

Aiming for Social Implementation of Precision Medicine

The Research and Development Center for Precision Medicine (PMC) was established as Japan's first omics analysis center aiming to develop a \$1000 genome sequencing technology. Using state-of-the-art technologies in genome sequencing and mass spectrometry, the Center aims to provide analytic and translational approaches to provide precise diagnosis of cancers and various diseases in a data-driven/evidence-based approach.

The Center has been working with the Tsukuba Preventive Medicine Research Center, which offers a comprehensive medical examination utilizing the function of initiative prevention of medical research. In order to promote collaborations with leading domestic and international research institutions, the PMC is also active in cross-border multidisciplinary networking.

The Center aims to establish a research infrastructure for the implementation and realization of Precision Medicine, to improve/determine the best course of treatment for each individual.



Taka-Aki Sato, Ph.D.

Director, R&D Center for Precision Medicine

Mission

Introduce the next-generation ultra-high-throughput human whole genome sequencing system in the University of Tsukuba.

Form a platform for Precision Medicine by building partnerships across industry, academia, and government.

7 Core Laboratories

Medical Genomics

Cancer Genomics and Epigenomics

Congenital Metabolic Diseases

Precision Psychiatry

Morpho-informatics and Multi-omics

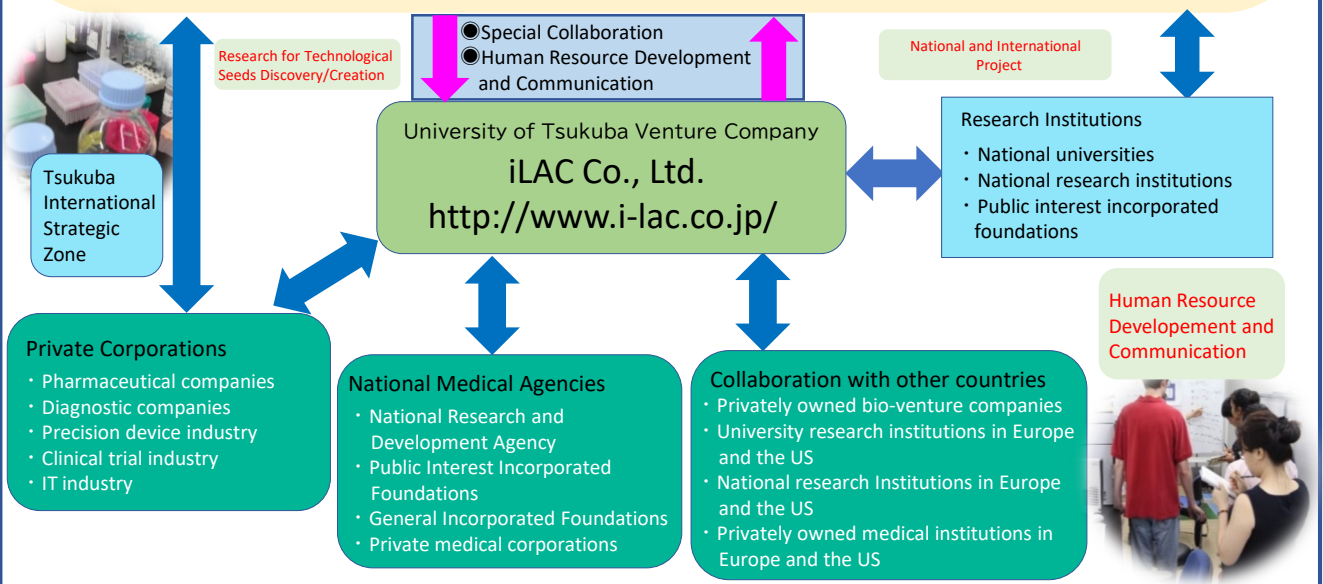
Food and Healthcare

Large-Scale Data Analysis

Innovative Medical Research Institute



Next Generation High-Throughput Human Whole-Genome Sequencing



IMAGINE THE FUTURE.

※About the R&D Centers

Since July 1, 2015, the R&D centers have been sequentially founded under the Headquarters for International Industry-University Collaboration. They are founded for promoting joint research and development in academic fields of high social demands, and organizing a cooperative research system. Their operation cost only comes from an external fund such as a collaborative or sponsored research with private sectors. As the mission of a national university, we are responsible for education, research and social contribution. And the R&D centers are the new body which undertakes a role of social contribution. We are continuously supporting their centers and developing more R&D center of other fields in the future.