





Keio University Human Biology-Microbiome-Quantum Research Center (Bio2Q)

NEW SCIENCE FIELD

Integrating Biology, Microbiome and Quantum Computing for Healthy Longevity



Human health is maintained by complex interactions between multiple organs. These interactions include the microbiome, which exists on every external surface of the body, and the resulting information is processed and utilized in a coordinated manner.

Our center will develop novel research techniques to understand the interactions between multiple organs and the microbiome and develop methods to apply quantum computing to human biology. Our mission is to forge a new interdisciplinary research area that will lead to groundbreaking progress in elucidating the regulatory mechanisms sustaining human health. In the long term, we will develop new prophylactic/therapeutic approaches to promote healthy longevity.





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Developing and advancing research techniques to elucidate interactions between multiple organs and the microbiome.

Creating a new interdisciplinary research field to advance the understanding of mechanisms related to health.

Pioneering methods to utilize quantum computers in unraveling complex phenomena in biological systems.

Contributing to the development of new treatment and prevention methods for diseases (preemptive medicine).



Unraveling the secrets of healthy longevity based on understanding the mechanisms of the human body, including the microbiome.



AI

Taking on Challenge to Unparalleled Integrated Research in the World.

In Bio2Q, three research core units, human multi-organ multi-dimensional data analysis core (Bio-1), homeodynamics mechanistic analysis core (Bio-2), and quantum computing core (Q), transcend boundaries for integrated research. By conducting interdisciplinary research among researchers from different disciplines and backgrounds, and promoting the use of cutting-edge technology, Bio2Q will function as a unique research base that is highly regarded around the world.





Bringing together World-Renowned Researchers.

Bio2Q brings together world-leading researchers in microbiome research, organoid technology, metabolite analysis, neural circuit analysis, and quantum computing. We also collaborate internationally with world leaders in immunology, microbiology, neuroscience, informatics, biochemistry, metabolism, stem cell biology, structural analysis, and more.

First Private University to be Adopted by the WPI Program.

The World Premier International Research Center Initiative (WPI) is a project promoted by the Ministry of Education, Culture, Sports, Science and Technology. As the first private university to be selected for the WPI Program, we aim to create a visible and active research base at the Human Biology-Microbiome-Quantum Research Center.







Donation Requirements

Use of Donations

Donations will be used to advance the research of Bio2Q.

Target Donors

Individuals/Corporations/Organizations



Application Procedure

01. Kindly reach out to the designated office via email to initiate the process. We will provide guidance throughout.



02. We will provide you with the bank account details for your transfer.



03. Upon confirming the transfer, we will promptly provide you with the required documents and details for your tax return.

Information on Tax Benefits (Donation Deduction)

Donations made to Keio University are considered contributions to specified public interest promotion organizations. This means they qualify for preferential treatment under the Income Tax Act (for individuals) and the Corporation Tax Act (for corporations) in the form of donation deductions or tax deductions. For comprehensive details, please visit the Keio University Office of Fund Raising website (https://kikin.keio.ac.jp/).

Acknowledging Generous Donors

With your consent, we can recognize your support by publishing your name and donated amount in the highly-regarded Keio University journal Mita Hyoron and on the Bio2Q website.

Inquiries

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