

***Multiscale Brain/
Molecular and Cellular Cognition Society Asia***

Constructive understanding of multi-scale dynamism of brain and its disorders

Date: June 27-28, 2022

Venue: Ito Hall, Tokyo University

Organizers

Satoshi Kida (Tokyo University)

Yasunori Hayashi (Kyoto University)

Support

MEXT Grant-in-Aid for Scientific Research on Innovative Areas
“Constructive understanding of multi-scale dynamism of
neuropsychiatric disorders”

SECOM Science and Technology Foundation

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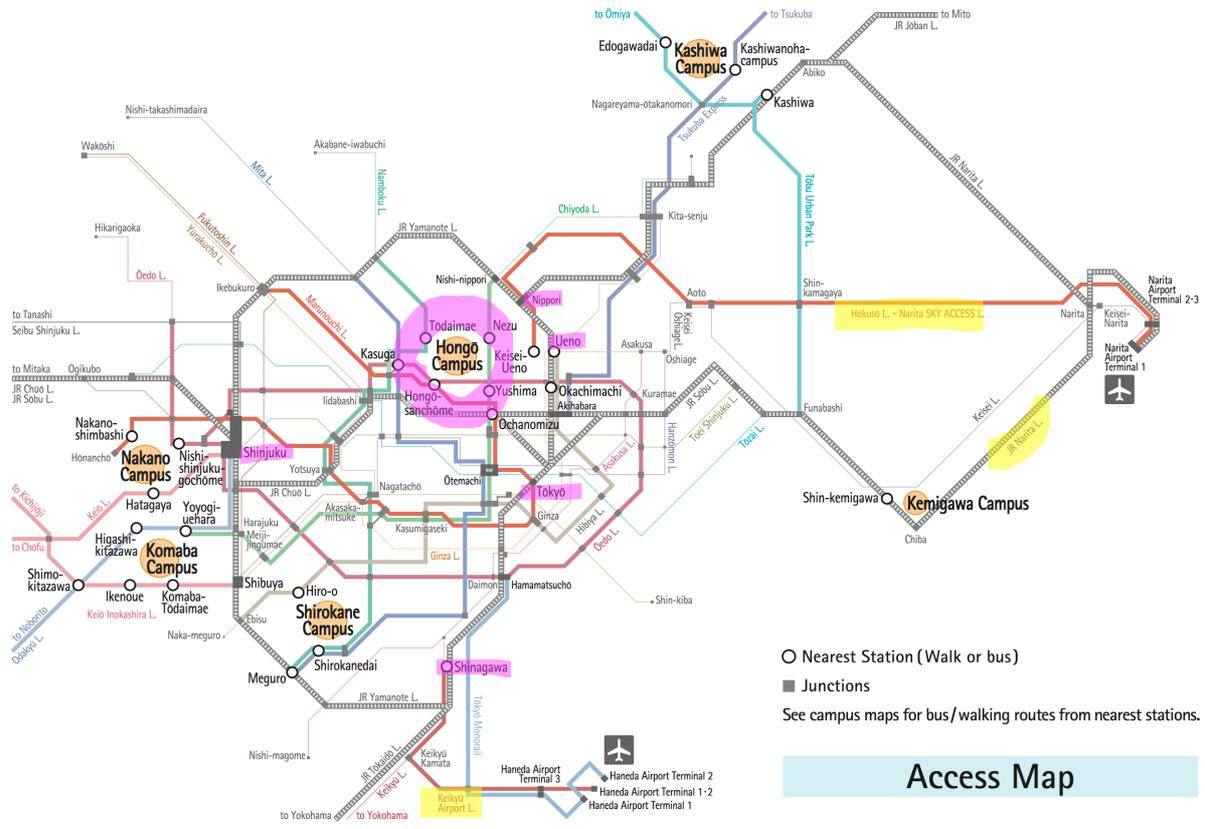
Contact

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Access to Ito Hall, Tokyo University

From Narita or Haneda Airport to Tokyo



Airport	Train lines and major destinations in downtown Tokyo
Narita Airport	JR Line: Narita Express to Tokyo, Shinagawa or Shinjuku Stations Keisei/Hokuso Sky Access Line: Skyliner to Nippori or Ueno Stations
Haneda Airport	Keikyu Airport Line to Shinagawa Station

Do not take a taxi. It is too far away and can cost >US\$200.

After arriving downtown Tokyo, please change to local line (JR or subway) to reach your hotel.

Venue

Ito Hall is located on Hongo Campus of Tokyo University.

7-3-1, Hongo, Bunkyo-ku, Tokyo 113-0033
 +81-3-5841-0779 (international) or 03-5841-0779 (within Japan)
 (for GPS: 35.710N, 139.760E)

Hongo-sanchome Station (**Marunouchi** and **Oedo** Lines) is the closest station.

Symposium Schedule

June 27, 2022

9:00–9:10 **Opening Remarks – Chair of Multiscale Brain**
Dr. Akiko Hayashi-Takagi (RIKEN CBS, Japan)

9:10–9:15 **Opening Remarks – MCCS Asia**
Dr. Satoshi Kida (Univ Tokyo, Japan)

<**Session 1**> Chairman; Dr. Satoshi Kida (Univ Tokyo, Japan)
Sponsored by SECOM

9:15–9:40 Dr. Alicia Che (Yale Univ, USA)
Role of GABAergic interneurons in mediating early life experiences and implications in psychiatric illnesses

9:40–10:05 Dr. Yasunori Hayashi (Kyoto Univ, Japan)
Online- and offline-LTP underlying long-term fear memory

10:05–10:30 Dr. Satoshi Kida (Univ Tokyo, Japan)
Potential roles of cAMP signaling pathway in PTSD

10:30–10:45 **Coffee Break**

<**Session 2**> Chairman; Dr. Tadafumi Kato (Juntendo Univ, Japan)

10:45–11:10 Dr. Gustavo Turecki (McGill Univ, Canada)
The depressed brain at single-cell resolution

11:10–11:35 Dr. Jelena Radulovic (Albert Einstein Med Coll, USA)
Primary cilia control the formation of lasting memories

11:35–12:00 Dr. Tadafumi Kato (Juntendo Univ, Japan)
Possible roles of paraventricular thalamic nucleus in bipolar disorder

12:00–13:00 **Lunch Break**

<**Session 3**> Chairman; Dr. Tomoyuki Furuyashiki (Kobe Univ, Japan)

13:00–13:25 Dr. Kanzo Suzuki (Vanderbilt, USA)
Synaptic mechanisms underlying rapid antidepressant action

13:25–13:50 Dr. Anatol Kreitzer (UCSF, USA)
Modulation of dopamine signaling by internal needs

13:50–14:15 Dr. Weidong Li (Shanghai Jiao Tong Univ, China)
Desipramine rescues memory deficits in mouse model of Kabuki syndrome

14:15–14:25 **Coffee Break**

<Session 4> Chairman; Dr. Ted Abel (Univ Iowa, USA)

14:25–14:50 Dr. Takanobu Nakazawa (Tokyo Univ. Agri. Japan)
Modelling psychiatric disorders with patient iPSC-derived neurons and mouse disease models

14:50–15:15 Dr. Zhihua Gao (Zhejiang Univ, China)
Oxytocin and emotional control

15:15–15:40 Dr. Akiko Hayashi (RIKEN CBS, Japan)
Multi-scale synaptic analysis for schizophrenia

15:40–15:50 **Coffee Break**

<Session 5> Chairman; Dr. Thomas McHugh (RIKEN CBS, Japan)

15:50–16:15 Dr. Mazen Kheirbek (UCSF, USA)
Representing rewarding and aversive experiences in hippocampal circuits

16:15–16:40 Dr. Juan Song (Univ North Carolina, USA)
Hypothalamic modulation of adult hippocampal neurogenesis and its functional implication

16:40–17:05 Dr. Ted Abel (Univ Iowa, USA)
Endoplasmic reticulum chaperone genes encode effectors of long-term memory

<Poster Session>

17:05–19:00 With Snacks

June 28, 2022

9:00–9:05 Dr. Satoshi Kida
General Information

<Session 6> Chairman; Dr. Akiko Hayashi-Takagi (RIKEN CBS, Japan)

9:05–9:30 Dr. Gemma Modinos (King's Coll London, UK)
Translational approaches to the role of GABAergic dysfunction in
vulnerability for psychosis

9:30–9:55 Dr. Shusaku Uchida (Kyoto Univ, Japan)
Constructive understanding of the mechanisms underlying psychosocial
stress-induced behavioral heterogeneity

9:55–10:20 Dr. Tomoyuki Furuyashiki (Kobe Univ, Japan)
Inflammatory mechanisms of stress and depression

10:20–10:35 **Coffee Break**

<Session 7> Chairman; Dr. Josh Johansen (RIKEN CBS, Japan)

10:35–11:00 Dr. Matthew Girgenti (Yale Univ, USA)
Integrating single cell genomics to understand stress disorder

11:00–11:25 Dr. Atsushi Kasai (Osaka Univ, Japan)
Claustal ensemble for stress-induced anxiety responses

11:25–11:50 Dr. Takuya Sasaki (Tohoku Univ, Japan)
Hippocampal memory mechanisms underlie stress-induced psychiatric
disease

11:50–13:00 **Lunch Break**

<Session 8> Chairman; Dr. Paul Frankland (Hosp Sick Kids, Canada)

13:00–13:25 Dr. Takashi Kitamura (Univ Texas, USA)
Role of Eph/Ephrin signals on anatomical and functional modules in medial
entorhinal cortex

13:25–13:50 Dr. Hyungju Park (Korea Brain Res Inst, Korea)
Regulation of learning and memory by astrocytic synapse pruning

13:50–14:15 Dr. Gisella Vetere (ESPCI Paris, France)
Decoding memory formation and stabilization in mice

14:15–14:25 **Coffee Break**

<Session 9> Chairman; Dr. Takashi Kitamura (Univ Texas, USA)

14:25–14:50 Dr. Kobi Rosenblum (Univ Haifa, Israel)
Differential cell specific regulation of protein synthesis control different neuronal and behavioral processes

14:50–15:15 Dr. Paul Frankland (Hosp Sick Kids, Canada)
The supramammillary nucleus integrates environmental signals to modulate mood and cognition via hippocampal neurogenesis

15:15–15:40 Dr. Yong-Seok Lee (Seoul Natl Univ, Korea)
Role of NAc-projecting infralimbic neurons in social recognition

15:40–15:50 **Coffee Break**

<Session 10> Chairman; Dr. Yasunori Hayashi (Kyoto Univ, Japan)

15:50–16:15 Dr. Eric Klann (New York Univ. USA)
Cell type-specific and local translation in memory

16:15–16:40 Dr. Takeshi Imai (Kyushu Univ, Japan)
Cortical development during adolescence

16:40–17:05 Dr. Justin Lee (Inst Basic Sci, Korea)
Reactive astrocytes as the cause of Alzheimer's disease

17:05– **Closing Remarks**
Dr. Hiroyuki Nawa (Wakayama Med. Univ, Japan)