

Symposia

Symposium 1 (Room A) 9:00–11:30, December 5, (Wed)

S1. Innate immunity

Chairpersons: Shizuo Akira (Osaka University)
Kensuke Miyake (The University of Tokyo)

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| S1-1 | 9:00 – 9:22 | Masahiro Yamamoto (Osaka University)
Role of GBPs in innate host defense against an intracellular pathogen <i>Toxoplasma gondii</i> |
| S1-2 | 9:22 – 9:52 | Xiaoxia Li (The Cleveland Clinic Foundation)
Novel mechanisms for the regulatory role of IRAKM in TLR signaling |
| S1-3 | 9:52 – 10:14 | Shin-Ichiroh Saitoh (The University of Tokyo)
Arf-like GTPase Arl8b drives TLR7 into type I interferon-mediated autoimmunity |
| S1-4 | 10:14 – 10:44 | Manolis Pasparakis (University of Cologne)
Epithelial regulation of immune homeostasis and inflammation in barrier surfaces |
| S1-5 | 10:44 – 11:14 | Paul Kubes (University of Calgary)
iNKT cells, rapid inducers of immunity |
| S1-6 (LBT) | 11:14 – 11:29 | Jing Wang (Osaka University)
Neutrophil infiltration during inflammation is regulated by PILR α via modulation of integrin activation |

Symposium 2 (Room B) 9:00–11:30, December 5, (Wed)

S2. Lymphocyte development

Chairpersons: Takashi Nagasawa (Kyoto University)
Hiroshi Kawamoto (Kyoto University)

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| S2-1 | 9:00 – 9:30 | Hiroshi Kawamoto (Kyoto University)
Epigenetic mechanisms maintaining the T cell and thymic epithelial cell lineages |
| S2-2 | 9:30 – 10:00 | Tariq Enver (University College London)
Gene regulatory networks governing hematopoietic stem cell development and identity |
| S2-3 | 10:00 – 10:30 | Takashi Nagasawa (Kyoto University)
The adipo-osteogenic progenitors with long processes function as niches for hematopoietic stem and progenitor cells |
| S2-4 | 10:30 – 11:00 | Satoshi Yamazaki (The University of Tokyo)
Bone marrow Schwann cells in the bone marrow niche maintain hematopoietic stem cell hibernation through TGF- β signaling |
| S2-5 | 11:00 – 11:30 | Utpal Banerjee (University of California, Los Angeles)
Systemic control of hematopoietic progenitors in <i>Drosophila</i> |

Symposium 3 (Room K) 9:00–11:30, December 5, (Wed)

S3. Effector T cell functions and neuro-immune interactions

Chairpersons: Masaaki Murakami (Osaka University)
Marco Prinz (University of Freiburg)

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| S3-1 | 9:00 – 9:25 | Kai W. Wucherpfennig (Dana-Farber Cancer Institute)
Immunological synapse formation by self-reactive human T cells |
| S3-2 | 9:25 – 9:50 | Toshihide Yamashita (Osaka University)
RGMA modulates T cell responses and is involved in autoimmune encephalomyelitis |
| S3-3 | 9:50 – 10:15 | Alexander Flügel (University Medical Center Goettingen)
The lung as checkpoint for encephalitogenic T cells |
| S3-4 | 10:15 – 10:40 | Masaaki Murakami (Osaka University)
Local neural pathway and a gateway for pathogenic T cells in the CNS |
| S3-5 | 10:40 – 11:05 | Marco Prinz (University of Freiburg)
Myeloid cells in the brain |
| S3-6 | 11:05 – 11:30 | Lawrence Steinman (Stanford University)
Amyloid fibrils composed of hexameric peptides attenuate neuroinflammation |

Symposium 4 (Room L) 9:00–11:30, December 5, (Wed)

S4. Autoimmune diseases

Chairpersons: Atsushi Kumanogoh (Osaka University)
Yoshiya Tanaka (University of Occupational and Environmental Health)

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| S4-1 | 9:00 – 9:20 | Shingo Nakayama (University of Occupational and Environmental Health)
Dynamic regulation of T follicular helper cell differentiation through STAT signaling |
| S4-2 | 9:20 – 9:40 | Yuka Kanno (National Institutes of Health)
Shaping the active enhancer landscape of T cell populations through signal sensing transcription factors |
| S4-3 | 9:40 – 10:05 | Kazuhiko Yamamoto (The University of Tokyo)
Effector and regulatory T cells in autoimmunity |
| S4-4 | 10:05 – 10:30 | Koji Yasutomo (University of Tokushima)
Notch provides metabolic signal for CD4+ memory T cells associated with autoimmune responses |
| S4-5 | 10:30 – 10:55 | Gary S. Firestein (University of California, San Diego)
Epigenetics and DNA methylation in rheumatoid arthritis |
| S4-6 | 10:55 – 11:15 | Toshio Tanaka (Osaka University)
Targeting interleukin-6: all the way to treat immune-mediated diseases |
| S4-7 (LBT) | 11:15 – 11:30 | Glen N. Barber (University of Miami)
STING manifests self DNA-dependent inflammatory disease |

Symposium 5 (Room A) 8:30–11:00, December 6, (Thu)

S5. Perpetuation and resolution of inflammation

Chairpersons: Kouji Matsushima (The University of Tokyo)
Masayuki Miyasaka (Osaka University)

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| S5-1 | 8:30 – 8:55 | Toshinori Nakayama (Chiba University)
Sox4 acts as a downstream target of TGF β and suppresses GATA3-induced Th2 cell differentiation |
| S5-2 | 8:55 – 9:25 | Steven Kunkel (University of Michigan)
Regulation of the immune response via cytokine-directed epigenetic signatures |
| S5-3 | 9:25 – 9:55 | Jeremy S. Duffield (University of Washington)
The role of pericytes (perivascular cells) in perpetuation and resolution of inflammation |
| S5-4 | 9:55 – 10:20 | Makoto Arita (The University of Tokyo)
Emerging roles of lipid mediators in the resolution of inflammation |
| S5-5 | 10:20 – 10:45 | Issei Komuro (Osaka University and The University of Tokyo)
Complement C1q activates canonical Wnt signaling and promotes aging-related phenotypes |
| S5-6 (LBT) | 10:45 – 11:00 | Chigusa Nakahashi-Oda (University of Tsukuba)
Apoptotic cells suppress mast cell inflammatory responses via the CD300a immunoreceptor |

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

S6. Imaging of immune responses

Chairpersons: Masaru Ishii (Osaka University)
Tadashi Yokosuka (RIKEN)

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| S6-1 | 8:30 – 9:00 | Stehen C. Bunnell (Tufts University) |
| S6-2 | 9:00 – 9:30 | Matthew Krummel (University of California, San Francisco)
Imaging the immune bee hive: Motility and the generation of collective behaviors in the immune response |
| S6-3 | 9:30 – 10:00 | Tatsuo Kinashi (Kansai Medical University)
Mst1 regulates integrin-dependent thymocyte trafficking and antigen recognition in the thymus |
| S6-4 | 10:00 – 10:30 | Hai Qi (Tsinghua University)
Parenchymal B cells and border control: A novel regulatory mechanism of follicular recruitment of helper T cells |
| S6-5 | 10:30 – 11:00 | Kenji Kabashima (Kyoto University)
Live imaging of skin immune responses |

Symposium 7 (Room K) 8:30–11:00, December 6, (Thu)

S7. B cell activation

Chairpersons: Tomohiro Kurosaki (RIKEN and Osaka University)
Hitoshi Nagaoka (Gifu University)

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| S7-1 | 8:30 – 8:55 | Maki Kobayashi (Kyoto University)
Activated cytidine deaminase regulates topoisomerase1 protein by miRNA during immunoglobulin gene recombination |
| S7-2 | 8:55 – 9:20 | Wataru Ise (Osaka University)
Regulation of memory antibody response by antigen-specific memory CD4 T cells |
| S7-3 | 9:20 – 9:50 | Michael McHeyzer-Williams (The Scripps Research Institute)
Regulating affinity maturation in germinal centers |
| S7-4 | 9:50 – 10:15 | Patrick C. Wilson (The University of Chicago)
Human B cell responses to influenza vaccination and infection |
| S7-5 | 10:15 – 10:45 | Michel Nussenzweig (The Rockefeller University)
Human antibodies to HIV: Prevention and therapy |
| S7-6 (LBT) | 10:45 – 11:00 | Ji-Yang Wang (RIKEN)
Critical role of the IgM Fc receptor in IgM homeostasis, B cell survival and humoral immune responses |

Symposium 8 (Room L) 8:30–11:00, December 6, (Thu)

S8. Allergy

Chairpersons: Tomohiro Yoshimoto (Hyogo College of Medicine)
Tomoki Ito (Kansai Medical University)

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| | 8:30 – 8:35 | Tomohiro Yoshimoto (Hyogo College of Medicine)
Introduction |
| S8-1 | 8:35 – 9:00 | Tomohiro Yoshimoto (Hyogo College of Medicine)
A critical role of IL-33 and basophils in allergic rhinitis |
| S8-2 | 9:00 – 9:30 | Richard M. Locksley (University of California, San Francisco)
Lung immune response to chitin mediated by epithelial cytokines and innate helper type 2 (iH2) cells |
| S8-3 | 9:30 – 9:55 | Hiroshi Watarai (RIKEN)
Role of invariant natural killer T cells in the induction of airway hyperreactivity |
| S8-4 | 9:55 – 10:25 | Yui-Hsi Wang (Cincinnati Children's Hospital Medical Center)
Novel IL-9-producing innate helper cells promote oral antigen-induced anaphylaxis |
| S8-5 | 10:25 – 10:50 | Kenji Izuhara (Saga University)
Periostin, a matricellular protein, promotes chronicity of allergic skin inflammation |

Symposium 9 (Room A) 9:00–11:30, December 7, (Fri)

S9. Regulation of immune responses

Chairpersons: Shimon Sakaguchi (Osaka University)
Kenya Honda (The University of Tokyo)

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| S9-1 | 9:00 – 9:30 | Naganari Ohkura (Osaka University)
Epigenetic conversion defines the regulatory T cell lineage |
| S9-2 | 9:30 – 10:00 | Shohei Hori (RIKEN)
Genetic and environmental control of regulatory T cell fitness in tissues |
| S9-3 | 10:00 – 10:30 | Akihiko Yoshimura (Keio University)
Molecular bases for the regulation of DC and T cell responses by TGF- β |
| S9-4 | 10:30 – 11:00 | Kenya Honda (The University of Tokyo)
Potent Treg-inducing Clostridia species in the human microbiota |
| S9-5 | 11:00 – 11:30 | Diane Mathis (Harvard University)
Muscular Tregs |

Symposium 10 (Room B) 9:00–11:30, December 7, (Fri)

S10. Systems immunology

Chairpersons: Osamu Takeuchi (Osaka University and Kyoto University)
Osamu Ohara (Kazusa DNA Res. Inst. and RIKEN)

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| S10-1 | 9:00 – 9:25 | Ido Amit (Weizmann Institute of Science)
Principles of dynamic gene regulation in innate immune cells |
| S10-2 | 9:25 – 9:50 | Satoru Miyano (The University of Tokyo)
Gene network analysis with supercomputer |
| S10-3 | 9:50 – 10:15 | Masahiro Ueda (Osaka University)
Self-organization of intracellular signaling networks for chemotactic response and migration |
| S10-4 | 10:15 – 10:40 | Wendy J. Fantl (Stanford University)
Multidimensional proteomic single cell profiling by mass cytometry |
| S10-5 | 10:40 – 11:05 | Mike White (The University of Manchester)
Dynamics and function of the NF- κ B signalling system |
| S10-6 | 11:05 – 11:20 | Osamu Ohara (RIKEN)
Systems immunology: Tackling the complexity of the immune system |

Symposium 11 (Room K) 9:00–11:30, December 7, (Fri)

S11. Mucosal barrier

Chairpersons: Kiyoshi Takeda (Osaka University)
Hiroshi Kiyono (The University of Tokyo)

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| S11-1 | 9:00 – 9:20 | Koji Hase (The University of Tokyo)
Epithelial Notch signaling secures the gut immune system |
| S11-2 | 9:20 – 9:50 | Marc Veldhoen (Babraham Institute)
Role of the arylhydrocarbon receptor in epithelial immunity |
| S11-3 | 9:50 – 10:20 | Andreas Diefenbach (University of Freiburg)
Transcriptional control of innate immune responses |
| S11-4 | 10:20 – 10:35 | Yosuke Kurashima (The University of Tokyo)
Extracellular ATP mediates mast cell-dependent intestinal inflammation through P2X7 purinoceptors |
| S11-5 | 10:35 – 11:05 | G rard Eberl (Institut Pasteur)
Development and regulation of innate lymphoid cells by symbiotic microbiota |
| S11-6 | 11:05 – 11:20 | Makoto Kinoshita (Osaka University)
Dietary folic acid promotes survival of Foxp3+ regulatory T cells in the colon |

Symposium 12 (Room L) 9:00–11:30, December 7, (Fri)

S12. Translational research in immunology

Chairpersons: Takayuki Sumida (University of Tsukuba)
Hitoshi Kohsaka (Tokyo Medical and Dental University)

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| S12-1 | 9:00 – 9:25 | James McCluskey (The University of Melbourne)
A drug-induced change in self-presentation by HLA-B*57:01 leads to self-reactivity |
| S12-2 | 9:25 – 9:50 | Moriya Tsuji (The Rockefeller University)
Carbohydrate-specific T cells (Tcarbs): a new paradigm in glycoconjugate vaccine development? |
| S12-3 | 9:50 – 10:15 | Masaru Taniguchi (RIKEN)
NKT cells as an ideal target for anti-tumor immunotherapy |
| S12-4 | 10:15 – 10:40 | Norihiro Nishimoto (Wakayama Medical University)
Discovery of IL-6 and its clinical application |
| S12-5 | 10:40 – 11:05 | Kunihiro Yamaoka (University of Occupational and Environmental Health)
Anti-inflammatory effect of a JAK inhibitor |
| S12-6 | 11:05 – 11:30 | Isao Matsumoto (University of Tsukuba)
Basic and translational concepts of autoimmune arthritis revealed by ubiquitous autoantigen |