

Program

Monday, November 14 (Day 1)

8:30-9:30 Registration

9:30-9:40 Welcoming Address by Hironobu Fujiwara

Session 1: Epithelial structure and function

Chair: Yoshiaki Hirako

9:40-10:10 S1-1
Spatiotemporal orchestration of epidermal cell turnover based on Kelvin's tetrakaidecahedron cell shape
Akiharu Kubo (Keio University School of Medicine, Japan)

10:10-10:30 S1-2*
Initiation of cornification is regulated by Ca^{2+} and pH in isolated mouse stratum granulosum cells
Takeshi Matsui (RIKEN Center for Integrative Medical Sciences, Japan)

10:30-11:00 S1-3
Epithelium - an intelligent tissue
Hisao Honda (Kobe University Graduate School of Medicine, Japan)

11:00-11:20 *Coffee Break*

Keynote Lecture I

Chair: Daisuke Nanba

11:20-12:10 K1-1
TBA
Yann Barrandon (EPFL, Switzerland, Singapore A-STAR, Singapore)

12:10-13:10 *Lunch*

Session 2: Organization of functional units I

Chair: Emi Nishimura

- 13:10-13:40 S2-1
Melanosome transfer from melanocytes to keratinocytes is mediated by plasma membrane vesicles
Yoshiko Takahashi (Kyoto University, Japan)
- 13:40-14:00 S2-2*
Visible light activates hair follicle stem cells through a neural circuit initiated from intrinsically photosensitive retinal ganglion cells
Sung-Jan Lin (National Taiwan University, Taiwan)
- 14:00-14:30 S2-3
Hair follicle epidermal stem cells define a niche for tactile sensation
Hironobu Fujiwara (RIKEN Center for Developmental Biology, Japan)

14:30-14:40 *Short Break*

Session 3: Organization of functional units II

Chair: Mariko Moriyama

- 14:40-15:10 S3-1
Diversity of organ-specific vascular patterning
Yoshiaki Kubota (Keio University, Japan)
- 15:10-15:40 S3-2
Thermoregulatory role of juxtapositional aligned arterial and venous vessels in the skin
Hiroyasu Kidoya (Osaka University, Japan)

15:40-16:10 *Group Photo & Coffee Break*

Session 4: Therapeutics

Chair: Akiharu Kubo

16:10-16:40 S4-1

Stratum corneum as the forefront barrier of the skin

Masayuki Amagai (Keio University School of Medicine,
RIKEN Center for Integrative Medical Sciences, Japan)

16:40-17:10 S4-2

Live imaging of skin immune responses

Kenji Kabashima (Kyoto University, Japan)

17:10-18:50 **Poster Session**

17:10-18:00 Odd numbered posters

18:00-18:50 Even numbered posters

18:50-20:50 Banquet at CDB Salon

Tuesday, November 15 (Day 2)

Session 5: Maintenance, regeneration and aging I

Chair: Ken Natsuga

- 9:30-10:00 S5-1
A mechanistic principle of multilayered structure formation from single human epidermal stem cells
Daisuke Nanba (Tokyo Medical and Dental University, Japan)
- 10:00-10:20 S5-2*
Defining the stem cell lineages in the mouse inter-follicular epidermis
Aiko Sada (University of Tsukuba, Japan)
- 10:20-10:50 S5-3
Mathematical modeling of the barrier function of the stratum corneum
Masaharu Nagayama (Hokkaido University, Japan)

10:50-11:10 *Coffee Break*

Keynote Lecture II

Chair: Hironobu Fujiwara

- 11:10-12:00 K2-1
Evo-Devo of skin appendages: Multiplicity as the body Surface tactics
Cheng-Ming Chuong (University of Southern California, USA)

12:00-13:00 *Lunch*

Session 6: Maintenance, regeneration and aging II

Chair: Hironobu Fujiwara

- 13:00-13:30 S6-1
Stem cells orchestrates hair follicle aging program
Emi K. Nishimura (Tokyo Medical and Dental University, Japan)
- 13:30-13:50 S6-2*
Stem and transit-amplifying cells orchestrate abdominal skin expansion during pregnancy
Ryo Ichijo (Kyoto University, Japan)
- 13:50-14:20 S6-3
Melanocyte stem cells in regeneration and cancer
Mayumi Ito (New York University School of Medicine, USA)
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14:20-14:40 *Coffee Break*

Session 7: New technologies

Chair: Daisuke Nanba

- 14:40-15:10 **Spatial propagation of radial ERK activity distribution (SPREAD) in the epidermis**
Michiyuki Matsuda (Kyoto University, Japan)
- 15:10-15:40 **Functional regeneration of hair follicle and integumentary organ system**
Takashi Tsuji (RIKEN Center for Developmental Biology, Japan)
- 15:00-15:10 Closing Remarks by Emi Nishimura