

Program

Opening Remarks (9:50 ~ 10:00)

Session I. 10:00 - 12:00 chair:Miki Ebisuya

[1] Dr. Avigdor Eldar (Tel Aviv University, Israel)

Title: "Social evolution shapes the diversification of bacterial intercellular signaling"

[2] Dr. Naoki Irie (University of Tokyo, Japan)
Title: "Flexibility in early animal developmental system"

[3] Dr. Yu-Chiun Wang (Center for Developmental Biology, RIKEN, Japan)

Title: "Quantitative 4D analyses of epithelial folding during Drosophila gastrulation"

Poster Session I & Lunch Break (12:00 - 13:30)

Short Talk Session

13:30 - 13:45

chair: Noriko Hiroi & Akira Funahashi

Masashi Kajita (The University of Tokyo)

Title: "Modeling of Self- and Non-self Discrimination by T-cells"

Session II. 13:45 - 15:30 chair: Chun-Biu Li

[1] Dr. Yoshiyuki Arai (Osaka University, Japan)

Title: "Realtime fluorescnece and chemiluminescence imaging with optogenetic activation in living cells"

[2] Dr. Hiroaki Takagi (Nara Medical University, Japan)

Title: "Relevance of spontaneous migration to tactic response in Dictyostelium cells"

[3] Dr. Rinshi Kasai (Kyoto University, Japan)

Title: "Reversible dimer formation of G-protein coupled receptor: Quantitative evaluation by a single fluorescent molecule imaging"

Coffee Break (15:30 - 15:50)

Session III. 15:50 - 17:50 chair: Ziya Kalay

[1] Dr. Craig Jolley (Center for Developmental Biology, RIKEN,

Japan)

Title: "Mammalian circadian oscillations at the cellular and tissue scales"

[2] Dr. Tomonobu Watanabe (QBiC, RIKEN, Japan)
Title: "Development of fluorescent protein to sense
physical parameters"

[3] Dr. Andre Leier (OIST, Japan)

Title: "Simulating diffusion in crowded environments with multifractional Brownian motion"

Closing Remarks (17:50 ~ 18:00)

Poster Session II & Free Discussion (18:00 - 20:00)

International Workshop on Quantitative Biology 2013

Nov. 25th, 2013 OSAKA UNIVERSITY



SUPPORTED BY

CDB, RIKEN, Japan



Keio University, Japan



Access to Suita Campus

- Train: 15'~30' east on foot from Kita-Senri, Hankyu Senri Line.
- Monorail: 5'~15' on foot from Monorail Handai-Byoin-Mae.
- · Hankyu Bus: Bus for Handai-Honbu-Mae or Ibaraki-Mihogaoka at Senri-Chuo. Exit at Handai-Honbu-Mae. (5'~15')
- · Kintetsu Bus: Bus for Handai-Honbu-Mae from Ibaraki-Shi, Hankyu Kyoto Line. Exit at Handai-Honbu-Mae. $(5' \sim 15')$

Train / Flight connections

Train

• From Shin-Osaka Station Subway Midosuji Line to Senri-Chuo → Monorail. Exit at Handai-Byoin-Mae. (1 hr.)

Fliaht

- From Kansai International Airport (3 choices)
- (1) JR line to Osaka → subway Midosuji Line to Senri-Chuo → Monorail to Handai-Byoin-Mae. (2 hr.)
- (2) Nankai Line to Namba → subway Midosuji Line to Senri-Chuo → Monorail to Handai-Byoin-Mae. (2 hr.)
- (3) Airport Bus to Osaka Airport → Monorail to Handai-Byoin-Mae. (2 hr. 30')

Domestic&International Airport (Haneda)

From Osaka Airport (Itami)

Monorail to Handai-Byoin-Mae. (1 hr.)



POSTER PRESENTATIONS

No.	Name	TITLE
1	Takumi Hiraiwa	Development of microfluidic system for high resolution control of long-term cell culturing environment
2	Yuichiro Nakai	Development of High-speed 3D imaging system with electrically tunable lenses for deeper probing of subcellular structures
3	Shota Suzuki	Mathematical models of RNP-mediated synthetic translational systems for precise control of the differentiation of iPS cells
4	Ryuichi Tanimoto	Detection and Analyses of Intracellular Distribution of Temperature
5	Mitsunori Ozeki	Development of Semi-Auto nuclei identification system from fluorescent 4D embryonic images
6	Katsuyoshi Matsushita	A theoretical investigation of protein folding funnel from protein structures
7	Masashi Kajita	Modeling of Self and Non-self Discrimination by T-cells
8	Ziya Kalay	Observing the rotational diffusion of nanodiamonds with arbitrary nitrogen vacancy center configurations
9	Rizki Mardian	Reinforcement Learning Model based on DNA Strand Displacement
10	Yuki Matsumoto	Growth rate dependent effect on gene expression under environmental perturbation
11	Yuka Shirokawa	Decision making under fluctuated environments: get over with a social group or alone
12	Noriko Hiroi	Assessing uncertainly in model parameters based on sparse experimental data
13	Akinori Awazu	Data driven findings of function-dependent fluctuations and fluctuation - response relation of gene expressions in plants
14	Masaki Nomura	Biological Significance of Heterogeneity in iPS Cells by Single Cell Transcriptome Analysis
15	Wibowo Adi	Aggregation of Swarm Molecular Robotics in Cell Culture Medium
16	Akira Funahashi	Design and Implementation of CellDesigner

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 a)Will you attend another similar workshop next year or in a couple of years
yes no Which conference/workshop?
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 b) What would you like to hear more among today's talk
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c)Would you prefer more talks
yes no
d)Would you like longer talks
yes no
How long?
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e)What other areas would you like to be
covered
(
f) Other Comments
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Thank you! We will appreciate your comments and opinions.
* 回答は日本語でも構いません。

Organizer Committee

Yoshiyuki Arai (Osaka University) Viji Mythily Draviam (University of Cambridge) Miki Ebisuya (CDB, RIKEN) Akira Funahashi (Keio University) Noriko Hiroi (Keio University) Ziya Kalay (Kyoto University)

Rinshi Kasai (Kyoto University) Chun-Biu Li (Hokkaido University)

Hiroaki Takagi (Nara Medical University)