

Symposia

Symposium 1 (Room A) 9 : 30~12 : 00, December 5, (Mon.)

S1. Tolerance and immune regulation

Chairpersons: Shimon SAKAGUCHI (Osaka University)
Jeff BLUESTONE (University of California San Francisco)

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| S1-1 | 9 : 30~10 : 00 | Akihiko YOSHIMURA (Keio University)
TET enzymes promote DNA demethylation of the Foxp3 gene locus and improve Treg stability |
| S1-2 | 10 : 00~10 : 30 | Shohei HORI (RIKEN IMS)
Functional dissection of the Foxp3-centered molecular network in regulatory T cells |
| S1-3 | 10 : 30~11 : 00 | Alexander RUDENSKY (Memorial Sloan Kettering Cancer Center)
Mechanisms of Differentiation and Function of Regulatory T Cells |
| S1-4 | 11 : 00~11 : 30 | Daniel MUELLER (University of Minnesota Medical School)
Anergy induction in self-reactive CD4 T cells generates Foxp3 ⁺ Treg progenitors |
| S1-5 | 11 : 30~12 : 00 | Jeffrey Bluestone (UCSF)
Tregs Homeostasis and the Immune System |

Symposium 2 (Room H) 9 : 30~12 : 00, December 5, (Mon.)

S2. Neuro-immune interactions

Chairpersons: Kazuhiro SUZUKI (Osaka University)
Masaaki MURAKAMI (Hokkaido University)

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| S2-1 | 9 : 30~10 : 00 | Kazuhiro SUZUKI (Osaka University)
Control of lymphocyte trafficking by adrenergic nerves |
| S2-2 | 10 : 00~10 : 30 | Simon MENDEZ-FERRER (University of Cambridge, National Health Service Blood and Transplant, Centro Nacional de Investigaciones Cardiovasculares (CNIC))
Neural regulation of hematopoietic stem cell niches |
| S2-3 | 10 : 30~11 : 00 | Isaac CHIU (Harvard Medical School)
Pain and Sensory Neuron-Immune Interactions in Host Defense |
| S2-4 | 11 : 00~11 : 30 | Francisco QUINTANA (Harvard Medical School, MIT)
Regulation of CNS inflammation |
| S2-5 | 11 : 30~12 : 00 | Masaaki MURAKAMI (Hokkaido University)
Gateway Reflex, a new paradigm for neuro-immune interactions |

Symposium 3 (Room I) 9 : 30~12 : 00, December 5, (Mon.)

S3. Nucleic acid recognition and innate immunity

Chairpersons: Osamu TAKEUCHI (Kyoto University)
Takashi FUJITA (Kyoto University)

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| S3-1 | 9 : 30~10 : 00 | Umeharu OHTO (The University of Tokyo)
Structures of nucleic acids sensing Toll-like receptors |
| S3-2 | 10 : 00~10 : 30 | Gunther HARTMANN (University Hospital Bonn)
DNase II-derived 5'-monophosphate DNA generated as a result of pyroptosis and acidosis resists Trex1 and potentially activates cGAS |
| S3-3 | 10 : 30~11 : 00 | Takashi FUJITA (Kyoto University)
Auto immune diseases caused by gain of function mutation of RIG-I-Like Receptors |
| S3-4 | 11 : 00~11 : 30 | Daniel STETSON (University of Washington)
Nucleic acid detection in host defense and autoimmunity |
| S3-5 | 11 : 30~12 : 00 | Osamu TAKEUCHI (Kyoto University, CREST, AMED-CREST)
Posttranscriptional control of inflammatory responses RNA binding proteins |

Symposium 4 (Room J) 9 : 30~12 : 00, December 5, (Mon.)

S4. New developments in allergy and hypersensitivity

Chairpersons: Tomohiro YOSHIMOTO (Hyogo College of Medicine)
Stephen J. GALLI (Stanford University School of Medicine)

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| S4-1 | 9 : 30~10 : 00 | Yui His WANG (Cincinnati Children's Hospital Medical Center)
Induction Of Mucosal Mast Cell MMC9 Promotes IgE-mediated Food Allergy |
| S4-2 | 10 : 00~10 : 30 | Toshiaki KAWAKAMI (La Jolla Institute for Allergy and Immunology)
IgE Heterogeneity in Food Allergy |
| S4-3 | 10 : 30~11 : 00 | Cathryn NAGLER (University of Chicago)
Regulation of sensitization to dietary antigens by commensal bacteria |
| S4-4 | 11 : 00~11 : 30 | Kazufumi MATSUSHITA (Hyogo College of Medicine)
A novel non-IgE-mediated nasal hypersensitivity reaction. |
| S4-5 | 11 : 30~12 : 00 | Stephen J. GALLI (Stanford University School of Medicine)
The roles of mast cells and IgE in innate and acquired host defenses against venoms |

Symposium 5 (Room A) 9 : 30~12 : 00, December 6, (Tue.)

S5. Mucosal barrier at skin and intestinal surface

Chairpersons: Kiyoshi TAKEDA (Osaka University)
Koji HASE (Keio University)

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| S5-1 | 9 : 30~ 9 : 55 | Koji HASE (University of Keio)
Microbiota-derived metabolites regulate mucosal immunity and barrier |
| S5-2 | 9 : 55~10 : 20 | Charles SURH (Institute for Basic Science (IBS), Pohang University of Science and Technology (POSTECH), La Jolla Institute for Allergy and Immunology)
Role of Commensal Microbiota in Regulating Immune Homeostasis to Dietary Antigens |
| S5-3 | 10 : 20~10 : 45 | Gregory F. SONNENBERG (Weill Cornell Medical College)
Immune regulation of intestinal health |
| S5-4 | 10 : 45~11 : 10 | Kenya HONDA (Keio University, RIKEN IMS, AMED-CREST)
T-cell-stimulatory bacteria colonizing in the human oral cavity |
| S5-5 | 11 : 10~11 : 35 | Keisuke NAGAO (National Institutes of Health)
<i>Staphylococcus aureus</i> and skin immunity |
| S5-6 | 11 : 35~12 : 00 | Yasmine BELKAID (National Institute of Health, NIAID)
Long-term consequences of infection for tissue immunity and metabolism |

Symposium 6 (Room H) 9 : 30~12 : 00, December 6, (Tue.)

S6. Immunological memory

Chairpersons: Tomohiro KUROSAKI (Osaka University)
Toshinori NAKAYAMA (Chiba University)

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| S6-1 | 9 : 30~10 : 00 | Steven F. ZIEGLER (Benaroya Research Institute)
CD11c+ Interstitial Lung Macrophages Directly Regulate TSLP-Mediated Acute Airway Inflammation Independent of Dendritic Cells |
| S6-2 | 10 : 00~10 : 30 | Toshinori NAKAYAMA (Chiba University, AMED-CREST, AMED)
Pathogenic Th population disease induction model: Memory type pathogenic Th2 (Tpath2) cells in airway inflammation |
| S6-3 | 10 : 30~11 : 00 | Federica SALLUSTO (Universita della Svizzera Italiana)
Autoreactive T cells in narcoleptic patients |
| S6-4 | 11 : 00~11 : 30 | Garnett KELSOE (Duke University)
The Nature of Dark Antigen: Selection for the Unknown in Germinal Centers |
| S6-5 | 11 : 30~12 : 00 | Ryo SHINNAKASU (Osaka University, RIKEN IMS)
Selection mechanisms of germinal center B cells into the memory B cell compartment |

Symposium 7 (Room I) 9 : 30~12 : 00, December 6, (Tue.)

S7. Autoimmunity

Chairpersons: Atsushi KUMANOGOH (Osaka University)
Hisashi ARASE (Osaka University)

- S7-1** **9 : 30~10 : 00** Koji YASUTOMO (Tokushima University)
Notch in T cells and autoimmunity
- S7-2** **10 : 00~10 : 30** Kenneth SMITH (University of Cambridge School of Clinical Medicine)
- S7-3** **10 : 30~11 : 00** Diane MATHIS (Harvard Medical School)
A T1D-protective MHC allele operates by shaping the intestinal microbiota
- S7-4** **11 : 00~11 : 30** Yukinori OKADA (Osaka University)
Statistical genetics, disease biology, and drug discovery
- S7-5** **11 : 30~12 : 00** Hisashi ARASE (Osaka University)
Neo-self as a new target for autoimmune diseases

Symposium 8 (Room J) 9 : 30~12 : 00, December 6, (Tue.)

S8. Immuno-Metabolism and lifestyle-related diseases

Chairpersons: Jun KUNISAWA (National Institutes of Biomedical Innovation, Health and Nutrition)
Masaru ISHII (Osaka University)

- S8-1** **9 : 30~ 9 : 55** Jun KUNISAWA (National Institutes of Biomedical Innovation, Health and Nutrition)
Critical roles of gut environmental factors in the regulation of immunosurveillance and allergic diseases
- S8-2** **9 : 55~10 : 30** Douglas R. GREEN (St. Jude Children's Research Institute)
Noncanonical Autophagy and Phagocytosis: Two ancient pathways converge on inflammation, innate immunity, and aging
- S8-3** **10 : 30~11 : 00** Yoshihiro OGAWA (Tokyo Medical and Dental University)
Immunometabolic cell interaction in lifestyle-related diseases
- S8-4** **11 : 00~11 : 35** Ronald N. GERMAIN (NIAID, NIH)
Imaging Immunity: Developing a Spatiotemporal Understanding of Host Defense and Disease
- S8-5** **11 : 35~12 : 00** Masaru ISHII (Osaka University)
Dynamic behaviors of adipose tissue-resident macrophages: as a new therapeutic target against metabolic disorders

Symposium 9 (Room A) 9 : 30~12 : 00, December 7, (Wed.)

S9. Tumor immunity and novel cancer immunotherapies

Chairpersons: Hiroyoshi NISHIKAWA (National Cancer Center)
Sacha GNJATIC (Mount Sinai)

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| S9-1 | 9 : 30~ 9 : 50 | Heiichiro UDONO (Okayama University)
Metformin-induced, metabolic reprogramming of CD8+ TIL requires reactive oxygen species (ROS) |
| S9-2 | 9 : 50~10 : 25 | Weiping ZOU (University of Michigan School of Medicine)
Effector T cells in cancer immunotherapy and chemotherapy |
| S9-3 | 10 : 25~10 : 45 | Hiroyoshi NISHIKAWA (National Cancer Center, Nagoya University)
Control of regulatory T cells for effective cancer immunotherapy |
| S9-4 | 10 : 45~11 : 20 | Sergio QUEZADA (University College London Cancer Institute)
Deciphering Immune Regulation and Recognition at the Tumour Site |
| S9-5 | 11 : 20~11 : 55 | Sacha GNJATIC (Icahn School of Medicine at Mount Sinai)
High-dimensional approaches for immune biomarker discovery in tumors |

Symposium 10 (Room H) 9 : 30~12 : 00, December 7, (Wed.)

S10. Dynamic control of inflammatory signaling by organelles inDC/macrophages

Chairpersons: Tsuneyasu KAISHO (Wakayama Medical University)
Kensuke MIYAKE (The University of Tokyo)

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| S10-1 | 9 : 30~ 9 : 52 | Shin-Ichiroh SAITOH (The University of Tokyo)
Metabolic permission for IFN α induction is connected by Toll-like Receptor 7 trafficking |
| S10-2 | 9 : 52~10 : 14 | Rikinari HANAYAMA (Kanazawa University)
Mechanisms of hemophagocytosis and heterolysis by phagocytes |
| S10-3 | 10 : 14~10 : 44 | Feng SHAO (National Institute of Biological Sciences)
Pyroptosis in anti-bacterial immunity: sensing and execution |
| S10-4 | 10 : 44~11 : 06 | Tatsuya SAITOH (Tokushima University)
The roles of organelle communication in innate immune responses |
| S10-5 | 11 : 06~11 : 36 | Phillip WEST (Texas A&M University Health Science Center)
Mitochondrial DNA Stress in Innate Immunity and Disease |
| S10-6 | 11 : 36~11 : 58 | Takashi TANAKA (RIKEN IMS)
The roles of LIM protein family in the negative regulation of inflammatory responses |

Symposium 11 (Room I) 9 : 30~12 : 00, December 7, (Wed.)

S11. Vaccine and infectious diseases

Chairpersons: Masahiro YAMAMOTO (Osaka University)

Ken ISHII (National Institutes of Biomedical Innovation, Health and Nutrition)

- S11-1 9 : 30~10 : 00 Masahiro YAMAMOTO (Osaka University)
Interferon-induced activation of cell-autonomous immunity against vacuolar pathogens
- S11-2 10 : 00~10 : 30 Katsuyuki YUI (Nagasaki University)
Regulation of the protective immune responses by IL-27 producing CD4⁺ T cells (Tr27 cells) during malaria infection
- S11-3 10 : 30~11 : 00 Yoshihiro KAWAOKA (The University of Wisconsin-Madison, The University of Tokyo)
- S11-4 11 : 00~11 : 30 Jeffrey RAVETCH (The Rockefeller University)
Diversification of IgG Effector Functions
- S11-5 11 : 30~12 : 00 Ken ISHII (National Institute of Biomedical Innovation, Health and Nutrition (NIBIOHN), Osaka University)
Critical role of cell death and DAMPs in infection/vaccination

Symposium 12 (Room J) 9 : 30~12 : 00, December 7, (Wed.)

S12. Lympho-hematopoiesis

Chairpersons: Takashi NAGASAWA (Osaka University)

Naganari OHKURA (Osaka University)

- S12-1 9 : 30~10 : 00 Takahiro MAEDA (Harvard Medical School)
Regulation of lympho-hematopoiesis by the transcription factor LRF/ZBTB7A
- S12-2 10 : 00~10 : 30 Satoshi YAMAZAKI (The University of Tokyo)
Valine starvation permits hematopoietic stem cell transplantation without chemoirradiative myeloablation
- S12-3 10 : 30~11 : 00 Carl WALKLEY (St. Vincent's Institute of Medical Research, University of Melbourne)
Adenosine-to-Inosine RNA editing by ADAR1 is essential to prevent sensing of dsRNA by MDA5 and activation of the innate immune response
- S12-4 11 : 00~11 : 30 Naganari OHKURA (Osaka University)
Epigenetic control for the development of regulatory T cells
- S12-5 11 : 30~12 : 00 Hiroshi TAKAYANAGI (The University of Tokyo)
Identification of the transcription factor required for negative selection in the thymus