

# WPI-Bio2Q Kickoff Symposium

Human Biology × Microbiome × Quantum Computing



The first symposium at the Keio University Human Biology-Microbiome-Quantum Research Center (Bio2Q) will be held.

As Japan's first microbiome research center, Bio2Q aims to understand the interactions between humans and their microbiome at the molecular level. We combine quantum computing with bioanalytical methods to understand such complexity and hope to develop new therapies for diseases that are currently difficult to treat.

Anyone can participate online.

<b>DATE:</b>	February 3 <sup>rd</sup> , 2023 10:00 – 16:00
<b>Format:</b>	Hybrid(Anyone is welcome to participate Zoom online (on-site participation is available only for invited guests).)
<b>Language:</b>	English
<b>Fee</b>	Free
<b>Registration</b>	<a href="https://keio-univ.zoom.us/webinar/register/WN_K-aTin6Tv-Ay7zsb1V_w">https://keio-univ.zoom.us/webinar/register/WN_K-aTin6Tv-Ay7zsb1V_w</a>
<b>CONTACT:</b>	Keio University WPI-Bio2Q Office sc-wpi@adst.keio.ac.jp +81-3-5363-3473 (ex. 64022)

## 10:00 – 10:10 Opening Remarks /Lounge

[Akira Ukawa](#) / Program Director, World Premier International Research Center Initiative; on site  
[Kenya Honda](#) /Center Director of Bio2Q / Keio University School of Medicine; on site

## 10:10-11:40 / Lounge

*chaired by Timur Tuganbaev*

- 1 [Kenya Honda](#) /Center Director of Bio2Q / Keio University School of Medicine; on site  
Toward Development of Defined Microbial Therapeutics
- 2 [Jun Huh](#) /Harvard Medical School, US; on line  
Neuroimmune Interaction Underlies Both Neurodevelopmental and Immune-Primed Phenotypes
- 3 [Yasuyo Minagawa](#) /Keio University Faculty of Letters; on site  
Diverse Neurocognitive Development in Infants with and without Elevated Likelihood of ASD

## 11:40-12:10 / Lounge

*chaired by Kenji Tanaka*

- 4 [Radu Aricescu](#) /MRC Laboratory of Molecular Biology, UK; on site  
The Structural Biology of Synaptic Connectivity

## 12:10-13:00 [Lunch]

## 13:00-14:00 / Lounge

*chaired by Norio Takata*

- 5 [George Augustine](#) /Lee Kong Chian School of Medicine /Nanyang Technological University, Singapore; on line  
Synapses: The Keys to Understanding Brain Function and Gut-Brain Interactions
- 6 [Hideaki Kawaguchi](#) /Keio University Graduate School of Science and Technology; on site  
Medical and Biological Applications of Quantum Computing: Current and Future

## 14:00-15:00 / Lounge

*chaired by Kazuyoshi Ishigaki*

- 7 [Michisuke Yuzaki](#) /Keio University School of Medicine; on site  
Approaching the Gut-Brain Axis from the Synapse
- 8 [Makoto Arita](#) /Keio University Faculty of Pharmacy; on site  
Cutting-Edge Lipidomics Technology Reveals the Biology of Lipid Diversity and Disease Control

## 15:00-15:20 [Coffee Break] / Lounge

## 15:20-15:50 / Lounge

*chaired by Kazuyoshi Ishigaki*

- 9 [Oltea Sampetean](#) /Administrative director of Bio2Q /Keio University School of Medicine; on site  
Biological and Therapeutic Challenges in Malignant Brain Tumors

15:50 – 16:00 Closing Remarks /Lounge

Oltea Sampetean /Administrative director of Bio2Q /Keio University School of Medicine; on site



Keio University

# WPI-Bio2Q Kickoff Symposium

Human Biology × Microbiome × Quantum Computing

Date

**February 3, 2023 (Fri.)**  
10:00-16:00 JST(UTC+9)

Venue

**Hybrid (On-site & Zoom Online) /Free Admission**

On-site (invited guests only) : Keio University Shinanomachi Campus  
1F Lounge, Center for Integrated Medical Research  
35 Shinanomachi, Shinjuku-ku, Tokyo 160-8582 Japan

**Speakers**(Alphabetical Order) :

\*Streamed from Onsite Venue (Shinanomachi Campus)

**Radu Aricescu**

MRC Laboratory of Molecular Biology, UK

**Makoto Arita**

Keio University Faculty of Pharmacy

**George Augustine**

Lee Kong Chian School of Medicine/ Nanyang Technological University, Singapore

**Kenya Honda**

Center Director of Bio2Q/ Keio University School of Medicine

**Jun Huh**

Harvard Medical School, US

**Hideaki Kawaguchi**

Keio University Graduate School of Science and Technology

**Yasuyo Minagawa**

Keio University Faculty of Letters

**Oltea Sampetean**

Keio University School of Medicine

**Michisuke Yuzaki**

Keio University School of Medicine

Registration



The Bio2Q is the first microbiome research center in Japan. We aim to understand the interactions between the microbiome and humans at the molecular level. To understand this complex network, we will use quantum computing together with bioanalytical methods. In the future, we hope to develop new treatments for diseases that are currently difficult to treat. We want to make our organization attractive to diverse researchers and competitive on a global level.

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



WPI Research Center  
Keio University

**Bio2Q**

Human Biology  
Microbiome Quantum  
Research Center

Keio University

