

Recent Advances in Cell Biology and Immunology 2023

October 25-26, 2023 Online meeting

Wednesday, October 25, 2023

10:00-10:05 Opening Remarks:
Shinichiro Sawa (Kyushu University, Japan)

10:05-10:10 Announcement

Session 01: Development and lineage commitment of immune cells

Chair: Yoshihiro Baba

10:10-10:40 S-01 : **Chrysothemis Brown** (Memorial Sloan Kettering Cancer Center, USA)
Early life imprinting of immune tolerance

10:40-11:05 S-02 : **Shinichiro Sawa** (Kyushu University, Japan)
Regulatory mechanism of ROR γ t expression in innate and adaptive lymphocytes

11:05-11:10 Short break

11:10-11:35 S-03 : **Sho Yamasaki** (Osaka University, Japan)
Regulation of MAIT cells by a host-derived antigen

11:35-12:00 S-04 : **Takahiro Masuda** (Kyushu University, Japan)
Similar but different: Diverse macrophages in the central nervous system

12:00-13:00 Lunch

Session 02: Migration, recognition, and activation of leukocytes

Chair: Takahiro Masuda

13:00-13:30 S-05 : **Morgan Huse** (Memorial Sloan Kettering Cancer Center, USA)
Mechanoregulation of Immune Effector Function

13:30-13:55 S-06 : **Takanari Inoue** (Johns Hopkins University School of Medicine, USA)
Missing link between skeleton and skin in cell motility

13:55-14:00 Short break

- 14:00-14:25 S-07 : **Takumi Maruhashi** (The University of Tokyo, Japan)
Immune regulation by LAG-3, an inhibitory co-receptor of a unique target selectivity
- 14:25-14:50 S-08 : **Yoshinori Fukui** (Kyushu University, Japan)
A mechanism that grants immune privilege at the feto-maternal interface
- 14:50-15:00 Short break

Session 03: Stromal-immune cell interactions

Chair: Shinichiro Sawa

- 15:00-15:30 S-09 : **Jakub Abramson** (Weizmann Institute of Science, Israel)
From Broken Self-Tolerance to Broken Teeth
AIRE deficiency reveals autoimmune amelogenesis imperfecta
- 15:30-15:55 S-10 : **Takashi Nagasawa** (Osaka University, Japan)
Bone marrow specific fibroblasts creating microenvironmental niches for hematopoietic stem cells and lympho-hematopoiesis
- 15:55-16:20 S-11 : **Mamiko Sakata-Yanagimoto** (University of Tsukuba, Japan)
Unraveling Microenvironmental Diversity in Malignant Lymphoma through Single-Cell Analysis
- 16:20-16:30 Short break
- 16:30-17:00 S-12 : **Burkhard Ludewig** (Kantonsspital St.Gallen, Switzerland)
Lymphoid organ fibroblast control immune cell differentiation and activity
- 17:00-17:30 S-13 : **Lucie Peduto** (Institut Pasteur, France)
Stromal mesenchymal cells in tissue homeostasis and antitumor immunity

Thursday, October 26, 2023

11:30-11:35 Announcement

Session 04: Allergy and inflammation

Chair: Takehito Uruno

11:35-12:00 S-14 : **Kiyoshi Hirahara** (Chiba University, Japan)
Pathological tissue inflammatory memories
- Immune-neuro interaction shapes the transformation of inflamed tissue -

12:00-12:25 S-15 : **Kenji Kabashima** (Kyoto University, Japan)
Cutaneous immune responses to foreign bodies

12:25-12:50 S-16 : **Hideki Ueno** (Kyoto University, Japan)
Human germinal center helper cells differentiate into IL-10+ T follicular
regulatory cells

12:50-13:50 Lunch

Session 05: Commensals and host immunity

Chair: Minako Ito

13:50-14:15 S-17 : **Koji Atarashi** (Keio University, Japan)
Gut Microbiota and Longevity

14:15-14:40 S-18 : **Kazuki Nagashima** (Stanford University, USA)
Mapping the T cell repertoire to a complex defined gut bacterial community

14:40-14:45 Short break

14:45-15:10 S-19 : **Hiroko Kitamoto** (Osaka University, Japan)
Microbial-Host Cross-talk in Inflammatory Bowel Disease

15:10-15:35 S-20 : **Koji Hase** (Keio University, Japan)
The pathological link between the intestinal immune system and autoimmune
disorders

15:35-15:45 Short break

Session 06: Host defense against pathogens

Chair: Shinya Tanaka

15:45-16:10 S-21: **Takasuke Fukuhara** (Hokkaido University, Japan)
Establishment of a simple high-speed reverse genetics system for SARS-
CoV-2 and application research using recombinant viruses

- 16:10-16:35 S-22 : **Masahiro Yamamoto** (Osaka University, Japan)
Identification of secreted and non-secreted *Toxoplasma* virulence factors by *in vivo* CRISPR screens
- 16:35-17:00 S-23 : **Hisashi Arase** (Osaka University, Japan)
Autoimmunity by aberrant MHC class II self-antigen presentation by virus infection
- 17:00-17:05 Closing Remarks:
Yoshinori Fukui
(Director of Medical Institute of Bioregulation, Kyushu University, Japan)