

Keio University

# WPI-Bio2Q 2<sup>nd</sup> Symposium

**Integrating Biology, Microbiome and Quantum Computing  
for Healthy Longevity**

Date

**July 27, 2023 (Thursday)**  
9:30AM-5:50PM JST (UTC+9)

Venue

**Hybrid (Onsite & Zoom Online) / Free Admission**

**Onsite : Keio University Shinanomachi Campus      Language : English**

Large Conference Room, 11th floor, Building 2  
35 Shinanomachi, Shinjuku-ku, Tokyo 160-8582, Japan

**Speakers** (Alphabetical Order) :

**Gloria CHOI**

MIT Department of Brain and Cognitive Sciences, USA

**Sloan DEVLIN**

Harvard Medical School, USA

**Jun HUH**

Harvard Medical School, USA

**Erika SASAKI**

CIEA Department of Marmoset Biology and Medicine, JAPAN

**Toshiro SATO**

Keio University School of Medicine, JAPAN

**Haruhiko SIOMI**

Keio University School of Medicine, JAPAN

**Kunimichi SUZUKI**

MRC Laboratory of Molecular Biology, Cambridge, UK

**Shu TANAKA**

Keio University Faculty of Science and Technology, JAPAN

**Timur TUGANBAEV**

Keio University School of Medicine, JAPAN

**Mihoko YOSHINO**

Keio University School of Medicine, JAPAN

Registration



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WPI Research Center  
Keio University

**Bio2Q**

Human Biology  
Microbiome Quantum  
Research Center



Organizer: Keio University Bio2Q Office  
Contact: [bio2q@info.keio.ac.jp](mailto:bio2q@info.keio.ac.jp)  
Website: <https://www.bio2q.keio.ac.jp>

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Keio University



\*Symposium content is subject to change.

# Keio University WPI-Bio2Q 2nd Symposium

## Integrating Biology, Microbiome and Quantum Computing for Healthy Longevity

**DATE:** July 27, 2023, 9:30 AM-5:50 PM (Japan Standard Time)  
**ONSITE:** Large Conference Room, 11th floor, Building 2  
Shinanomachi Campus, Keio University, 35 Shinanomachi, Shinjuku-ku, Tokyo, Japan  
**ONLINE:** Zoom  
**CONTACT:** Keio University WPI-Bio2Q Office [bio2q@info.keio.ac.jp](mailto:bio2q@info.keio.ac.jp) +81-(0)3-6709-8106  
**LANGUAGE:** The symposium will be held in English.  
**ADMISSION:** Free  
**REGISTRATION:** CLICK or SCAN the QR code. CLICK or SCAN to register.



### 9:30 AM-9:40 AM Opening Remarks

Ryosuke TAKAHASHI / Program Officer, WPI-Bio2Q (online)  
Kenya HONDA / Center Director of Bio2Q / Keio University School of Medicine

### 9:40 AM-12:40 PM

*chaired by Kenya HONDA*

- ① Jun HUH / Harvard Medical School, USA  
Unexpected Roles of the Gut Microbiome and the Host Immune System in Controlling Animal Behaviors
- ② Timur TUGANBAEV / Keio University School of Medicine, Japan  
Microbiome-Empowered Drug Efficacy Optimization
- ③ Sloan DEVLIN / Harvard Medical School, USA  
Host-Produced, Bacterially Modified Gut Metabolites

**[Short Break]**

*chaired by Koji ATARASHI*

- ④ Mihoko YOSHINO / Keio University School of Medicine, Japan  
Effects of Diet versus Gastric Bypass on Metabolic Function in Diabetes
- ⑤ Haruhiko SIOMI / Keio University School of Medicine, Japan  
Development of Preimplantation Embryos Requires Transposon Expression
- ⑥ Toshiro SATO / Keio University School of Medicine, Japan  
Understanding of Human Disease Biology using Organoids

### 12:40 PM-2:00 PM [Lunch Break]

### 2:00 PM-3:00 PM

One-on-One Networking, Meet the Speakers ①②③④⑤⑥;

### 3:00 PM-5:00 PM

*chaired by Michisuke YUZAKI*

- ⑦ Gloria CHOI / MIT Department of Brain and Cognitive Sciences, USA  
Neuroimmune Interactions Shaping Social Behavior
- ⑧ Kunimichi SUZUKI / MRC Laboratory of Molecular Biology, Cambridge, UK  
Structure-Guided Control of the Connectivity

**[Short Break]**

*chaired by Hideaki KAWAGUCHI*

- ⑨ Erika SASAKI / CIEA Department of Marmoset Biology and Medicine, Japan  
A Non-Human Primate Model for Understanding Mechanisms of Healthy Longevity
- ⑩ Shu TANAKA / Keio University Faculty of Science and Technology, Japan  
Quantum Annealing: Current Status and Future Challenges

### 5:00 PM-5:10 PM Closing Remarks

Takanori KANAI / Dean, Keio University School of Medicine, Japan  
Oltea SAMPETREAN / Administrative director of Bio2Q / Keio University School of Medicine, Japan

### 5:10 PM-5:50 PM

One-on-One Networking, Meet the Speakers ⑦⑧⑨⑩