



FIRST Program

AKIRA Project

Funding Program for World-Leading Innovative R&D on Science and Technology
Comprehensive understanding of immune dynamism:
toward manipulation of immune responses (Core Researcher: Prof. Shizuo AKIRA, Osaka University)

International Symposium

TCUID 2012

Towards Comprehensive Understanding of Immune Dynamism

Date: October 29-31, 2012

Venue: Icho Kaikan &

Taniguchi Memorial Hall

Osaka University, Suita, Osaka, Japan

<http://akira-pj.lserp.osaka-u.ac.jp/TCUID2012/>

Registration fee: Free

Registration deadline: October 1, 2012

Poster submission deadline: September 14, 2012

TCUID2012 **GO!**

Call for Papers for Poster Presentations

TCUID 2012 calls for papers for poster presentations at the Poster Session on October 30, 2012. Applicants are requested to submit an abstract online at the symposium website (http://akira-pj.lserp.osaka-u.ac.jp/TCUID2012/main_contents/poster_submission.html) by September 14, 2012.

The abstracts will be reviewed by the TCUID 2012 Program Committee, and 30 posters will be selected. A notification of the result will be sent to the presenting author by e-mail by October 1, 2012. How to prepare for poster presentations will be announced on the website.

Young scientists are eligible for being a presenting author, and only presenting authors are allowed to sign up for abstract submissions.

TCUID 2012

TCUID 2012 will be held as part of research activities of the research project titled “**Comprehensive understanding of immune dynamism: toward manipulation of immune responses**” (Core Researcher: Prof. Shizuo AKIRA, Osaka University) selected for the Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST Program) established by the Council for Science and Technology Policy (chaired by the Prime Minister of Japan) of the Cabinet Office, Government of Japan.

Scope

Studying the immune dynamics is important for understanding and controlling immune functions. This requires combining conventional immunology and new techniques. This symposium aims to deepen our comprehensive understanding of the dynamic mechanisms regulating innate and acquired immunity through presentations and discussions of research findings achieved by using a variety of techniques including imaging and systems biology. There will be a particular focus on real-time spatiotemporal observations of immune cellular and molecular dynamics and reactions by world-leading researchers with expectation of significantly advancing immunology.

Program

Monday, October 29, 2012 at Taniguchi Memorial Hall

14:30-15:00 Registration

15:00-18:00 Young Researchers' Workshop

Tuesday, October 30, 2012 at Ichō Kaikan

8:45- 9:30 Registration

9:30- 9:40 Opening Remarks

9:40- 9:50 Guest Speech

9:50-10:50 **Session 1: Immunology 1**

Shizuo AKIRA (Osaka University, Japan)

Posttranscriptional regulation of immune response

Tatsuya SAITOH (Osaka University, Japan)

Cell biological analysis of innate immune response

10:50-11:10 Coffee Break

11:10-12:10 **Session 2: Immunology 2**

Dirk H. BUSCH

(Technische Universität München, Germany)

Composition of complex T cell responses from individual precursor cells and its implications for adoptive immunotherapy

Paul KUBES (University of Calgary, Canada)

Imaging Intravascular Immunity

12:10-13:40 Lunch Break

13:40-14:40 **Session 3: Biological Imaging 1**

Masaru ISHII (Osaka University, Japan)

Dynamic behaviors of osteoclast function visualized by intravital imaging

Marc BAJÉNOFF

(Centre d'Immunologie de Marseille-Luminy, France)

Imaging myeloid cells homeostasis

14:40-15:00 Coffee Break

15:00-16:00 **Session 4: Biological Imaging 2**

Nicholas I. SMITH (Osaka University, Japan)

Raman imaging and analysis of T and B cells

Yoshichika YOSHIOKA (Osaka University, Japan)

In vivo visualization of immune cells in the central nervous system

16:00-17:30 **Panel Discussion: Towards comprehensive understanding of immune dynamism**

Panelists:

Shizuo AKIRA, Dirk BUSCH, Nicolas CHEVRIER, Masaru ISHII, Paul KUBES, Nicholas I. SMITH

Coordinators:

Osamu TAKEUCHI, Daron M. STANDLEY

17:30-18:50 **Poster Session**

19:00-21:00 **Reception**

Wednesday, October 31, 2012 at Ichō Kaikan

9:00-10:00 **Session 5: Biological Imaging 3**

Matthew BOGYO

(Stanford University School of Medicine, USA)

Applications of small molecule probes for imaging protease activation during inflammation

Kazuya KIKUCHI (Osaka University, Japan)

Development of in vivo Imaging Probes with Tunable Chemical Switches

10:00-10:20 Coffee Break

10:20-11:50 **Session 6: Structural Biology & Immunology**

Jie-Oh LEE

(Korea Advanced Institute of Science and Technology, Korea)

Structural biology of Toll-like Receptor family

Fuyuhiko INAGAKI (Hokkaido University, Japan)

Structural biology of innate immunity

Daron M. STANDLEY (Osaka University, Japan)

In silico modeling of immune responses

11:50-13:20 Lunch Break

13:20-14:50 **Session 7: Systems Biology**

Kenta NAKAI (The University of Tokyo, Japan)

Deducing the nature of immune responses from the time-course changes of transcriptional start sites

Yutaka SUZUKI (The University of Tokyo, Japan)

Towards comprehensive understandings of transcriptome regulations

Nicolas CHEVRIER (Harvard University, USA)

Systems-Level Analysis of the Toll-like Receptor Network

14:50-15:00 **Closing Remarks**

※The program is subject to change.



Ichō Kaikan, Osaka University

Contact

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