



NAIST GCOE International Student Workshop 2010

Program

Presentation: Talk, 15 minutes; Discussion, 5 minutes
Place: I&I Land, Osaka
Sponsor: NAIST Global COE program

IGDB: Institute of Genetics and Developmental Biology, Chinese Academy of Sciences
UCD: College of Biological Sciences, University of California, Davis
NAIST: Graduate School of Biological Sciences, Nara Institute of Science and Technology

November 7 (Sunday)

18:30 Check-in
19:00 Dinner

November 8 (Monday)

07:30 Breakfast
08:50 Opening remarks (Main Hall) by Professor Hisaji Maki (Dean, Graduate School of Biological Sciences, NAIST)

Session 1 - Room 1

Chairperson: **Amy Fabritius** (UCD)
Assistants: KokSong Lai and Rikiya Takeuchi

09:00 **(01) Toshiya Sasaki** (NAIST)
Functional analysis of the constitutively active variant of the ubiquitin ligase Rsp5 on the regulation of proline permease activity in *Saccharomyces cerevisiae*

09:20 **(02) Hidetaka Murai** (NAIST)
Novel method to investigate the interactions between melanocytes and keratinocytes in developing skin

09:40 **(03) Bambang Retnoaji** (NAIST)
Mechanisms underlying somite boundary formation

10:00 **(04) Yuta Takase** (NAIST)

Reciprocal interactions between neural crest cells and dorsal aorta in developing embryos

Session 2 - Room 2

Chairperson: **Lifen Gao** (IGDB)

Assistants: Ryutaro Akiyama and Kok Ang Lim

09:00 **(05) Keita Kato** (NAIST)

Novel genes involved in nicotine biosynthesis in tobacco

09:20 **(06) Maliwan Naconsie** (NAIST)

Characterization of a rate-limiting enzyme of nicotine biosynthesis, N-methylputrescine oxidase

09:40 **(07) Masateru Oguri** (NAIST)

Analysis of the molecular basis of cyclic electron flow around photosystem I

10:00 **(08) Saki Hoshiyasu** (NAIST)

Involvement of post-translational modification in the quantitative regulation of the ϵ subunit of chloroplast ATP synthase in a xerophyte, wild watermelon

Session 3 - Room 3

Chairperson: **Jingyan Zhang** (IGDB)

Assistants: Satohiko Murayama and Hirotaka Shibata

09:00 **(09) Yohei Yamamoto** (NAIST)

Novel DnaJ family protein, DNAJB12, is involved in quality control of proteins in the endoplasmic reticulum

09:20 **(10) Pattarawut Sopha** (NAIST)

Study of a novel transmembrane J-protein, DNAJB14

09:40 **(11) Thanyarat Promlek** (NAIST)

Unfolded protein interaction with the stress sensor Ire1

10:00 **(12) Dai Kanagawa** (NAIST)

Novel enriched environment increases expression of the plasticity-related protein neuropsin (KLK8)

10:20 Coffee break

10:40 Administrative matters (Main Hall) (*details to be announced at dinner on Sunday*)

IGDB & UCD students: Please bring your passport

Session 4 - Main Hall

Chairperson: **Hongmei Zhai** (IGDB)

Assistants: Supanji and Tomonori Nishii

11:00 **(13) Satoshi Fujita** (NAIST)

A novel domain destabilizes interphase microtubules in *Arabidopsis*

11:20 **(14) Mo Wang** (IGDB)

The central element protein ZEP1 of the synaptonemal complex regulates the number of crossovers during meiosis in rice

11:40 **(15) Polly Yingshan Hsu** (UCD)

REVEILLE8, a MYB-like transcription factor, regulates the circadian clock and plant development

- 12:00 **(16) Yasuko Hashiguchi** (NAIST)
Functional analysis of *Arabidopsis SHOOT GRAVITROPISM 6*
- 12:20 **(17) Jian Feng** (IGDB)
A role for *GSNOR1* in polar auxin transport and plant development
- 12:40 Group photographs and lunch

Session 5 - Main Hall

- Chairperson: **Ni Luh Putu Ika Mayasari** (NAIST)
Assistants: Harumitsu Suzuki and Mitsunori Arai
- 14:00 **(18) Manami Toriyama** (NAIST)
Phosphorylation of doublecortin and neural progenitor cell migration
- 14:20 **(19) Caitlin Kiley** (UCD)
Rapid plasticity of visual circuits in the lateral geniculate nucleus
- 14:40 **(20) Katsunori Semi** (NAIST)
Committed neuronal precursors confer astrocytic potential on residual neural precursor cells
- 15:00 **(21) Jingyan Zhang** (IGDB)
Wiring specificity between BDU and PLM neurons
- 15:20 **(22) Berry Juliandi** (NAIST)
The effects of histone deacetylase inhibition on cortical development
- 15:40 Coffee break

Session 6 - Main Hall

- Chairperson: **Rie Ishida** (NAIST)
Assistants: Toshiya Sasaki and Bambang Retnoaji
- 16:20 **(23) Paul Ginno** (UCD)
Hardwiring epigenetic signals, a role for R-loops in setting DNA methylation patterns
- 16:40 **(24) Daniel Melters** (UCD)
Primate centromere evolution: plasticity caught in the act
- 17:00 **(25) Jinfeng Chen** (IGDB)
Sequence and analysis of the genome of wild rice *Oryza brachyantha*
- 17:20 **(26) Lina Chen** (IGDB)
Temporal and spatial dynamics of As in the soil-rice system under different water regimes
- 17:40 **(27) Matthew McGee** (UCD)
Resource polyphenism increases species richness: a test of the hypothesis
- 18:00 Guidance for cultural visits on November 10
- 18:40 Welcome party

November 9 (Tuesday)

- 07:30 Breakfast

Session 7 - Room 1

Chairperson: **Caitlin Kiley** (UCD)

Assistants: Hidetaka Murai and Yuta Takase

- 09:00 **(28) Mitsunori Arai** (NAIST)
Integration of exogenous neural stem cells in adult mouse cortex with neuronal activity
- 09:20 **(29) Harumitsu Suzuki** (NAIST)
Histological profile of synaptic matrix metalloproteinase activity in the mouse hippocampus
- 09:40 **(30) Hirotaka Shibata** (NAIST)
Shootin2: a candidate clutch molecule involved in the migration of ganglionic eminence-derived inhibitory neurons
- 10:00 **(31) Hitomi Nakazawa** (NAIST)
Rab33a interacts with singar1 and promotes axon formation

Session 8 - Room 2

Chairperson: **Lina Chen** (IGDB)

Assistants: Keita Kato and Masateru Oguri

- 09:00 **(32) Mio Ikeda** (NAIST)
Inhibitory and modulating action of DNA polymerase IV on progression of the DNA replication fork in *Escherichia coli*
- 09:20 **(33) Kok Ang Lim** (NAIST)
Generation of a new version of the small GTPase Raichu-OsRac1
- 09:40 **(34) Mwathi Jane Wamaita** (NAIST)
OsRap2.6 is a transcription factor that is involved in rice innate immunity
- 10:00 **(35) Most. Altaf-Un-Nahar** (NAIST)
Interactions among genes involved in carpel margin formation during *Arabidopsis* gynoecium development

Session 9 - Room 3

Chairperson: **Monica Watson** (UCD)

Assistants: Yohei Yamamoto and Dai Kanagawa

- 09:00 **(36) Satohiko Murayama** (NAIST)
In vivo analysis of RNA polymerase α subunit interaction sites in the *Bacillus subtilis* genome
- 09:20 **(37) Supanji** (NAIST)
HtrA1 expression under oxidative stress
- 09:40 **(38) Tomonori Nishii** (NAIST)
Functional analysis of a BTB-containing zinc finger protein, CIBZ
- 10:00 **(39) Ni Luh Putu Ika Mayasari** (NAIST)
Conditional poly-A trapping based on the *Tol2*-transposon system
- 10:20 Coffee break

Session 10 - Main Hall

Chairperson: **Christine Rabinovitch** (UCD)

- Assistants: Satoshi Fujita and Saki Hoshiyasu
- 11:00 **(40) Hongmei Zhai** (IGDB)
Physiological regulation of high transpiration efficiency in winter wheat under drought conditions
- 11:20 **(41) Damian Guerra** (UCD)
A family of RING-type ubiquitin ligases in *Arabidopsis* play a role in abiotic stress adaptation
- 11:40 **(42) Lifen Gao** (IGDB)
Generation of marker-free, bacterial blight-resistant transgenic sterile line and hybrid rice with *Xa21*
- 12:00 **(43) KokSong Lai** (NAIST)
Analysis of molecular mechanisms of self-incompatibility in the Brassicaceae
- 12:20 **(44) De-Shui Yu** (IGDB)
Molecular mechanism of *HvWRKY2* in barley resistance to powdery mildew
- 12:40 Lunch

Session 11 - Main Hall

- Chairperson: **Polly Yingshan Hsu** (UCD)
Assistants: Pattarawut Sopha and Hitomi Nakazawa
- 14:00 **(45) Christine Rabinovitch** (UCD)
Acidovorax sp. strain JS42 uses three types of taxis to respond to 2-nitrotoluene: 2NT chemotaxis, nitrite chemotaxis, and energy taxis
- 14:20 **(46) Rikiya Takeuchi** (NAIST)
Global analysis of the genetic network for metabolic pathways in *Escherichia coli*
- 14:40 **(47) Amy Fabritius** (UCD)
Meiosis-specific actomyosin regulation during polar body formation in *Caenorhabditis elegans*
- 15:00 **(48) Pei Jiun Lai** (NAIST)
Effects of inverted repeats on the DNA replication fork: biochemical studies with fully reconstituted *oriC* plasmid DNA replication *in vitro*
- 15:20 **(49) David Richter** (UCD)
Protein-protein interactions conserved between human insulin signaling and a glucose responsive pathway in fission yeast
- 15:40 Coffee break

Session 12 - Main Hall

- Chairperson: **Manami Toriyama** (NAIST)
Assistants: Berry Juliandi and Katsunori Semi
- 16:20 **(50) Junfeng Bi** (IGDB)
Tissue-autonomous function of *Drosophila Seipin* in preventing ectopic lipid droplet formation
- 16:40 **(51) Rie Ishida** (NAIST)
Functional analysis of BNIP2 as a kinesin adaptor

- 17:00 **(52) Monica Watson** (UCD)
The role of the glucocorticoid receptor in skeletal muscle atrophy
- 17:20 **(53) Wei Zhang** (IGDB)
Gene expression-based classification and regulatory networks of pediatric acute lymphoblastic leukemia
- 17:40 **(54) Ryutaro Akiyama** (NAIST)
Integration of segmentation clock and FGF signaling generates segmental pattern of somites
- 18:00 Closing remarks
- 18:30 Dinner

November 10 (Wednesday)

- 07:00 Breakfast
- 08:00 Check-out and departure to NAIST
- 08:30 Arrival at NAIST

Cultural visits to Nara, Kyoto or Osaka

November 11 (Thursday)

- 09:00 Posters 1-28 will be put up in Millennium Hall
- 10:00 GCOE International Symposium (<http://bsgcoe.naist.jp/en/symp.html>)
- 13:30 Poster session 1
- 17:00 Posters 1-28 will be taken down
- 17:30 Mixer

November 12 (Friday)

- 09:00 Posters 29-54 will be put up in the Millennium Hall
- 10:00 Poster session 2
- 14:30 Closing remarks
- 14:45 Posters 29-54 will be taken down

November 13 (Saturday)

- 09:30 Take a chartered bus to KIX
- 13:50 Flight for Beijing
- 18:35 Flight for San Francisco