

**The Third Bizan Immunology Symposium at The University of Tokushima (BISUT3)
“Immune System Development, Deviation, and Regulation”**

Thursday 13 February and Friday 14 February 2014

Fujii Memorial Hall, Kuramoto Campus, University of Tokushima

Guest speakers:

Shizuo Akira (Osaka University)

Shohei Hori (Riken Center for Integrative Medical Science, Yokohama)

Hajime Karasuyama (Tokyo Medical and Dental University)

Shigeo Koyasu (Riken Center for Integrative Medical Science, Yokohama)

Vijay Kuchroo (Harvard Medical School, Boston)

Alfred Singer (National Institutes of Health, Bethesda)

Dinah Singer (National Institutes of Health, Bethesda)

Masakatsu Yamashita (Ehime University)

Akihiko Yoshimura (Keio University, Tokyo)

Host organizers:

Naozumi Ishimaru (Graduate School of Oral Sciences)

Taku Okazaki (Institute for Genome Research)

Mitsuru Matsumoto (Institute for Enzyme Research)

Yoshiyuki Minegishi (Institute for Genome Research)

Tohru Sakai (Graduate School of Nutrition and Bioscience)

Yousuke Takahama (Institute for Genome Research)

Tetsuo Yamazaki (Graduate School of Pharmaceutical Sciences)

Koji Yasutomo (Graduate School of Medical Sciences)

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Joint Usage/Research Center, Institute for Enzyme Research, University of Tokushima

Thursday 13 February

13:00 – 13:10 *Opening remarks by Yousuke Takahama*

Session 1: Immune system development

Chaired by Y Takahama & M Matsumoto

- 13:10 – 13:45 Alfred Singer (Bethesda)
Basis for CD4 T cell fate determination in the thymus
- 13:45 – 14:05 Kensuke Takada (Tokushima)
What is the positive selection for?
- 14:05 – 14:25 Mitsuru Matsumoto (Tokushima)
Aire-dependent organization of thymic microenvironment for the establishment of self-tolerance
- 14:25 – 15:00 Shigeo Koyasu (Yokohama)
Allergic inflammation and natural helper cell, a member of ILC2s

Group photo & coffee

Session 2: Immune mechanisms

Chaired by K Yasutomo & T Yamazaki

- 15:30 – 16:05 Shizuo Akira (Osaka)
The role of Regnase-1 in the control of immune response
- 16:05 – 16:40 Shohei Hori (Yokohama)
Genetic control of regulatory T cell homeostasis in non-lymphoid tissues
- 16:40 – 17:05 Masakatsu Yamashita (Ehime)
The role of Menin in CD4 T cell senescence and homeostasis
- 17:05 – 17:40 Dinah Singer (Bethesda)
The two faces of BRD4

Session 3: Short talks I

Chaired by I Okazaki & C Ishifune

- 17:40 – 17:50 Izumi Ohigashi (Tokushima)
Development and developmental potential of $\beta 5t$ -expressing thymic epithelial cells
- 17:50 – 18:00 Motoko Kimura (Chiba)
Strong TCR signaling prolongs lineage uncertainty but then accelerates lineage commitment during MHC-I specific positive selection in the thymus

- 18:00 – 18:10 Hitoshi Nishijima (Tokushima)
Ectopic Aire expression in thymic cortex reveals inherent properties of Aire as a stromal factor within medullary microenvironment
- 18:10 – 18:20 Chieko Ishifune (Tokushima)
Requirement of Notch signaling for the development of intestinal intraepithelial T cells
- 18:20 – 18:30 Kyoko Masuda (Kyoto)
Regeneration of antigen specific T cells using the iPS cell technology: A novel strategy of cancer immunotherapy

Dinner at Isuien, hosted by Susumu Kagawa, President, University of Tokushima

MC by N Ishimaru & R Arakaki

Friday 14 February 2014

Session 4: Immune system deviation

Chaired by Y Minegishi & N Ishimaru

- 9:30 – 10:05 Hajime Karasuyama (Tokyo)
Emerging roles for basophils in health and disease
- 10:05 – 10:25 Yoshiyuki Minegishi (Tokushima)
Molecular pathogenesis of hyper IgE syndrome
- 10:25 – 10:45 Naozumi Ishimaru (Tokushima)
Controlling autoimmunity by adipose tissue-associated macrophages

Coffee

Session 5: Short talks II

Chaired by Y Kudo & Y Nishikawa

- 11:00 – 11:10 Yohko Kitagawa (Osaka)
*Divergent roles of the genome organizer *Satb1* in the development of thymic and peripheral regulatory T cells*
- 11:10 – 11:20 Takaaki Tsunematsu (Tokushima)
The novel function of geminin via the escape from ubiquitin proteasome-mediated proteolysis in DNA replication and cell differentiation
- 11:20 – 11:30 Takeshi Wada (Tokushima)

Enhanced mast cell activation in mouse model of hyper-IgE syndrome

- 11:30 – 11:40 Daisuke Sugiura (Tokushima)
Molecular analyses of an inhibitory co-receptor, LAG-3
- 11:40 – 11:50 Saradee Warit (Pathumthani)
Candidate protein markers to determine infected Tuberculosis stages in humans
- 11:50 – 12:00 Beata Shiratori (Sendai)
Attempt to distinguish between LTBI and active TB by latency-related antigens and biomarkers

Lunch with students, managed by K Takada & I Ohigashi

Session 6: Immune system regulation

Chaired by T Okazaki & T Sakai

- 14:00 – 14:35 Vijay Kuchroo (Boston)
Transcriptional network controlling the development of Tregs and Th17 cells
- 14:35 – 15:10 Akihiko Yoshimura (Tokyo)
Regulation of Treg development by TGF-beta and NR4a
- 15:10 – 15:30 Taku Okazaki (Tokushima)
Regulation of autoimmunity by immuno-inhibitory receptors

Closing remarks by Sumihare Noji, Director of Research, University of Tokushima