell growth by the suppression of JAK/STAT and the activation of p53 signaling pathways**  
 ○Naoko Tagami<sup>1,2</sup>, Satoshi Serada<sup>2</sup>, Minoru Fujimoto<sup>2</sup>, Atsushi Tanemura<sup>1</sup>, Tetsuji Naka<sup>2</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Osaka University Graduate School of Medicine, Japan, <sup>2</sup>laboratory for Immuno Signal, National Institute of Biomedical Innovation, Osaka
- P13-05 [C09-03]** **Dowling-Degos disease is genetically and clinico-pathologically distinct from Reticulate acropigmentation of Kitamura, further confirmation**  
 ○Michihiro Kono<sup>1</sup>, Mutsumi Suganuma<sup>1</sup>, Hiromichi Takama<sup>2</sup>, Tamio Suzuki<sup>3</sup>, Kayoko Matsunaga<sup>4</sup>, Yasushi Tomita<sup>1</sup>, Masashi Akiyama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Nagoya University Graduate School of Medicine, Nagoya, Japan, <sup>2</sup>Takama Dermatology Clinic, Kasugai, Japan, <sup>3</sup>Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan, <sup>4</sup>Department of Dermatology, Fujita Health University School of Medicine, Toyoake, Japan
- P13-06 [C09-04]** **TRIF and MAVS pathway is essential to induce Rab27A and melanosome transportation by TLR3 agonist Poly(I:C) in human epidermal melanocytes**  
 ○Saaya Koike  
 Department of Dermatology, Tohoku University Graduate School of Medicine, Miyagi, Japan
- P13-07 [C09-05]** **Specific cytotoxicities of rhododol and raspberry ketone on B16 melanoma cell by increasing intracellular reactive oxygen species levels**  
 ○Takeshi Nagata<sup>1,2</sup>, Shinobu Ito<sup>2</sup>, Kazuyoshi Itoga<sup>1</sup>, Hideko Kanazawa<sup>3</sup>, Hitoshi Masaki<sup>4</sup>  
<sup>1</sup>Institute of Advanced Biomedical Engineering and Science, Tokyo Women's Medical University, Tokyo, Japan, <sup>2</sup>I.T.O.Co., Ltd., Tokyo, Japan, <sup>3</sup>Faculty of Pharmacy, Keio University, Tokyo, Japan, <sup>4</sup>School of Bioscience and Biotechnology, Tokyo University of Technology, Tokyo, Japan
- P13-08 [C09-06]** **Rhododendrol activates autophagy-lysosome pathway in melanocytes: a potential mechanism for skin depigmentation disorder**  
 ○Lingli Yang<sup>1</sup>, Mari Wataya-Kaneda<sup>1</sup>, Fei Yang<sup>1</sup>, Daisuke Tsuruta<sup>2</sup>, Atsushi Tanemura<sup>1</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Course of Molecular Medicine, Graduate School of Medicine, Osaka University, <sup>2</sup>Department of Dermatology, Osaka City University Graduate School of Medicine
- P13-09 [C09-07]** **The immunomodulatory effect of IFN-β on tumor-associated macrophages in in-transit melanoma**  
 ○Aya Kakizaki, Taku Fujimura, Sadanori Furudate, Yumi Kambayashi, Yukikazu Numata, Takahiro Haga, Akira Hashimoto, Setsuya Aiba  
 Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan
- P13-10 [C09-08]** **Serum leptin receptor as a tumor marker of melanoma**  
 ○Satoshi Fukushima, Hironori Mizutani, Azusa Miyashita, Junji Yamashita, Satoshi Nakahara, Masatoshi Jinnin, Hironobu Ihn  
 Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan
- P13-11** **Actin-binding Protein, Espin: a Novel Metastatic Regulator for Melanoma**  
 ○Takeshi Yanagishita<sup>1,2</sup>, Ichiro Yajima<sup>2,5</sup>, Mayuko Kumasaka<sup>2,5</sup>, Yoshiyuki Kawamoto<sup>3</sup>, Toyonori Tsuzuki<sup>4</sup>, Yoshinari Matsumoto<sup>1</sup>, Yasuhiko Tamada<sup>1</sup>, Daisuke Watanabe<sup>1</sup>, Masashi Kato<sup>2,5</sup>  
<sup>1</sup>Department of Dermatology, Aichi Medical University School of Medicine, <sup>2</sup>Units of Environmental Health Sciences, Department of Biomedical Sciences, College of Life and Health Sciences, Chubu University, <sup>3</sup>Units of Immunology, Department of Biomedical Sciences, College of Life and Health Sciences, Chubu University, <sup>4</sup>Department of Pathology, Nagoya Daini Red Cross Hospital, <sup>5</sup>Department of Occupational and Environmental Health, Nagoya University Graduate School of Medicine

- P13-12 [C02-07] High-mobility-group-Box1 (HMGB1) promotes melanoma progression through the recruitment of M2 macrophages**  
○Roman Huber, Atsushi Otsuka, Barbara Meier, Daniel Widmer, Takashi Satoh, Gabriele Fenini, Johanna Mangana, Tatiana Proust, Reinhard Dummer, Emmanuel Contassot, Lars E. French  
Department of Dermatology, University Hospital Zurich, Zurich, Switzerland
- P13-13 Melanoblast maturation is mediated by the aryl hydrocarbon receptor pathway**  
○Motoki Nakamura, Emi Nishida, Akimichi Morita  
Department of Geriatric and Environmental Dermatology, Nagoya City University, Nagoya, Japan
- P13-14 Anti-B16 melanoma effects of a STAT3 inhibitor (rR9-GRIM19) are strongly enhanced by co-treatment with recombinant Interferons**  
○Takashi Okamoto, Naotaka Shibagaki, Shinji Shimada  
Department of Dermatology, University of Yamanashi, Yamanashi, Japan
- P13-15 Activation of Toll-like receptor 4 induces proliferation and migration of human melanoma cells**  
○Eisaku Ogawa, Yuko Takazawa, Yukiko Kiniwa, Aya Uchiyama, Atsuko Ashida, Hisashi Uhara, Yasufumi Goto, Ryuhei Okuyama  
Department of Dermatology, Shinshu University School of Medicine, Matsumoto, Japan
- P13-16 The role of ADAM proteases on the processing of pmel17**  
○Masakazu Kawaguchi, Yutaka Hozumi, Tamio Suzuki  
Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan
- P13-17 An agonistic antibody to EphA2 exhibits anti-tumor effect to human melanoma**  
○Atsushi Sakamoto<sup>1</sup>, Kazunori Kato<sup>2</sup>, Taro Kojima<sup>2</sup>, Ritsuko Harigai<sup>2</sup>, Toshio Hasegawa<sup>1</sup>, Shigaku Ikeda<sup>1</sup>  
<sup>1</sup>Department of Dermatology and Allergology, Juntendo University Graduate School of Medicine, Tokyo, Japan, <sup>2</sup>Department of Biomedical Engineering, Toyo University, Saitama, Japan
- P13-18 A mouse model of leukoderma induced by Rhododendrol**  
○Yuko Abe<sup>1</sup>, Yutaka Hozumi<sup>1</sup>, Ken Okamura<sup>1</sup>, Masakazu Kawaguchi<sup>1</sup>, Takahiro Kunisada<sup>2</sup>, Hitomi Aoki<sup>2</sup>, Tamio Suzuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan, <sup>2</sup>Department of Tissue and Organ Development, Regeneration and Advanced Medical Science, Gifu University Graduate School of Medicine
- P13-19 Positive selection with diversity in oculocutaneous albinisms type 2 gene (OCA2) among Japanese**  
○Miwa Shimanuki<sup>1</sup>, Gen Tamiya<sup>2</sup>, Yuko Abe<sup>1</sup>, Yutaka Hozumi<sup>1</sup>, Tamio Suzuki<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Yamagata University Faculty of Medicine, Yamagata, Japan, <sup>2</sup>Tohoku Medical Megabank Organization, Tohoku University, Miyagi, Japan
- P13-20 Melanin pigmentation enhanced by the inhibition of Arginase-1 activity**  
○Akiko Eda, Akiko Enomoto, Mariko Ikeda, Shioji Ishiwatari, Tamie Suzuki, Shoko Matsukuma  
Beauty Science Research Center, Fancl Research Institute, Totsuka, Yokohama, Japan
- P13-21 Inhibition of melanogenesis by HLA class II molecules**  
○Noriko Arase<sup>1</sup>, Atsushi Tanemura<sup>1</sup>, You Reiri<sup>1</sup>, Megumi Nishioka<sup>1</sup>, Hui Jin<sup>2</sup>, Hisashi Arase<sup>2</sup>, Ichiro Katayama<sup>1</sup>  
<sup>1</sup>Department of Dermatology, Osaka University, <sup>2</sup>Immunochemistry, Immunology Frontier Research Center, Department of Immunochemistry, Research Institute for Microbial Diseases, Osaka University
- P13-22 Decreased eumelaninogenesis in a case of nevus depigmentosus with pale skin, yellow-brown hair and a bright brown iris**  
○Naoki Oiso<sup>1</sup>, Norimasa Nomi<sup>2</sup>, Kazuyoshi Fukai<sup>3</sup>, Atsushi Tanemura<sup>4</sup>, Tamio Suzuki<sup>5</sup>, Ichiro Katayama<sup>4</sup>, Kazumasa Wakamatsu<sup>6</sup>, Masahiko Muto<sup>7</sup>, Akira Kawada<sup>1</sup>  
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- P13-23 MSX1 promotes melanoma progression via neural crest-like reprogramming**  
○Mizuho Fukunaga-Kalabis<sup>1</sup>, Markus V. Heppt<sup>1,2</sup>, Joshua X. Wang<sup>1</sup>, Denitsa M. Hristova<sup>1</sup>, Zhi Wei<sup>3</sup>, Martin Irmeler<sup>4</sup>, Carola Berking<sup>2</sup>, Robert Besch<sup>2</sup>, Johannes Beckers<sup>4,5</sup>, Frank J. Rauscher<sup>1</sup>, David E. Fisher<sup>6</sup>, Meenhard Herlyn<sup>1</sup>  
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- P13-24 Comparison of vitiligo vulgaris and rhododendrol-induced vitiligo by multiband camera imaging with multiple linear regression analysis**  
○Mai Inoue, Kenshi Yamasaki, Takeshi Yamauchi, Saaya Koike, Akiko Watabe, Katsuko Kikuchi, Setsuya Aiba  
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- P13-25 Comparison of the degree of semi-permanent makeup removal and histological changes using 1,064 nm Q-switched ND:YAG laser**  
○Euy Hyun Chung<sup>1</sup>, Bum Joon Ko<sup>2</sup>, Sun Bum Kwon<sup>2</sup>, Hyun ju Kim<sup>3</sup>, Ga Hee Jung<sup>1</sup>, Sang Hoon Lee<sup>3</sup>, Sung Yul Lee<sup>1</sup>, Moon Kyun Cho<sup>2</sup>  
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**P13-26 Withdrawn**