

In 2020, Okayama University Medical School will celebrate the 150th anniversary.

Practice and Spirit, leading to Future History of Okayama University Medical School

- 1870 The Okayama clan founded the Medical Training Place with a large hospital, aiming at the progress of medicine.
- 1880 The Medical Training Place was superseded by the Okayama Prefectural Medical School.
- 1888 The Okayama Prefectural Medical School was superseded by the Third Higher Middle School Medical Faculty.
- 1889 The first lecture meeting of the Okayama Medical Association was held and the Journal of Okayama Medical Association was published.
- 1901 The medical school was separated from the Third Higher Middle School and became independent as the Okayama Medical Specialty School.
- 1910 Dr. Sahachiro Hata synthesized "Salvarsan 606" in a joint effort with Dr. Ehrlich and developed the world's first chemotherapy.
- 1922 The Okayama Medical Specialty School was superseded by the Okayama Medical College.
- 1923 *The Great Kanto Earthquake occurred.*
- 1945 *Most of the wooden buildings in the college were burnt out by the Okayama air raids. The WWII ended.*
- 1949 The Okayama Medical College was superseded by Okayama University Medical School.
- 1958 The New Medical Curriculum (so-called Okayama Method, that is, small-group clinical education) started.
- 1964 *The Tokyo Olympic Games were held.*
- 1970 The 100th Anniversary of the Medical School was celebrated.
- 1975 *The Sanyo Shinkansen Line was fully opened.*
- 1987 *Dr. Susumu Tonegawa received Nobel Prize in Physiology or Medicine.*
- 1995 *The Great Hanshin Awaji Earthquake occurred.*
- 1998 The Japan's first living-donor lobar lung transplantation was succeeded at the Okayama University Hospital.
The School of Health Sciences Okayama University was reorganized as the Faculty of Health Sciences, Okayama University Medical School.
- 1999 The Japan's first gene therapy for lung cancer started at the Okayama University Hospital.
- 2003 The University Medical Hospital and the University Dental Hospital were integrated into the University Hospital of Medicine and Dentistry.
- 2004 With the implementation of the Incorporated National University Act, the Okayama University was reorganized as the National University Corporation Okayama University.
- 2005 The Graduate School of Medicine and Dentistry and the Graduate School of Natural Science (Pharmacy) were integrated into the Graduate School of Medicine, Dentistry and Pharmaceutical Sciences.
- 2009 The University Hospital of Medicine and Dentistry was renamed the Okayama University Hospital.
- 2011 *The Great East Japan Earthquake occurred.*
- 2012 *Dr. Shinya Yamanaka received Nobel Prize in Physiology or Medicine.*
- 2013 The Okayama University Hospital was designated as a disaster base hospital and an advanced medical emergency and critical care center.
The Okayama University Hospital was designated as a core clinical research hospital by the Ministry of Health, Labour and Welfare.
The Community Health Human Resources Center Okayama (commonly called the Muscat Cube) was founded.
The Junko Fukutake Hall (commonly called JHall) was completed.
Okayama University was selected for the "Program for Promoting the Enhancement of Research Universities" by the Ministry of Education, Culture, Sports, Science and Technology.
- 2014 The Graduate School of Medicine, Dentistry and Pharmaceutical Sciences was selected as a "Translational research accelerating network program" by the Ministry of Education, Culture Sports, Science and Technology.
- 2015 Okayama University "PRIME Program" was selected for the "Top Global University Project" by the Ministry of Education, Culture, Sports, Science and Technology.
- 2020 *The Tokyo Olympic Games will be held.*
The Okayama University Medical School will celebrate the 150th anniversary.

Okayama University Hospital Center for Innovative Clinical Medicine

2-5-1 Shikata-cho, Kita-ku, Okayama 700-8558, Japan
[TEL] 81-86-235-6503 [FAX] 81-86-235-6505
[E-mail] ouh-csnw@adm.okayama-u.ac.jp



The future of Okayama University



OKAYAMA
UNIVERSITY



An important part in the
"Project of Translational and Clinical Research Core Centers (2016)"
under the jurisdiction of the Japan Agency
for Medical Research and Development (AMED)

Concept of what Okayama University to be like in the future.

Okayama University continues to contribute to the achievement of a healthy longevity society as a base of innovative medical research and development.

Strengthening Academic Research Organization (ARO) Function, Capacity to develop Research Seeds and Intellectual Property Strategic Management

Okayama University has set up the system to promote seamlessly the development process of innovative drugs and medical devices from basic research to practical implementation. Our system is continuously evolving to quickly respond to the innovation of medical technology.

"We will contribute to the progression of human society through the creation of high-level intelligence (research) and the accurate inheritance of knowledge (education and contribution to society)." This is the abiding philosophy of Okayama University.

Since 2014, Okayama University had been selected as "a core clinical research hospital" and "a translational research support center," and since 2015, the university has played a role in an integrated project under the charge of the Japan Agency for Medical Research and Development (AMED), entitled "Project of Translational and Clinical Research Core Centers."

Unifying the Operations of Okayama University Hospital and Okayama University Graduate Schools

We unify the operations of the university hospital and the graduate schools from the early stage of research/development, to put development seeds to clinical use as soon as possible.

Coordination by the "Organization for Research Promotion & Collaboration" speeds up prioritization and decision making, and the "Center for Innovative Clinical Medicine" manages the quality control system which is standardized across the university hospital and the graduate schools.

Biweekly implementing of "Plan-Do-Check-Action (PDCA)" on the

entirety of the unified organization elicits consistent high-quality results.

From various viewpoints, such as research, hospital operation and management of conflict of interest, the "Bioethics Committee" adopts a strict and highly transparent audit process.

The Center for the Innovative Clinical Medicine

The Center for the Innovative Clinical Medicine is the management center which comprehensively plans and promotes clinical researches, clinical trials, translational researches and the creation of medical devices.

The Center develops new medical therapies (regenerative medicines, gene therapies, cellular therapies, most advanced medical devices, etc.) and realizes these into clinical use.

The Center offers world-leading, innovative medical care and excellent medical professionals, through the use of the global medical network of the Okayama University Hospital.

Organization for Research Promotion and Collaboration of Industry-Academia-Government in Okayama University

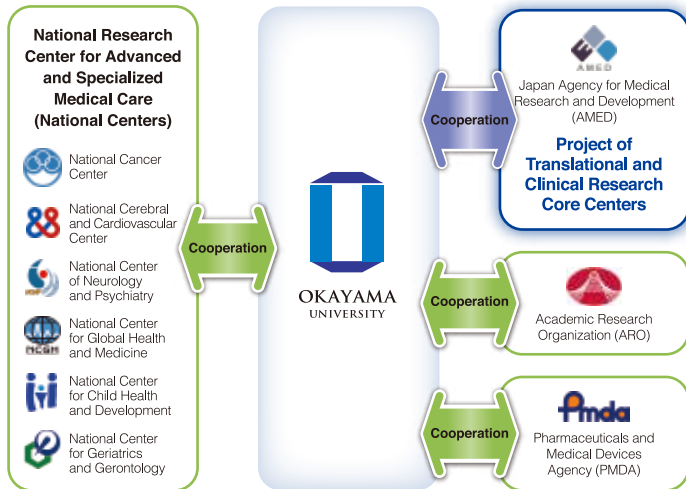
The mission of the Organization is to promote academic research in a broad range of fields, to manage and utilize the intellectual properties that result from research in the university, and contribute to the society through collaboration between industries, academia and governments.

By creating "an intellectual creative cycle between society and academia," the Organization aims to help not only local but also nation-wide businesses increase the international competitiveness, as well as to activate and advance research activities in Okayama University.

Seamlessly Promoting the Creation of New Industries toward the Realization of Clinical Application

Networking 83 hospitals in the west-Japan region

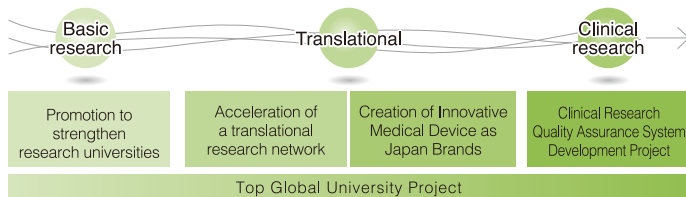
- Improving the environment for the usage of disease information and patient data obtained in the hospitals participating in the Consortium
- Strengthen educational program in undergraduate and graduate schools
- Aggressively approaching to foreign pharmaceutical companies and research institutions



Feature of Okayama University

Research institution with all 5 cores functions

Okayama University was selected for the following 5 services and functions as a research institution which seamlessly links basic research to clinical research.



Enhancing the skill level in 83 hospitals

Okayama University aims to promote the development of drugs and medical devices, and accelerate clinical trials by establishing the networks to specific to diseases (e.g., intractable diseases, rare diseases, pediatric disease) through the use of the foundation of the Mid/West Japan Clinical Study Consortium.

Hospitals with 200 or more beds
83 hospitals / 33,000 beds
 A large-scale hospital network in Japan

Recruitment of study patients in 32 affiliated hospitals

Progressive approaches will be made in developments and clinical studies utilizing the mega-hospital network. In the 32 affiliated hospitals participating in the lung cancer group of the Chugoku and Shikoku region, close to 1,000 registries are being formed. Recruitment for clinical study patients will be conducted through these registries.

Preparing a Registry of Lung Cancer Patients in the Chugoku and Shikoku Region

Clinical study subjects are recruited from 32 hospitals participating in the Lung Cancer Group in the Chugoku and Shikoku Region. The purpose of the subject recruitment is to collect and manage high-quality information on cases and corresponding clinical information, which will be used in clinical studies.

Planning and Promotion of the Dental Education Reform Consortium

Okayama University Hospital is growing seeds associated with dental diseases while coordinating with the “Dentistry Education Reform Consortium” which is composed of 11 universities nationwide. We are promoting researches regarding “Maintenance of a normal oral cavity function,” “Improving the medication in relating area between oral diseases and systemic diseases,” and “Dental care responding to the super-aging society.”

Promoting the Mid/West Japan Genomic Medicine Consortium Plan

Okayama University Hospital organizes and promotes a consortium to provide appropriate and quick medical care based on disease-related gene sequence analysis (clinical sequence). This consortium is beginning with Tottori University, Tokushima University and Okayama University.

Okayama University Biobank (Okadai Biobank)

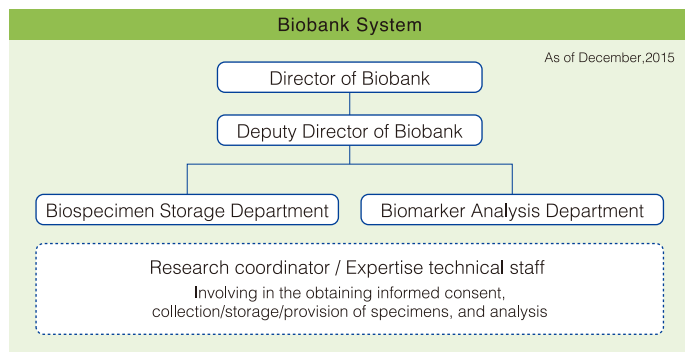
A biobank is a system in which biospecimens (e.g., blood, tissues, urine) donated by patients are stored and managed with the corresponding clinical information (e.g., the age, gender and medical history of the patients) in sets to use in medical research.



The materials stored (biospecimens and corresponding clinical information) are supplied to research institutions inside and outside Okayama University, with the objective of utilizing in medical research.

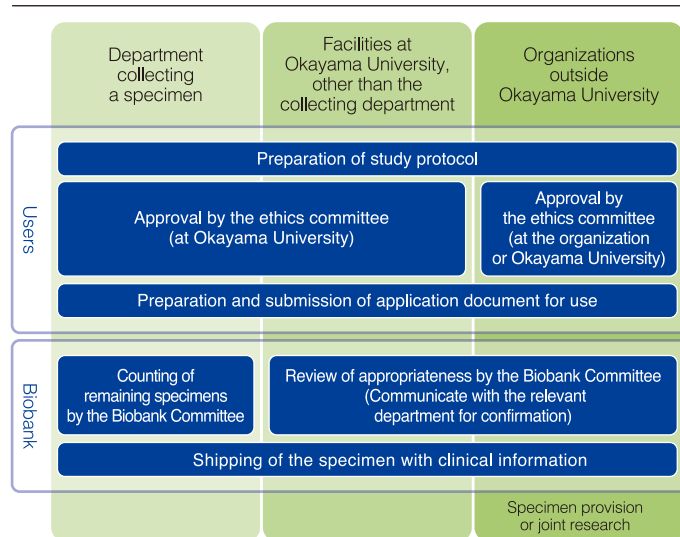
■ Current Development Status of Okayama University Biobank

- The biobank started full operation in July 2015.
- Characteristics: Taking the advantage of being a hospital-based biobank, the Okayama University Biobank interfaces with in-hospital systems such as automated medical records through, thereby allowing the provision of specimens attended by traceable clinical information.
- A "Rental Laboratory" style, without the precondition of joint research has been established.

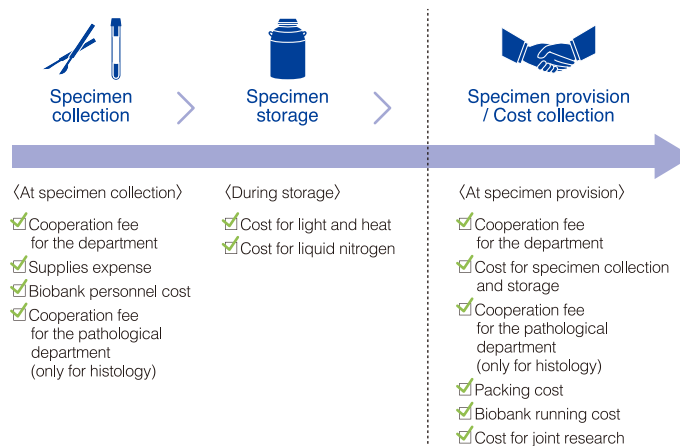


Future Activities Development

Operation Flow for Each Providing Specimen



Flow from Specimen Collection to Specimen Provision / Cost collection



Contact information



OKADAI BIOBANK

Okayama University Biobank

2-5-1 Shikata-cho, Kita-ku, Okayama-shi, Okayama 700-8558, Japan

[TEL] 81-86-235-6029 [E-mail] biobank@okayama-u.ac.jp

Drug Formulation Manufacturing / Preparation Laboratory

This laboratory is used to prepare drug formulations for clinical researches on gene therapies for the treatment of cancers (Telomelysin [a tumor-selective oncolytic adenovirus], Ad-REIC(Reduced Expression in Immortalized Cells) preparation). In the clinical trial with Ad-SGE-REIC (second generation of Ad-REIC) sponsored by Kyorin Pharmaceutical Co., Ltd., the laboratory prepares (including dilution) and stores the study drugs. The laboratory will be improved so that it can be used as a facility in which gene medicines/anti-cancer viral medicines are prepared and administered to patients in clinical studies (including multicenter/global clinical trials).

Cell Preparation Facility

In April 2003, Okayama University Hospital established the Center for Gene and Cell Therapy in compliance with a ministerial ordinance, which was then renamed "Exploratory Drug Development Office".

This facility is maintained and improved as GMP-compliant.

The center will be improved so that it can be used as a facility with improved CPC function in which cell therapy (transplantation) medicines are prepared and administered to patients in clinical studies (including multicenter/global clinical trials).



The external appearance of the facility

Non-clinical Study System

Non-clinical studies are addressed in the "Advanced Natural Science Research Center" which stays under the "Okayama Medical Innovation Center (OMIC)," an Okayama University-related industry-academia-government cooperative organization.

The system which allows for performing studies in departments and animal laboratories has been established. The animal laboratories cover studies using middle- to large-size animals.

Two toxicology expert employed as part-time instructors properly manage outsourcing studies.



PET/CT system for medium size animals

Information on Overseas Offices of Okayama University

In November 2015, Okayama University opened a field office in Silicon Valley (California, USA) known as the center of leading companies.

The office manages joint research agreements and licensing contracts with companies in North America for original seeds developed by Okayama University initiative.

We position the office as a base for globally presenting the results of our researches in various fields (biology, life science, medicine, dentistry, pharmacology, etc.) which are expected to create innovative seeds, based on outstanding research experience accumulated at Okayama University.

The setting up of an overseas office specifically addressing intellectual property is attracting attention as a unique attempt both inside and outside Japan.

Based on this office, we would like to create a network with universities around the office, including San Jose State University which has an exchange agreement with Okayama University, challenge joint researches involving Japanese companies and support the studying abroad and internship of students.



Opening Ceremony of Okayama University Office in Silicon Valley, the USA on November 13, 2015

Other overseas offices

- ★ Okayama University Office in Hue, Vietnam
- 🇨🇳 Okayama University Office in Changchun and Shenyang, China
- 🇮🇳 Collaborative Research Center of Okayama University for Infectious Diseases in India
- 🇬🇧 Okayama University Office in London, UK
- 🇲🇲 Ministry of Health - Myanmar, Department of Medical Sciences and Department of Medical Research

