

Program

Global COE International Symposium / Retreat 2009

In Awaji Yumebutai

Plenary Session

Friday, November 6th, 2009

11:30 Lunch /
Computer check-in for Allergy and Immunology Area speakers at Event Hall.

13:00-13:10 Opening remarks: **Shuh Narumiya, Program Leader**

Allergy and Immunology Area Session

Chair: Nagahiro Minato

13:10-13:45 PI-1 "The lymphoid stress-surveillance response"
Adrian Hayday (Professor, Cancer Research UK, and Dept of Immunobiology, King's College School of Medicine at Guy's Hospital, London, UK)

13:45-13:50 "Introduction of Allergy and Immunology Area"
Nagahiro Minato (Professor, Graduate School of Medicine Kyoto University)

13:50-14:15 PI-2 "Role of prostanoids in immunity, inflammation and other diseases"
Shuh Narumiya (Professor, Graduate School of Medicine Kyoto University)

14:15-14:40 PI-3 "Endogenous Inflammation Caused by Defective Departure of Dead Cells"
Shigekazu Nagata (Professor, Graduate School of Medicine Kyoto University)

14:40-15:05 **Coffee Break (25min.)**
Computer check-in for **Cancer Area speakers** at Event Hall stage.

Cancer Area Session

Chair: Makoto Noda

15:05-15:40 PC-1 "RUNX genes: Roles in development and oncogenesis"
Yoshiaki Ito (Professor, Cancer Science Institute Singapore, National University of Singapore)

15:40-15:45 "Introduction of Cancer Area"
Makoto Noda (Professor, Graduate School of Medicine Kyoto University)

15:45-16:10 PC-2 "Studies on the functions and regulation of the *RECK* tumor suppressor gene"
Makoto Noda (Professor, Graduate School of Medicine Kyoto University)

16:10-16:35 PC-3 "Two modes of glioblastoma invasion as visualized by two-photon excitation microscopy"
Michiyuki Matsuda (Professor, Graduate School of Medicine Kyoto University)

16:35-16:50 Break (15min.)
Computer check-in for Aging and Lifestyle-Related Disease Area speakers at Event Hall.

Aging and Lifestyle-Related Disease Area Session

Chair: Nobuya Inagaki

16:55 - 17:30 PA-1 “Insulin resistance, pancreatic β cell failure and diabetes”
Masato Kasuga (Director, Research Institute, International Medical Center of Japan)

17:30 - 17:35 “Introduction of Aging and Lifestyle-Related Disease Area”
Nobuya Inagaki (Professor, Graduate School of Medicine Kyoto University)

17:35-18:00 PA-2 “Relevant usage of Klotho in FGF19 subfamily signaling system in vivo: An implication for β -Klotho-independent FGF21-signaling in adipose”
Yo-ichi Nabeshima(Professor, Graduate School of Medicine Kyoto University)

18:00 -18:25 PA-3 “Translational Research of novel hormones: breakthroughs from excellent animal models and rare human diseases for common human diseases”
Kazuwa Nakao (Professor, Graduate School of Medicine Kyoto University)

18:25-19:20 Break (Hotel Check-in)

19:20-21:00 Banquet at Stella Ballroom, Westin Awaji Hotel (1F)

21:00-22:00 Free Discussion

Saturday, November 7th, 2009

7:00- 9:00 Breakfast Buffet at COCCOLARE, Westin Awaji Hotel
8:30-9:00 **Computer check-in for Neuroscience Area speakers at Event Hall.**

Neuroscience Area Session

Chair: Ryosuke Takahashi

9:00- 9:35 PN-1 “Brain mechanisms of sound localization in barn owls”
Masakazu Konishi (Professor, Division of Biology, California Institute of Technology, USA)

9:35- 9:40 “Introduction of Neuroscience Area”
Ryosuke Takahashi (Professor, Graduate School of Medicine Kyoto University)

9:40-10:05 PN-2 “Small Fish Model of Parkinson’s Disease”
Ryosuke Takahashi (Professor, Graduate School of Medicine Kyoto University)

10:05-10:30 PN-3 “Extraction and Processing of Sound Time Information in the Auditory Nuclei”
Harunori Ohmori (Professor, Graduate School of Medicine Kyoto University)

10:30-10:40 Break (10min.)
Computer check-in for Regenerative Medicine Area speakers at Event Hall.

Regenerative Medicine Area Session

Chair: Junya Toguchida

- 10:40-11:15** PR-1 “Capturing Pluripotency”
Austin Smith (Professor, Wellcome Trust Centre for Stem Cell Research, Department of Biochemistry University of Cambridge)
- 11:15- 11:20** “Introduction of Regenerative Medicine Area”
Junya Toguchida (Professor, Graduate School of Medicine Kyoto University)
- 11:20-11:45** PR-2 “A Novel Role of ADAM Proteases in Development”
Atsuko Sehara (Professor, Graduate School of Medicine Kyoto University)
- 11:45-12:10** PR-3 “Genetic Reconstruction of mouse spermatogonial stem cell self-renewal”
Takashi Shinohara (Professor, Graduate School of Medicine Kyoto University)
- 12:10-12:15** **End of the International Symposium / Information Announce**
Photo shooting at Lobby
- 12:15-13:00** **Lunch Break**
- 13:00-14:00** **Poster Session 1 at Event hall lobby (B1F)**
- 14:25-17:25** **Area Meetings (See each areas’ program)**
Allergy and Immunology Area Session: Room 405 (4F)
Cancer Area Session: Room 301 (3F)
Aging and Lifestyle Disease Area Session: Room 403 (4F)
Neuroscience Area Session: Room 311B (3F)
Regenerative Medicine Area Session: Room 311A (3F)
- 17:25-19:00** **Buffet Dinner at Reception Hall B (2F)**
- 19:00-21:00** **Poster Session 2 at Event hall lobby (B1F)**
Beverages

Sunday, November 8th, 2009

- 7:00- 9:00** Breakfast Buffet at COCCOLARE, Westin Awaji Hotel
- 8:00-10:00** **Check-out**
- 10:00** **Departure for Kyoto University by Shuttle Bus**

*Evaluation meeting will be held in the afternoon by the advisory committee members.

* This program is subject to change.

AREA MEETING
Allergy and Immunology

Saturday, November 7th, 2009
Room 405

Allergy and Immunology Area Meeting

Chair: Shigekazu Nagata

- 14:25-14:45** I-1 "Involvement of Topoisomerase I in class switch recombination"
Maki Kobayashi (Post-Doctoral Fellow, Department of Immunology and Genomic Medicine, Graduate School of Medicine Kyoto University)
- 14:45-15:05** I-2 "I Claudin expression in the thymus: Implications in T cell development"
Yoko Hamazaki (Assistant Professor, Department of Immunology and Cell Biology, Graduate School of Medicine Kyoto University)

Chair: Tsuneyo Mimori

- 15:05-15:25** I-3 "Construction of regulatory T cells without Foxp3"
Tomoyuki Yamaguchi (Assistant Professor, Department of Experimental Pathology, Institute for Frontier Medical Sciences, Kyoto University)
- 15:25-15:45** I-4 "Reconstitution of DNA-reactive B cells following B cell depletion"
Daisuke Kawabata (Assistant Professor, Department of Rheumatology and Clinical Immunology, Graduate School of Medicine Kyoto University)

15:45-16:05 **Coffee Break**

Chair: Tsutomu Chiba

- 16:05- 16:25** I-5 "NOD1 Mediates Mucosal Host Defense Utilizing a Novel Mechanism Involving the IFN-stimulated Gene Factor 3 Signaling Pathway"
Tomohiro Watanabe (Assistant Professor, Department of Gastroenterology and Hepatology, Graduate School of Medicine Kyoto University)
- 16:25-16:45** I-6 "Prostaglandin E2-EP4 signaling promotes immune inflammation through Th1 cell differentiation and Th17 cell expansion"
Daiji Sakata (Global COE Post-Doctoral Fellow, Department of Pharmacology, Graduate School of Medicine Kyoto University)

Chair: Shimon Sakaguchi

- 16:45-17:05** I-7 "Involvement of CCL20/CCR6 axis in the pathogenesis of human and murine autoimmune arthritis."
Hiroyuki Yoshitomi (Assistant Professor, Department of Orthopaedic Surgery, Graduate School of Medicine Kyoto University)
- 17:05-17:25** I-8 "Fatal autoimmune hepatitis induced by concurrent loss of naturally arising regulatory T cells and PD-1-mediated signaling"
Masahiro Kido (Post-Doctoral Fellow, Department of Gastroenterology and Hepatology, Graduate School of Medicine Kyoto University)

17:25 **End of the session**

AREA MEETING

Cancer

Saturday, November 7th, 2009
Room 301

Cancer Area Meeting

Chair: Michiyuki Matsuda

14:25-14:45 C-1 “Reck tumor suppressor protein is up-regulated after transient cerebral ischemia and contributes to the protection and recovery of brain functions in mice”
Yukio Imamura (Assistant Professor, Department of Molecular Oncology, Graduate School of Medicine Kyoto University)

14:45-15:05 C-2 “Purine-rich element binding protein alpha induces cell stress and differentiation pathways in prostate cancer cells”
Takahiro Inoue (Assistant Professor, Department of Urology, Graduate School of Medicine Kyoto University)

15:05-15:25 C-3 “Involvement of CREB in the regulation of ‘emergency’ granulopoiesis through upregulation of C/EBP β ”
Hideyo Hirai (Assistant Professor, Department of Transfusion Medicine and Cell Therapy, Graduate School of Medicine Kyoto University)

15:25-15:45 C-4 “Investigation of a novel molecular target therapy against ovarian clear cell carcinoma based on the analysis of expression microarray using bioinformatics.”
Noriomi Matsumura (Assistant Professor, Department of Gynecology and Obstetrics, Graduate School of Medicine Kyoto University)

15:45-16:05 **Coffee Break**

Chair: Shunichi Takeda

16:05- 16:25 C-5 “DNA polymerase δ carries out translesion synthesis DNA repair thorough p66 PCNA binding”
Kouji Hirota (Assistant Professor, Department of Radiation Genetics, Graduate School of Medicine Kyoto University)

16:25-16:45 C-6 “Optical imaging of Intratumoral HIF-1 activity to elucidate the mechanism behind HIF-1-mediated tumor radioresistance”
Hiroshi Harada (Science and Technology Advancement Senior Lecturer, Department of Radiation Oncology and Image-applied Therapy, Graduate School of Medicine Kyoto University)

16:45-17:05 C-7 “FANCI phosphorylation functions as a molecular switch to turn on the Fanconi anemia pathway”
Masamichi Ishiai (Associate Professor, Radiation Biology Center, Graduate School of Medicine Kyoto University)

17:05-17:25 C-8 “Reduced Level of Smoothed Suppresses Intestinal Tumorigenesis by Down-Regulation of Wnt Signaling”
Masahiro Aoki (Associate Professor, Department of Pharmacology, Graduate School of Medicine Kyoto University)

17:25 **End of the session**

AREA MEETING
Aging and Lifestyle-Related Disease

Saturday, November 7th, 2009

Room 403

Aging and Lifestyle-Related Disease

Chair: Nobuya Inagaki

14:25-14:45 A-1 “In vitro adipogenesis and in vivo adipocyte formation of human induced pluripotent stem cells”

Michio Noguchi (Global COE Post-Doctoral Fellow, Department of Medicine and Clinical Science, Graduate School of Medicine Kyoto University)

14:45-15:05 A-2 “The characteristic and potential of human ES and iPS -derived vascular cells”

Masakatsu Sone (Assistant Professor, Department of Medicine and Clinical Science, Graduate School of Medicine Kyoto University)

15:05-15:25 A-3 “The Role of Fibulins in elastogenesis”

Masahito Horiguchi (Assistant Professor, Department of Cardiovascular Medicine, Graduate School of Medicine Kyoto University)

15:25-15:45 A-4 “Beyond the Warburg effect; Protective role of enhanced glycolysis via bypassing senescence”

Hiroshi Kondoh (Assistant Professor, Department of Geriatric Medicine, Graduate School of Medicine Kyoto University)

15:45-16:05 **Coffee Break**

Chair: Yo-ichi Nabeshima

16:05- 16:25 A-5 “A novel SCN5A gain-of-function mutation M1875T associated with familial atrial fibrillation”

Takeru Makiyama SRP (Sponsored Research Program) Assistant Professor, Department of Clinical Innovative Medicine, Translational Research Center, Kyoto University Hospital / Department of Cardiovascular Medicine, Graduate School of Medicine Graduate School of Medicine Kyoto University)

16:25-16:45 A-6 “The role of incretins in bone metabolism”

Chizumi Yamada SRP (Sponsored Research Program) Assistant Professor, Department of Diabetes and Clinical Nutrition, Graduate School of Medicine Kyoto University)

16:45-17:05 A-7 “SIRT5 regulates urea cycle by deacetylation and activation of carbamoyl phosphate synthetase 1.”

Masahito Ogura (Clinical Fellow, Department of Diabetes and clinical nutrition, Kyoto University Graduate School of Medicine)

17:05-17:25 A-8 “Critical roles of nardilysin in energy balance and thermoregulation”

Yoshinori Hiraoka (Assistant Professor, Department of Cardiovascular Medicine, Graduate School of Medicine Kyoto University)

17:25 **End of the session**

AREA MEETING

Neuroscience

Saturday, November 7th, 2009
Room 311B

Neuroscience Area Meeting

Chair: Kenji Kawano

- 14:25-14:45** N-1 “Roles of the phase-locked inhibition for encoding interaural time difference cue in the nucleus laminaris of birds”
Rei Yamada (Assistant Professor, Department of Physiology and Neurobiology, Graduate School of Medicine Kyoto University)
- 14:45-15:05** N-2 “Visual motion detection in cortical area MST of alert monkey”
Kenichiro Miura (Assistant Professor, Department of Integrative Brain Science, Graduate School of Medicine Kyoto University)
- 15:05-15:25** N-3 “Contribution of color signals to ocular following responses”
Kiyoto Matsuura (Resident, Ijinkai Takeda Hospital)
- 15:25-15:45** N-4 “Structure and function of neural networks in rat whisker system: gating of vibrissal inputs in the brainstem”
Takahiro Furuta (Assistant Professor, Department of Morphological Brain Science, Graduate School of Medicine Kyoto University)

15:45-16:05 **Coffee Break**

Chair: Hidenao Fukuyama

- 16:05- 16:25** N-5 “Axonal arborization of midbrain dopamine neurons: a single-cell morphological study with viral vectors”
Wakoto Matsuda (Assistant Professor, Department of Anatomy, Shiga University of Medical Science)
- 16:25-16:45** N-6 “Diffusion-weighted functional MRI”
Toshihiko Aso (Post-doctoral Fellow, Human Brain Research Center, Kyoto University Graduate School of Medicine)
- 16:45-17:05** N-7 “In vivo tracking of human brain network by means of cortico-cortical evoked potentials”
Riki Matsumoto (Assistant Professor, Department of Neurology, Graduate School of Medicine Kyoto University)
- 17:05-17:25** N-8 “Adrenomedullin restores working memory deficits via angiogenesis and arteriogenesis after chronic cerebral hypoperfusion in mice”
Masafumi Ihara (Assistant Professor, Department of Neurology, Graduate School of Medicine Kyoto University)

17:25 **End of the session**

AREA MEETING
Regenerative Medicine

Room 311A

Regenerative Medicine Area Meeting

Chair: Shinya Yamanaka

14:25-14:45 R-1 “Functional Identification of the Actual and Potential Stem Cell Compartments in Mouse Spermatogenesis”

Toshinori Nakagawa (GCOE Post-doctoral Fellow, Department of Immunobiology and Hematology, Institute for Frontier Medical Sciences, Kyoto University)

14:45-15:05 R-2 “Intravascular Proteolysis Triggers Synchronous Start of Blood Circulation in Zebrafish”

Atsuo Iida (GCOE Post-doctoral Fellow, Institute for Frontier Medical Sciences, Kyoto University)

15:05-15:25 R-3 “Notch Signaling Maintains Prosensory Regions in the Inner Ear”

Norio Yamamoto (Assistant Professor, Department of Otolaryngology, Head and Neck Surgery, Graduate School of Medicine Kyoto University)

15:25-15:45 R-4 “Osteoblastic differentiation of mesenchymal stem cells in alginate scaffolds with a three-dimensional spatial gradient of biomolecules”

Masaya Yamamoto (Assistant Professor, Department of Biomaterials, Field of Tissue Engineering, Institute for Frontier Medical Science, Kyoto University)

15:45-16:05 **Coffee Break**

Chair: Junya Toguchida

16:05- 16:25 R-5 “Safeness and Quality of Induced Pluripotent Stem cells Revealed by Comprehensive Analysis of Chimeras and Progeny Mice”

Takashi Aoi (Assistant Professor, Center for iPS research and application, Institute for Integrated Cell-Material Science, Kyoto University)

16:25-16:45 R-6 “Hypoxia significantly enhances the generation of pluripotent stem cells”

Yoshinori Yoshida (Assistant Professor, Center for iPS research and application, Institute for Integrated Cell-Material Sciences, Kyoto University)

16:45-17:05 R-7 “The effects of cardioactive drugs on cardiomyocytes derived from human induced pluripotent stem cells”

Noritaka Yokoo (Graduate Student, Department of Pediatrics, Graduate School of Medicine Kyoto University)

17:05-17:25 R-8 “Embryonic stem cell-derived cardiomyocyte, differentiation and proliferation”

Hideki Uosaki (Graduate Student, Laboratory of Stem Cell Differentiation, Institute for Frontier Medical Sciences, Kyoto University/ Graduate School of Medicine Kyoto University)

17:25 **End of the session**