

Symposia

Symposium 1 (Room A) 9 : 00~11 : 30, December 10, (Wed.)

S1. Thymic microenvironments for T cell development and repertoire formation

Chairpersons: Nagahiro MINATO (Kyoto University)
Yousuke TAKAHAMA (The University of Tokushima)

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| S1-1 | 9 : 00~ 9 : 30 | Hans-Reimer RODEWALD (German Cancer Research Center (DKFZ))
Progenitor cell competition, thymus autonomy, and T cell leukemia |
| S1-2 | 9 : 30~10 : 00 | Yoko HAMAZAKI (Kyoto University)
Identification of medullary thymic epithelial stem cells ensuring lifelong central T-cell tolerance |
| S1-3 | 10 : 00~10 : 30 | Mark M. Davis (Stanford University School of Medicine, Howard Hughes Medical Institute)
The nature of the $\alpha\beta$ T cell receptor repertoire and thymic selection |
| S1-4 | 10 : 30~11 : 00 | Yousuke TAKAHAMA (University of Tokushima)
Thymus microenvironment for the formation of CD8 T cell repertoire |
| S1-5 | 11 : 00~11 : 30 | Adrian HAYDAY (King's College London)
Epithelial Determinants of Immune Compartments |

Symposium 2 (Room B) 9 : 00~11 : 30, December 10, (Wed.)

S2. Immunological memory and diseases

Chairpersons: Masaki HIKIDA (Kyoto University)
Toshinori NAKAYAMA (Chiba University)

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| S2-1 | 9 : 00~ 9 : 30 | Toshinori NAKAYAMA (Chiba University)
Pathogenic memory Th2 cells in the airway |
| S2-2 | 9 : 30~10 : 00 | Donna L. FARBER (Columbia University)
Multidimensional map of human T cell compartmentalization and maintenance over decades of life |
| S2-3 | 10 : 00~10 : 30 | David TARLINTON (Walter and ELiza Hall Institute of Medical Research)
c-Myb is the molecular switch that determines migration of plasma cells to the bone marrow. |
| S2-4 | 10 : 30~11 : 00 | Masaki HIKIDA (Kyoto University,)
Identification of negative regulator in class-switched B cells. |
| S2-5 | 11 : 00~11 : 30 | Tomohiro KUROSAKI (Osaka University, RIKEN-IMS)
Involvement of transcription factors in generation of memory B cells |

Symposium 3 (Room C) 9 : 00~11 : 30, December 10, (Wed.)

**S3. Chronic Inflammation: Mechanisms uncovered by Genetic,
Cellular and in vivo researches**

Chairpersons: Osamu TAKEUCHI (Kyoto University)
Ryuta NISHIKOMORI (Kyoto University)

- S3-1 9 : 00~ 9 : 30 Luke O'NEILL (Trinity College Dublin)
Metabolic reprogramming in innate immunity
- S3-2 9 : 30~10 : 00 Ajay CHAWLA (UCSF)
Innate immunity regulates acclimatization to environmental cold
- S3-3 10 : 00~10 : 30 Tohru MINAMINO (Niigata University)
A critical role of senescence-induced inflammation in metabolic and cardiovascular disease
- S3-4 10 : 30~11 : 00 Masanobu OSHIMA (Kanazawa University)
Chronic inflammation in promotion of gastrointestinal cancer development
- S3-5 11 : 00~11 : 30 Ivona AKSENTIJEVICH (NHGRI/NIH)
Inflammation in monogenic autoinflammatory diseases

Symposium 4 (Room D) 9 : 00~11 : 30, December 10, (Wed.)

**S4. Allergy: understanding sequential events from allergen exposure to
local inflammation**

Chairpersons: Tomohiro YOSHIMOTO (Hyogo College of Medicine)
Kenji KABASHIMA (Kyoto University)

- S4-1 9 : 00~ 9 : 30 Alain HOVNANIAN (University of Paris Descartes)
Netherton syndrome in mice and human: when defective skin protease inhibition results in severe allergy and inflammation
- S4-2 9 : 30~10 : 00 Yumi MATSUOKA-NAKAMURA (Chiba University)
Understanding the link between *Staphylococcus aureus* colonization and allergic skin disease
- S4-3 10 : 00~10 : 30 Steven F. ZIEGLER (Benaroya Research Institute)
Regulation of Type-2 Inflammation
- S4-4 10 : 30~11 : 00 Kenji KABASHIMA (Kyoto University)
Perivascular leukocyte clusters are essential for efficient effector T cell activation in the skin
- S4-5 11 : 00~11 : 30 Maria CUROTTO DE LAFAILLE (Singapore Immunology Network (SIgN),
A*STAR)
Mechanisms involved in the production of high affinity IgE

Symposium 5 (Room C) 8 : 30~11 : 00, December 11, (Thu.)

**S5. Microenvironments for stem and immune cells [JSI-Shingakujutsu
Immune Organ Network joint session]**

Chairpersons: Takashi NAGASAWA (Kyoto University)
Masaru ISHII (Osaka University)

- S5-1 8 : 30~ 9 : 00 Yoshio KATAYAMA (Kobe University Hospital)
Regulation of lympho-hematopoietic microenvironment by inter-organ communication
- S5-2 9 : 00~ 9 : 30 Michael H. SIEWEKE (Centre d'Immunologie de Marseille-Luminy, Max-Delbrueck-
Center for Molecular Medicine)
Integration of cell intrinsic and extrinsic signals in lineage choice of hematopoietic stem
cells
- S5-3 9 : 30~10 : 00 Takashi NAGASAWA (Kyoto University Japan Science and Technology Agency
(JST), Core Research for Evolutional Science and Technology
(CREST))
The microenvironmental niches for hematopoietic stem and progenitor cells in bone
marrow
- S5-4 10 : 00~10 : 30 Masaru ISHII (Osaka University)
Intravital multiphoton imaging revealing immune cell dynamics in live bone tissues in
vivo
- S5-5 10 : 30~11 : 00 Charles P. LIN (Wellman Center for Photomedicine and Center for Systems Biology,
Massachusetts General Hospital Harvard Medical School)
In vivo imaging and sensing of the bone marrow microenvironment

Symposium 6 (Room B) 8 : 30~11 : 00, December 11, (Thu.)

**S6. Regulation of lymphocyte diversity
(Sponsored partly by AAI)**

Chairpersons: Koichi IKUTA (Kyoto University)
Ichiro TANIUCHI (RIKEN-IMS)

- S6-1 8 : 30~ 9 : 00 Ichiro TANIUCHI (RIKEN-IMS)
Cell fate determination in the thymus
- S6-2 9 : 00~ 9 : 30 Bruno SILVA-SANTOS (University Lisbon)
Molecular mechanisms of differentiation of effector $\gamma\delta$ T cell subsets
- S6-3 9 : 30~10 : 00 Akihiko YOSHIMURA (Keio University)
Regulation of regulatory T cell fate by NR4a nuclear factors
- S6-4 10 : 00~10 : 30 Max D. COOPER (Emory University)
Evolution of Lymphocyte Diversity
- S6-5 10 : 30~11 : 00 Shigeo KOYASU (RIKEN-IMS, Keio University)
Innate lymphoid cells and inflammation

Symposium 7 (Room A) 8 : 30~11 : 00, December 11, (Thu.)

S7. Innate Sensors: Good and Bad

Chairpersons: Takashi FUJITA (Kyoto University)
Andrea ABLASSER (University of Bonn)

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| S7-1 | 8 : 30~ 9 : 00 | Andrea ABLASSER (Global Health Institute, Ecole Polytechnique Federale de Lausanne)
Intracellular DNA sensing mechanisms |
| S7-2 | 9 : 00~ 9 : 30 | Nan YAN (University of Texas Southwestern Medical Center)
A novel function of TREX1/DNase III in autoimmunity |
| S7-3 | 9 : 30~10 : 00 | Nobuhiko KAYAGAKI (Genentech, Inc.)
Non-canonical inflammasome |
| S7-4 | 10 : 00~10 : 30 | Ryuta NISHIKOMORI (Kyoto University)
Aicardi-Goutières syndrome: type I interferonopathy. |
| S7-5 | 10 : 30~11 : 00 | Hiroki KATO (Kyoto University, JST and PRESTO)
Autoimmune disorders associated with gain of function of the intracellular sensor MDA5 |

Symposium 8 (Room D) 8 : 30~11 : 00, December 11, (Thu.)

S8. Immunosenescence and immunometabolism

Chairpersons: Motoaki SANO (Keio University)
Ichiro MANABE (The University of Tokyo)

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| S8-1 | 8 : 30~ 9 : 00 | Filip SWIRSKI (Massachusetts General Hospital and Harvard Medical School)
Innate response activator B cells in acute and chronic inflammation |
| S8-2 | 9 : 00~ 9 : 30 | Nagahiro MINATO (Kyoto University)
Immunosenescence and autoimmunity |
| S8-3 | 9 : 30~10 : 00 | Motoaki SANO (Keio University)
Immunosenescence and metabolic disorder |
| S8-4 | 10 : 00~10 : 30 | Ichiro MANABE (The University of Tokyo)
Immunometabolic regulation of cardiometabolic disease |
| S8-5 | 10 : 30~11 : 00 | Minna WOO (University of Toronto)
Effects of inflammatory signals in diabetes and atherogenesis |

Symposium 9 (Room A) 9 : 00~11 : 30, December 12, (Fri.)

S9. Genetic and epigenetic control of cell fate [JSI-Shingakujutsu Cell Fate joint session]

Chairpersons: Hiroshi KAWAMOTO (Kyoto University)
Toshio KITAMURA (The University of Tokyo)

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| S9-1 | 9 : 00~ 9 : 20 | Hiroshi KAWAMOTO (Kyoto University)
Molecular mechanisms for production and maintenance of the T cell lineage |
| S9-2 | 9 : 20~ 9 : 50 | Katia GEORGOPOULOS (Harvard Medical School)
Epigenetic regulation of adhesion signaling in preB cells |
| S9-3 | 9 : 50~10 : 15 | Toshio KITAMURA (The University of Tokyo)
Molecular mechanisms of MDS and MDS/AML pathogenesis induced by ASXL1 and ASXL1/SETBP1 mutations |
| S9-4 | 10 : 15~10 : 35 | Toshiya INABA (Hiroshima University)
A mouse model for human myelodysplastic syndromes with monosomy 7 as a sole chromosome anomaly |
| S9-5 | 10 : 35~11 : 05 | Ari MELNICK (Weill Cornell Medical College)
Multifaceted roles of BCL6 in the immune system and beyond |
| S9-6 | 11 : 05~11 : 30 | Makoto NAKANISHI (Nagoya City University)
Regulation of maintenance DNA methylation through histone ubiquitylation |

Symposium 10 (Room B) 9 : 00~11 : 30, December 12, (Fri.)

S10. Antitumor immunity in mice and humans

Chairpersons: Hans SCHREIBER (The University of Chicago)
Norimitsu KADOWAKI (Kyoto University)

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| S10-1 | 9 : 00~ 9 : 35 | Hans SCHREIBER (The University of Chicago)
Antitumor immunity in mice and humans |
| S10-2 | 9 : 35~10 : 10 | Yang-xin FU (The University of Chicago)
Radiation-triggered Cytosolic DNA Sensing Pathway Bridges Type I Interferon-dependent Innate and Adaptive Immune Responses |
| S10-3 | 10 : 10~10 : 35 | Noriho IIDA (Kanazawa University)
The role of gut commensal bacteria in anti-tumor innate immune effects of chemotherapy |
| S10-4 | 10 : 35~11 : 00 | Shin-ichiro FUJII (RIKEN-IMS)
Immunological memory and antitumor immunity elicited by artificial adjuvant vector cells for cancer immunotherapy |
| S10-5 | 11 : 00~11 : 30 | Hideaki TAHARA (The University of Tokyo)
Reinventing cancer immunotherapy based on successful development of check-point blockades |

Symposium 11 (Room C) 9 : 00~11 : 30, December 12, (Fri.)

S11. Gut microbiota in health and disease

Chairpersons: Keiichiro SUZUKI (Kyoto University)
Kiyoshi TAKEDA (Osaka University)

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| S11-1 | 9 : 00~ 9 : 25 | Andrew L. GOODMAN (Yale University)
Resilience in the human gut microbiota |
| S11-2 | 9 : 25~ 9 : 50 | Andrea CERUTTI (Icahn School of Medicine at Mount Sinai)
The mucin MUC2 in gut homeostasis and tolerance |
| S11-3 | 9 : 50~10 : 15 | Shinichiro SAWA (The University of Tokyo, JST and ERATO)
Intestinal homeostasis governed by mesenchymal stroma cells |
| S11-4 | 10 : 15~10 : 40 | Hiroshi OHNO (RIKEN-IMS)
Gut microbiota-derived short-chain fatty acid in host defense |
| S11-5 | 10 : 40~11 : 05 | Eran ELINAV (Weizmann Institute of Science)
The host and its microbiota in health and disease |
| S11-6 | 11 : 05~11 : 30 | Eiji HARA (Cancer Institute, CREST and JST)
Obesity and Cancer: a gut microbial connection |

Symposium 12 (Room D) 9 : 00~11 : 30, December 12, (Fri.)

**S12. Dissection of pathogenic mechanisms of systemic lupus erythematosus
(Sponsored partly by AAI)**

Chairpersons: Koichiro OHMURA (Kyoto University)
Anne DAVIDSON (The Feinstein Institute for Medical Research)

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| S12-1 | 9 : 00~ 9 : 30 | Edward WAKELAND (University of Texas Southwestern Medical Center) |
| S12-2 | 9 : 30~10 : 00 | Shigekazu NAGATA (Kyoto University)
Engulfment of apoptotic cells by macrophages |
| S12-3 | 10 : 00~10 : 30 | Keishi FUJIO (The University of Tokyo)
TGF- β 3-expressing CD4 ⁺ CD25 ⁻ LAG3 ⁺ regulatory T cells control humoral immune responses |
| S12-4 | 10 : 30~11 : 00 | Anne DAVIDSON (Feinstein Institute for Medical Research)
Effects of TLR7 and BAFF on B cell selection |
| S12-5 | 11 : 00~11 : 30 | Takao FUJII (Kyoto University)
Direct and indirect pathogenic roles of autoantibodies in neuropsychiatric systemic lupus erythematosus |