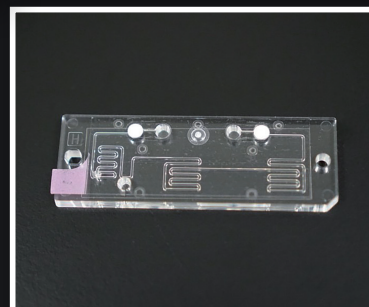
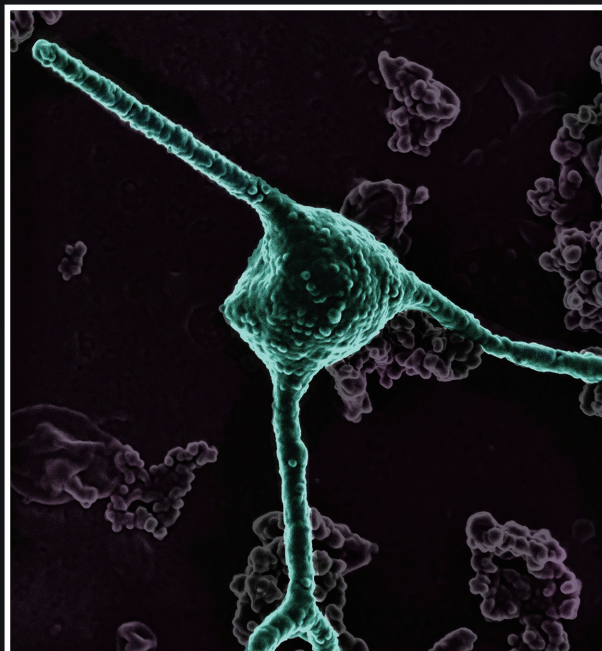
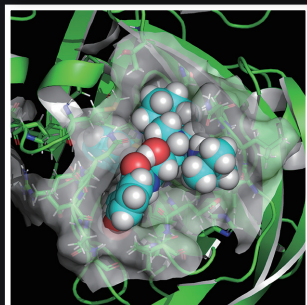
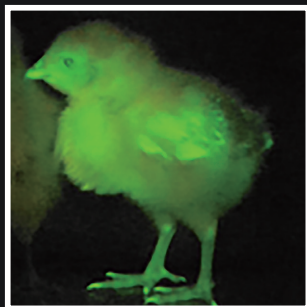


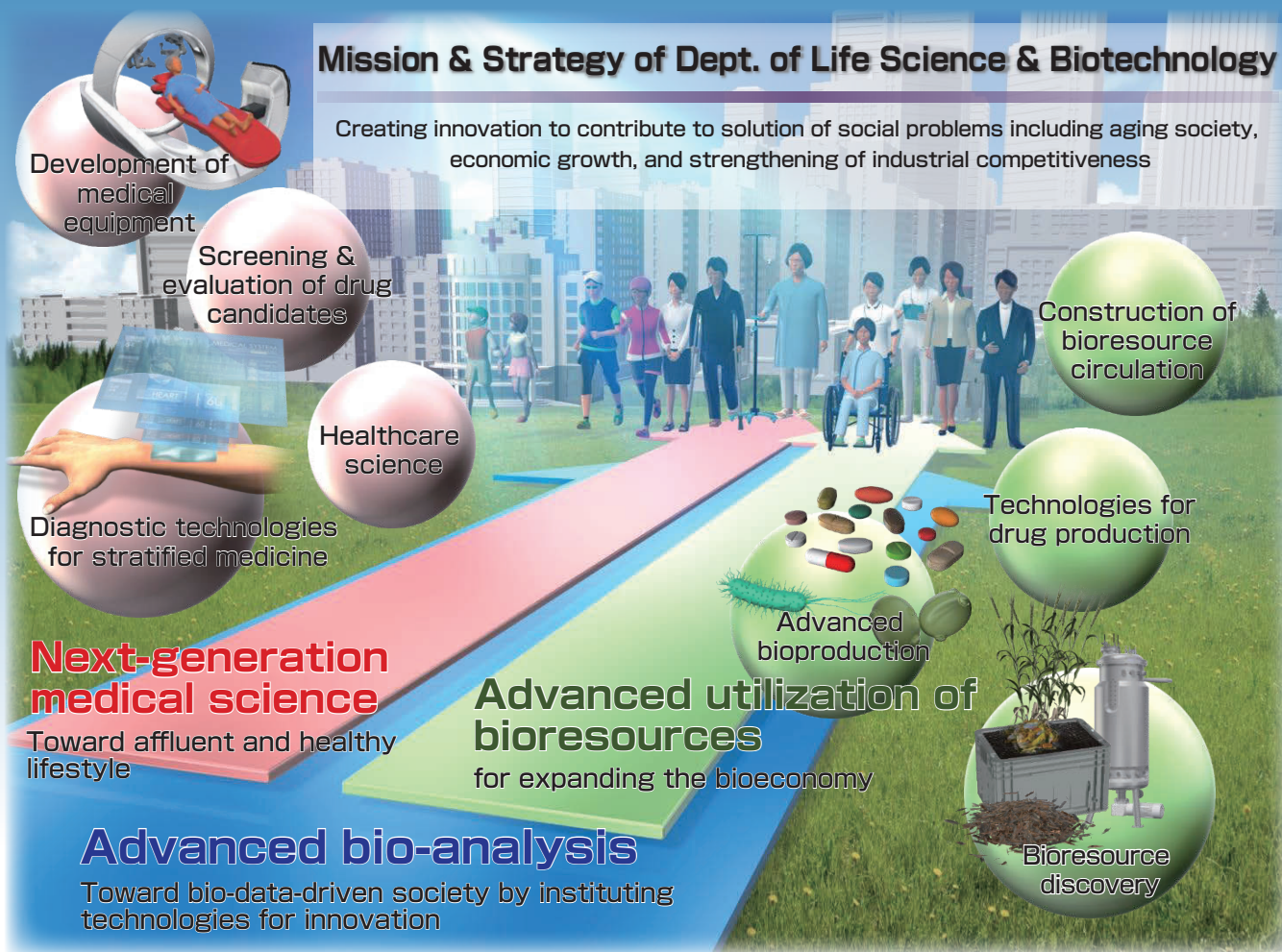
National Institute of Advanced Industrial Science and Technology

## Department of Life Science and Biotechnology

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[https://www.aist.go.jp/aist\\_e/dept/en\\_dlsbt.html](https://www.aist.go.jp/aist_e/dept/en_dlsbt.html)

## Executives



Director General

Dr. TAMURA Tomohiro



Assistant Director General

Dr. KAMAGATA Yoichi



Deputy Director General

Dr. KAMEYAMA Kimihiko

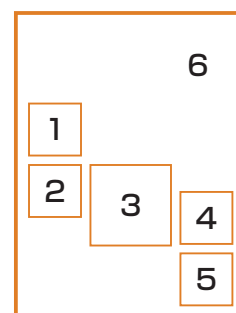


Director,  
Research Planning Office

Dr. CHIBA Yasunori

## Cover images:

1. Genetically modified chick expressing EGFP through integration of a transposon expression system (**Dr. OISHI Isao**)
2. Repositioning of approved drugs as candidates of COVID-19 therapeutic agents by in silico screening (**Dr. HIROKAWA Takatsugu**)
3. The first look at an "archaeon" closely related to our ancestor - a living window into our origin (**Dr. Masaru K. NOBU**)
4. High-sensitivity blood test through microchip-mediated measurement on a smartphone (**Dr. FUCHIWAKI Yusuke**)
5. Leaps in speed and size in gene detection - rapid real-time PCR on a micro-channel chip (**Dr. NAGAI Hidenori**)
6. Stem cross-section of a plant successfully genetically engineered to enhance lignocellulose production (**Dr. MITSUDA Nobutaka**)



# Research Institutes

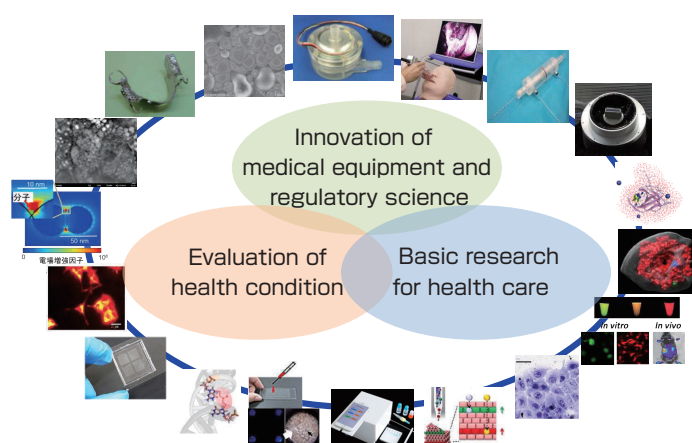
## Health and Medical Research Institute

Location; Shikoku and Tsukuba

Extension of healthy life expectancy could be a universal desire of all mankind and a key issue for achieving a sustainable society. We would like to contribute to the health via engineering approach, such as medical-engineering collaboration and integrated and interdisciplinary research.



Director  
Dr.TATSU Yoshiro



<https://unit.aist.go.jp/hmri/en/index.html>

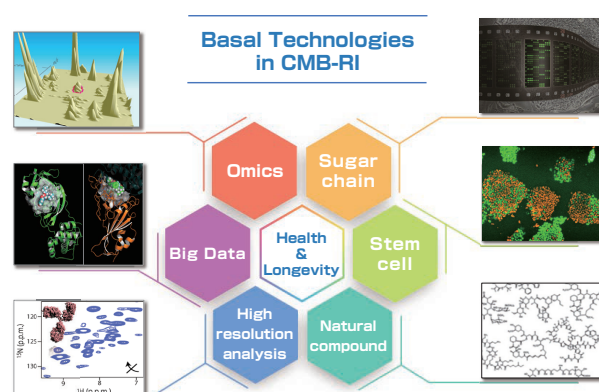
## Cellular and Molecular Biotechnology Research Institute

Location; Tokyo Waterfront and Tsukuba

Living organisms consist of cells that are smallest unit of life and yet work by many unknown molecular mechanisms. By elucidating the molecular mechanisms of cells and applying the knowledge as basic technologies, we aim to provide the society with state-of-the-art technologies in areas ranging from drug discovery, medicine to health care.



Director  
Dr.MIYAZAKI Koyomi



<https://unit.aist.go.jp/cmb5/en/index.html>

## Biomedical Research Institute

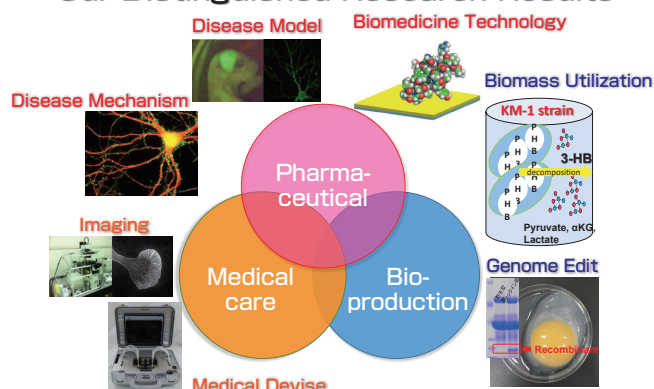
Location; Kansai and Tsukuba

Biomedical Research Institute aims not only to solve social issues through research and development, especially to meet social needs related to health and medical care, but also to contribute to the realization of a healthy and long-lasting society by promoting human resource development through research and development.



Director  
Dr.ONISHI Yoshiaki

### Our Distinguished Research Results



<https://unit.aist.go.jp/bmd/en/>

## Bioproduction Research Institute

Location; Hokkaido and Tsukuba

We aim to achieve an eco-friendly, sustainable society as well as healthy and safe living through "bioproduction systems" in transgenic plants and recombinant microorganisms.



Director  
Dr.SUZUKI Kaoru



[https://unit.aist.go.jp/bpri/index\\_e.html](https://unit.aist.go.jp/bpri/index_e.html)



# Laboratories

## AIST-Waseda University Computational Bio Big-Data Open Innovation Laboratory (CBBBD-OIL)

CBBBD-OIL aims to elucidate mechanisms of biological phenomena in a collaborative effort with Waseda University, which accumulates huge biological data depending on the latest experimental technologies, and has advanced mathematical methods.

## AIST-Osaka University Advanced Photonics and Biosensing Open Innovation Laboratory (PhotoBIO-OIL)

PhotoBIO-OIL was established to integrate AIST's cutting-edge technologies in object manipulation with Osaka University's state of the art photonics technologies in bio-analysis.

## New-Generation Medical Treatment and Diagnosis Research Laboratory

Our research laboratory is a virtual laboratory and consists of researchers specializing in medical treatment and diagnosis across five research domains in AIST. We aim to promote active aging for the achievement of the lifelong-active society.

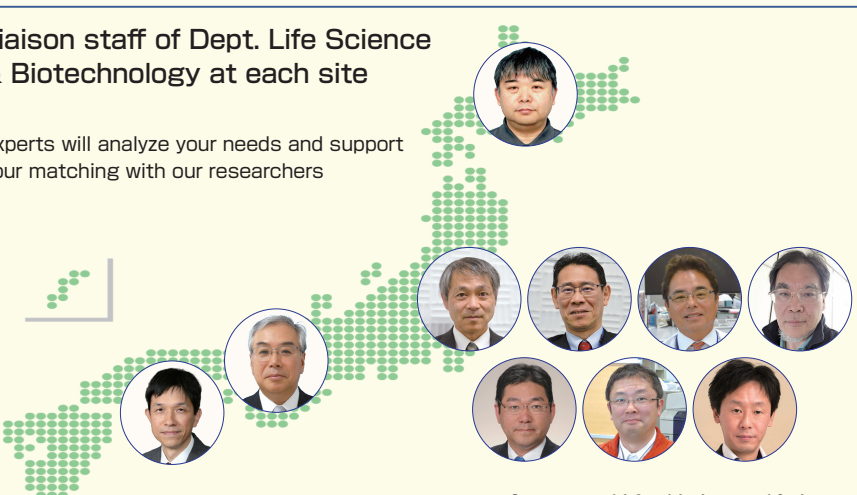
## Be Our Partner!

AIST's mission is to continuously create outstanding technology and bring it to society. Recently, business opportunities that have expanded across the world's industrial structures have also been rapidly changing, as can be seen in trans-boundary alliances and the appearance of new types of business. As a result of globalization, issues that were previously recognized at local levels, including environmental pollution, the depletion of energy resources, the rapid growth and aging of populations, and infectious diseases, are now becoming global issues. In order to accomplish our mission under such economic conditions, a global perspective is essential.

AIST actively promotes collaborative work with leading companies, research institutions, and universities worldwide. AIST believes its important role for the future is to contribute to innovation driven by science and technology, which will lead to the creation of new value, not only benefitting Japan and partner countries, but also moving towards the sustainable development of the world.

**Liaison staff of Dept. Life Science  
& Biotechnology at each site**

Experts will analyze your needs and support  
your matching with our researchers



Contact: [life-liaison-ml@aist.go.jp](mailto:life-liaison-ml@aist.go.jp)