

OVERVIEW | 2012

TOKYO MEDICAL AND DENTAL UNIVERSITY



Cultivating Professionals with Knowledge and Humanity

Cultivating Professionals with Knowledge and Humanity

Our daily work is dedicated to a word of gratitude and a smile of contentment from our patients and their family members.

In order to win the trust of people we serve we affirm that:

- We will do our utmost to gain advanced knowledge and skills in medicine.
- We will cultivate empathy for the suffering and sorrow that accompany disease, and will always maintain a strong sense of ethics.
- We will support all those who are engaged in education, research and medical service as they continue their journey to become true professionals with knowledge and humanity.

The above is the mission of TMDU, which we declare with humility and strive to achieve.

TMDU's Educational Philosophies

To provide students with a broad education and a rich sensibility

To educate creative people capable of diagnosing and solving problems independently

To train medical professionals with a rich international quality

The symbol of Tokyo Ikashika Daigaku (Tokyo Medical and Dental University) has the following meaning:



1. This symbol was designed to show the history of the development of Tokyo Medical and Dental University. Its shape represents the plum blossom, which is also the symbol of the neighboring shrine Yushima Tenmangu. Yushima Tenmangu is also known as Yushima Tenjin; Tenjin is the Shinto god of knowledge.

2. The center circle of this symbol, the core of the flower, was the emblem of the former Tokyo Koto Shikaigakko (Tokyo National School of Dentistry) and the five petals around the core show the present university which has developed from that school.
3. The five petals express the Faculty of Medicine, Faculty of Dentistry, College of Liberal Arts and Sciences, Institute of Biomaterials and Bioengineering, and Medical Research Institute, and these five petals, which join together to make the flower bloom, represent the activity of the university.
4. The bold outline of these petals suggests further development and progress in the future.

Our university logo mark was designed based on the initial letters of Tokyo Medical and Dental University. It has following meanings:

1. By connecting the letters M and D, the logo mark implies fusion of Medicine and Dentistry.
2. Bold lines express confidence and strength which are the heritage of our university.

TMDU

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Cultivating Professionals with Knowledge and Humanity

Tokyo Medical and Dental University is unique among medical and dental universities in Japan in that we have two graduate schools, Medical and Dental Sciences and Health Care Sciences; four undergraduate faculties – Medicine, Dentistry, Health Care Sciences and Oral Health Care Sciences; two university hospitals; an undergraduate College of Liberal Arts and Sciences; and two research institutes, namely the Institute of Biomaterials and Bioengineering and the Medical Research Institute.

At TMDU we strive to produce scientists who are spirited and expend every possible effort to seek the unknown and use their knowledge in service to humanity. In addition, they must have intellectual curiosity about anything they might encounter, respect for the diversity of experiences they will have, and a broad mind that allows for flexibility.

With the above goals in mind, we determined “Cultivating Professionals with Knowledge and Humanity” as our

To provide students with a broad education and a rich sensibility

A teaching from the Discourses of Confucius holds that, “A scholar is not a vessel.” In this context a “vessel” is a device with a single purpose. Thus, scholars must not be specialists who have been trained for only one purpose. Instead, they need broad knowledge, wide experience, and rich sensibility so they can cope with diversity. Similarly, health care providers must not be vessels: they should not impose artificial limits on themselves.

In a dialogue recounted in the Discourses, one of Confucius’s disciples asked, “Is there any single word which can be a guide to conduct throughout one’s life?” To this the great thinker answered, “Thoughtfulness. Do to others as you would have them do to you.” Confucius meant that one had to be true to oneself while, at the same time, having the intellectual sympathy to be considerate of other people. The concept of “intellectual sympathy” is very important, as it means that a sympathy that is not merely composed of



mission statement. “Knowledge” consists of learning and techniques, and it is the axis of profession. “Humanity” encompasses education and sensitivity, and serves as a lubricant. The proper combination of these factors thus leads the way to becoming a professional, which we clearly see as a goal of our mission. In fact, medical care is an art woven by knowledge and humanity acting as weft and warp threads.

TMDU manifests three educational philosophies:

kindness or pity, but is rather a refined sentiment that is based on a broad education.

The ability to provide intellectual sympathy is the mark of a true health care professional. Certainly, when we treat our patients to the utmost of our abilities we can gain a sense of accomplishment. However, if we only do our best to treat patients, our actions can only result in a smug feeling of contented self-satisfaction.

Only when we see the joy of life restored to a patient or a family member of a patient can we be fully satisfied with our actions. To attain such a worthy accomplishment, we have to understand the pain a patient has and have sympathy for the patient’s surrounding situation, family circumstances, occupation, viewpoints, and other factors.

To become an ideal professional, then, we need to obtain a broad range of knowledge and diverse ways of thinking, and we must also cultivate a rich education, deep insight into human nature, high ethical standards, and a solid ability to explain what we do. A broad education rooted in liberal arts is thus necessary to become a true medical professional.

To educate creative people capable of diagnosing and solving problems independently

Practitioners of traditional Chinese medicine use a hundred-drawer chest. Medical students must make their own such chest, storing knowledge and techniques as they are learned. In actual clinical and research situations, these drawers can be opened in various combinations. In time, you will learn new techniques and obtain new knowledge as you perfect your techniques. Sometimes you may refill your chest; other times you may need to make new drawers. This development will continue throughout your life.

Acquiring the necessary knowledge and techniques will help you identify and solve problems. In addition, acquiring a concrete way of thinking is indispensable. In the field he founded, critical philosophy, Kant said that knowledge can start with experience, but, without the use of thoughtful reflection, it may become blind. His idea echoes the teachings of Confucius.

The Master said, in the Discourses of Confucius, “If one learns from others but does not think, one will be bewildered. If, on the other hand, one thinks but does not learn from others, one will be in peril.” When you pursue academ-

To train medical professionals with a rich international quality

We aim to nurture medical professionals who will be international leaders in clinical and research fields. However, one can become an international citizen only after knowing one’s own culture first.

At TMDU, we offer various study abroad scholarships in the hope that students can experience other cultures, while keeping their own culture.

First of all, every student in our medical and dental departments has the chance to be one of the 12 recipients who will go to a country of their choice under the short-term study abroad scholarship system. In addition, TMDU will be sending 14 students to our 3 research centers

Self Improvement

How wonderful it is that the more you review what you have learned, the deeper you understand it! By learning received wisdom from books and those who have mastered their arts, and constantly reviewing what you have learned, naturally you’ll be ready to learn from your experiences. This may lead you to having confidence in what you can do, being able to challenge accepted wisdom and being ready to embrace new findings. How enjoyable this would be! This is what learning should be. If you train yourself this way, friends and followers will come to visit you from afar. It would be incredibly wonderful to be in such a position, wouldn’t it? From your discussions with your visitors, from

ic training, try to learn as many things as possible. Endeavor to thoroughly digest what you have learned, and then make efforts to apply what you have learned to solve problems around you. If you can do all these things, you will be able to understand the spirit of the Discourses. In short, as a person who pursues science, you must build your character to the point where you will be able to identify and solve problems independently.

Regardless of how much knowledge and information you acquire, unless you think about how it can be utilized in your life, that hard-won knowledge and information may turn out to be useless. At the other extreme, if you base your judgment only on cold reasoning, you may become self-righteous and make mistakes due to hubris or narrow-mindedness. Thus, only through thoughtful reflection and thinking can you appropriately solve problems.

Accordingly, a university’s mission is not to fill students with knowledge, but rather to teach them how to learn. You are therefore required to study liberal sciences as well as your specific field of science. By doing your best to identify problems and ask questions you can become an independent leader and a first-class, full-fledged professional. Learning and thoughtful thinking form a perfect pair.

abroad: the Emerging/Reemerging Infectious Disease Research Center at the Noguchi Memorial Institute for Medical Research (NMIMR), in Ghana, the Latin America Collaborative Research Center (LACRC), in Chile, and the CU-TMDU Research and Education Collaboration Center in Thailand.

Each year we send 8 sixth-year Faculty of Medicine students to Harvard University for clinical training. We also send 4 fourth-year medical students to Imperial College London (UK), from whom we receive 4 exchange students each year.

Furthermore, we also encourage our graduate students to pursue research abroad. We have already supported 8 students through the recently offered scholarship for study abroad, and 3 students used it in the 2011–12 academic year.

In this way, we encourage and support students and young researchers to pursue study and research abroad.

everyone present sharing their truths, you will wake to a completely new understanding of the world. How tremendous! It is not until you reach this point that you can really understand the true meaning of Confucius’ statement, “Even though others may not understand you, do not get upset about it.” That is, once you reach a confident level of knowledge, you will not easily get upset with others or blame them for not understanding you. Instead, you will behave accordingly and appropriately, despite a lack of recognition for what you have attained.

Wouldn’t this behavior describe a true medical professional? We can thank Confucius for making clear the importance of adhering to one’s knowledge-based beliefs and sticking to them all the way through, regardless of what other people might think of you.

Brief History

Oct. 12, 1928	· Tokyo National School of Dentistry was founded.	Sep. 1973	· Medical Research Institute was established.
Apr. 1944	· Tokyo Medical and Dental College was established.	Apr. 1989	· School of Allied Health Sciences was established.
Aug. 1946	· Tokyo Medical and Dental College was established. · Tokyo Medical and Dental University (The Former System) was established.	May. 1989	· Laboratory for Biomedical Analysis was established. (closed in May. 1996)
Jun. 1949	· Medical Hospital and Dental Hospital were established.	Apr. 1992	· Dept. of Maxillofacial Rehabilitation established as a Core Departmente.
Apr. 1951	· Tokyo Medical and Dental University (The New system), Faculty of Medicine and Faculty of Dentistry were established. · Research Institute for Dental Materials was established. · School of Nursing was established. (closed in Mar. 1991) · School for Dental Hygienists was established. (closed in May. 2005)	Apr. 1993	· Medical Research Division (Health Care Sciences) was established. · Human Gene Sciences Center was established. (reorganized in Apr. 2010)
Apr. 1952	· School for Dental Technicians was established.	Jan. 1995	· Information Center for Medical Sciences was established. (reorganized in Apr.2010)
Apr. 1955	· Medical Research Division was established. · Dental Research Division was established. · Premedical and Predental Course was established in Faculty of Humanities and Sciences, University of Chiba. (closed in Mar. 1958)	May. 1996	· Instrumental Analysis Research Center for Life Science was established. (reorganized in Apr.2003)
Apr. 1958	· Premedical and Predental Course was established at Kounodai Annex.	Apr. 1998	· General Isotope Center was established. (reorganized in Apr. 2003)
Apr. 1962	· School of Medical Technology was established. (closed in Mar. 1973)	Apr. 1999	· Graduate School was established. · Institute of Biomaterials and Bioengineering was established.
Apr. 1965	· College of Liberal Arts and Sciences was established.	Apr. 2000	· Graduate School of Medical and Dental Sciences was established. · Graduate School of Allied Health Sciences was established. · International Student Center was established. (reorganized in Mar. 2009)
Apr. 1966	· Research Institute for Dental Materials renamed Institute for Medical and Dental Engineering.	Apr. 2001	· Graduate School of Health Care Sciences was established.
Apr. 1970	· Health Service Center was established.	Apr. 2002	· Center for Education Research in Medicine and Dentistry was established.
Apr. 1972	· Animal Research Center was established. (closed in May. 1991)	Apr. 2003	· School of Biomedical Science was established. · Biomedical Science PhD Program was established. · Research Center for Frontier Life Science was established. (reorganized in Apr. 2010)
		Sep. 2003	· Intellectual Property Division was established. (reorganized in Apr. 2011)

Principals and Presidents

Tokyo National School of Dentistry

Shimamine Toru | Oct. 13, 1928–Mar. 31, 1944

Tokyo Medical and Dental College

Shimamine Toru | Apr. 1, 1944–Feb. 9, 1945

Tokyo Medical and Dental College

Nagao Masaru | Feb. 10, 1945–Feb. 19, 1945

Tokyo Medical and Dental College

Nagao Masaru | Feb. 20, 1945–Mar. 31, 1950

Tokyo Medical and Dental University

Nagao Masaru | Aug. 27, 1946–Oct. 4, 1946

Tokyo Medical and Dental University (The Former System)

Nagao Masaru | Oct. 5, 1946–Mar. 31, 1951

Tokyo Medical and Dental University (The New System)

Nagao Masaru | Apr. 1, 1951–Jun. 30, 1961

Okada Masahiro | Jul. 1, 1961–Feb. 29, 1968

Tokyo Medical and Dental University

Ota Keizo | Mar. 1, 1968–Mar. 15, 1968

Tokyo Medical and Dental University

Ota Keizo | Mar. 16, 1968–Oct. 8, 1969

Tokyo Medical and Dental University

Shimizu Fumihiko | Oct. 9, 1969–Sep. 17, 1970

Tokyo Medical and Dental University

Shimizu Fumihiko | Sep. 18, 1970–Sep. 17, 1974

Katsuki Yasuji | Sep. 18, 1974–Jul. 31, 1977

Yoshida Hisashi | Aug. 1, 1977–Jul. 31, 1985

Kano Rokuro | Aug. 1, 1985–Jul. 31, 1991

Yamamoto Hajime | Aug. 1, 1991–Jul. 31, 1995

Suzuki Akio | Aug. 1, 1995–Mar. 31, 2004

National University Corporation Tokyo Medical and Dental University

Suzuki Akio | Apr. 1, 2004–Mar. 31, 2008

Ohyama Takashi | Apr. 1, 2008–

Organization

Management Structure



Associate Managing Trustees

Karasuyama Hajime
Planning / International Exchange

Kondo Hiroshi
General Affairs / Finance

Chiba Tsukasa
Education

Kitajima Shigetaka
Research

Mizusawa Hidehiro
Research

Miyasaka Nobuyuki
Medical Treatment

Shimada Masahiko
Dental Treatment

Executive Advisers to the President

Kawaguchi Yoko
Planning / International Exchange

Tanaka Yujiro
Education

Omura Ken
Education

Taga Tetsuya
Research

Azuma Miyuki
Entrance Exam

Morio Tomohiro
Entrance Exam and High-School University Collaboration

Sugihara Izumi
Evaluation

Iseki Sachiko
Evaluation

Akazawa Chihiro
Evaluation

Nakashima Hikaru
Evaluation

Mitsubayashi Kohji
Evaluation

Matsuura Masato
Complaint Consultation and Student Support

Eishi Yoshinobu
Complaint Consultation and Student Support

Administrative Council

Deliberate on management issues

Internal Committee

Ohyama Takashi
President

Ohno Kikuo
Trustee (Planning / International Exchange)

Ito Isao
Trustee (General Affairs / Finance / Facilities)

Suda Hideaki
Trustee (Education)

Morita Ikuo
Trustee (Research)

Yoshizawa Yasuyuki
Trustee (Medical and Dental Treatments)

External Committee

Idei Nobuyuki
Founder & CEO, Representative Director,
Quantum Leaps Corporation

Inoue Takayoshi
Chairperson, Society for the Promotion of
the University of the Air

Koike Morio
Trustee, Educational Foundation Bunkyo Gakuen,
Director, Shuwakai Medical Corporation,
Professor Emeritus

Seshimo Akira
Aioi Nissay Dowa Insurance Co., Ltd,
Special Adviser

Miura Fujio
Director, Takahashi Orthodontic Office,
Professor Emeritus

Watanabe Tsuneo
Chairman, Board of Trustees,
Editor-in-Chief, The Yomiuri Shimbun Holdings

Education and Research Council

Deliberate on educational and research issues

Ohyama Takashi
President

Ohno Kikuo
Trustee (Planning / International Exchange)

Ito Isao
Trustee (General Affairs / Finance / Facilities)

Suda Hideaki
Trustee (Education)

Morita Ikuo
Trustee (Research)

Yoshizawa Yasuyuki
Trustee (Medical and Dental Treatments)

Sasaki Sei
Vice-President (Overall Management)

Tagami Junji
Dean, Graduate School of Medical and
Dental Sciences
Dean, Faculty of Dentistry

Inoue Tomoko
Dean, Graduate School of Health Care Sciences

Kagechika Hiroyuki
Dean, Biomedical Science PhD Program

Yuasa Yasuhito
Dean, Faculty of Medicine

Chiba Tsukasa
Dean, College of Liberal Arts and Sciences

Hanawa Takao
Director, Institute of Biomaterials
and Bioengineering

Kitajima Shigetaka
Director, Medical Research Institute

Kinoshita Atsuhiko
Director General, Institute for Library and
Media Information Technology

Miyasaka Nobuyuki
Director, Medical Hospital

Shimada Masahiko
Director, Dental Hospital

Mizusawa Hidehiro
Professor, Graduate School of Medical and
Dental Sciences (Medical Division)

Yamaguchi Akira
Professor, Graduate School of Medical and
Dental Sciences (Dental Division)

Matsuura Masato
Professor, Graduate School of Health Care Sciences

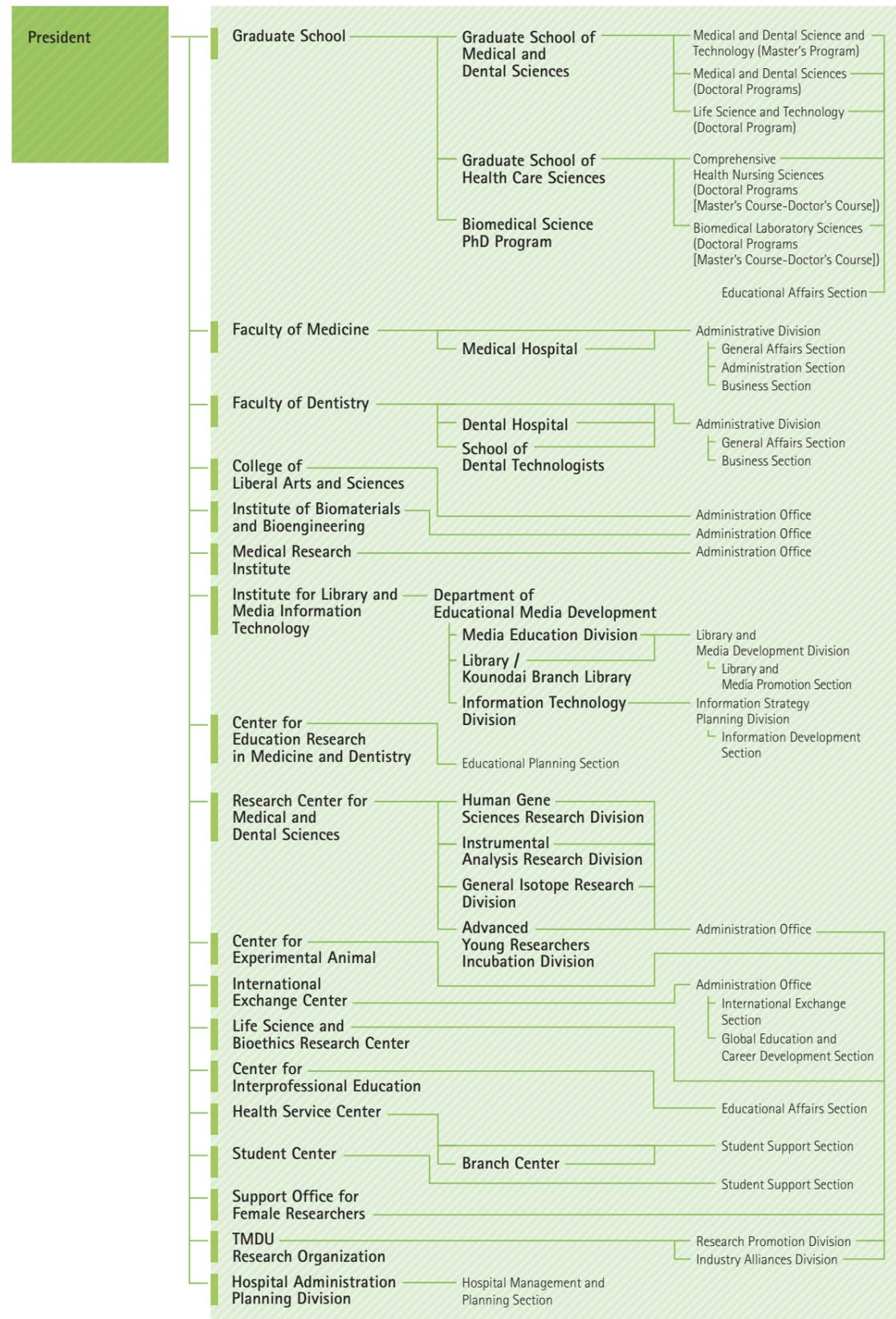
Nara Masayuki
Professor, College of Liberal Arts and Sciences

Kishida Akio
Professor, Institute of Biomaterials and
Bioengineering

Ishino Fumitoshi
Professor, Medical Research Institute

Organization

Education and Research Structure



Graduate School

Tagami Junji
Dean, Graduate School of Medical and Dental Sciences

Yuasa Yasuhito
Vice Dean, Graduate School of Medical and Dental Sciences

Kagechika Hiroyuki
Vice Dean, Graduate School of Medical and Dental Sciences

Inoue Tomoko
Dean, Graduate School of Health Care Sciences

Kagechika Hiroyuki
Dean, Biomedical Science PhD program

Faculty of Medicine

Yuasa Yasuhito
Dean, Faculty of Medicine

Mizusawa Hidehiro
Director, School of Medicine

Matsuura Masato
Director, School of Health Care Sciences

Miyasaka Nobuyuki
Director, Medical Hospital

Faculty of Dentistry

Tagami Junji
Dean, Faculty of Dentistry

Moriyama Keiji
Director, School of Dentistry

Shinada Kayoko
Director, School of Oral Health Care Sciences

Shimada Masahiko
Director, Dental Hospital

Igarashi Yoshimasa
Principal, School of Dental Technologists

College of Liberal Arts and Sciences

Chiba Tsukasa
Dean, College of Liberal Arts and Sciences

Institute of Biomaterials and Bioengineering

Hanawa Takao
Director

Medical Research Institute

Kitajima Shigetaka
Director

Institute for Library and Media Information Technology

Kinoshita Atsuhiko
Director General, Institute for Library and Media Information Technology

Kinoshita Atsuhiko
Director, Media Education Division

Kinoshita Atsuhiko
Director, Library

Kuroyanagi Kazuyo
Director, Kounodai Branch Library

Takase Kozo
Director, Information Technology Division

Center for Education Research in Medicine and Dentistry

Nara Nobuo
Director

Research Center for Medical and Dental Sciences

Nakamura Masataka
Director

Center for Experimental Animal

Kanai Masami
Director

International Exchange Center

Morio Ikuko
Director

Life Science and Bioethics Research Center

Yoshida Masayuki
Director

Center for Interprofessional Education

Tanaka Yujiro
Director

Health Service Center

Miyake Shuji
Director

Student Center

Taniguchi Hisashi
Director

Support Office for Female Researchers

Taniguchi Hisashi
Director

TMDU Research Organization

Morita Ikuo
Officer, TMDU Research Organization

Morita Ikuo
Senior Director, Research Promotion Division

Mizutani Shuki
Senior Director, Industry Alliances Division

Hospital Administration Planning Division

Kondo Hiroshi
Director

Graduate Schools

Graduate School of Medical and Dental Sciences

Human Resource Development Goals

Master's Program

This course is rooted in a systematic curriculum developed through the fusion of numerous fields, with the primary focus on medicine, dentistry, and life science and technology. The goals of the course are to inspire mutual cooperation in the various domains of life sciences and to develop capable educators, researchers, technicians, and other professionals in medicine, dentistry, and life science and technology who bring extensive knowledge and high ethical standards regarding human health and welfare to their work.

In detail, the Master of Medical Administration Course strives to effectively address today's social needs pertaining to medical services, based on a curriculum structured to

develop professionals who will excel in positions of leadership. Specifically, the course is designed to train individuals who will help establish social systems that supply increasingly efficient and superior patient-focused health care through the fields of medical administration and policy.

Master's Program

Medical and Dental Science and Technology

Medical and Dental Science and Technology,
Master of Medical Administration Course

Doctoral Programs

Medical and Dental Sciences

This course is devoted to developing researchers who are well-versed in specialized knowledge that spans both medicine and dentistry and who act as global leaders and cooperate closely with their counterparts in other fields; educators who are rich in spirit and have highly developed expertise in devising and implementing effective educational strategies; highly specialized medical professionals who have uncompromising ethical views and a passionate interest in research; and opinion leaders who will act as pioneers in a new and more progressive era.

Life Science and Technology

This program is designed to develop professionals who

have comprehensive knowledge in the field of life science and technology. These individuals will attain high degrees of specialization and problem-solving abilities and bring their impressive educational background and global perspective to interdisciplinary fields positioned to fuse the various domains of life science and technology with disease research. In particular, the envisioned outcomes include the training of researchers who have advanced capabilities in the fulfillment of research objectives, educators who achieve distinguished levels of scholarship and possess an exceptional sense of humanity, and professionals who have the high-caliber management skills required for cutting-edge innovation in such fields as biotechnology and medical equipment development and who can flourish on the frontlines of the business world.

Doctoral Programs

Medical and Dental Sciences

Oral Health Sciences

Oral Pathology	Anesthesiology and Clinical Physiology
Bacterial Pathogenesis	Orofacial Pain Management
Molecular Immunology	Pediatric Dentistry
Advanced Biomaterials	Orthodontic Science
Diagnostic Oral Pathology	Cariology and Operative Dentistry
Organic Biomaterials	Fixed Prosthodontics
Functional Material	Pulp Biology and Endodontics
Oral Radiation Oncology	Removable Partial Denture Prosthodontics
Oral and Maxillofacial Surgery	Oral Implantology and Regenerative Dental Medicine
Oral and Maxillofacial Radiology	Complete Denture Prosthodontics

Maxillofacial and Neck Reconstruction

Plastic and Reconstructive Surgery	Molecular Craniofacial Embryology
Head and Neck Surgery	Cellular Physiological Chemistry
Diagnostic Radiology and Oncology	Metals
Maxillofacial Anatomy	Biodesign
Cognitive Neurobiology	Maxillofacial Surgery
	Maxillofacial Orthognathics
	Maxillofacial Prosthetics

Bio-Matrix

Cell Biology	Connective Tissue Regeneration
Medical Biochemistry	Biochemistry
Joint Surgery and Sports Medicine	Cell Signaling
Biostructural Science	Inorganic Materials
Pharmacology	Periodontology

Public Health

Health Promotion	Life Sciences and Bioethics
Environmental Parasitology	Forensic Dentistry
Forensic Medicine	Health Care Economics
International Health and Medicine	Dental Education Development
Health Care Management and Planning	Oral Health Promotion
Molecular Epidemiology	Sports Medicine and Dentistry
Research Development	Educational System in Dentistry
Health Policy and Informatics	Educational Media Development

Gerontology and Gerodontology

Geriatrics and Vascular Medicine	Rehabilitation Medicine
	Gerodontology

Comprehensive Patient Care

Laboratory Medicine	Clinical Oncology
Critical Care Medicine	Dentistry for Persons with Disabilities
Liaison Psychiatry and Palliative Medicine	General Dentistry
Pharmacokinetics and Pharmacodynamics	Psychosomatic Dentistry
Medical Education Research and Development	Behavioral Dentistry
Acute Critical Care and Disaster Medicine	Temporomandibular Joint and Oral Function Psychiatry and Palliative Medicine

Cognitive and Behavioral Medicine

Neuroanatomy and Cellular Neurobiology	Otorhinolaryngology
Systems Neurophysiology	Neurology and Neurological Science
Pharmacology and Neurobiology	Psychiatry and Behavioral Sciences
Molecular Neuroscience	Neurosurgery
Neuropathology	Endovascular Surgery
Ophthalmology and Visual Science	NCNP Brain Physiology and Pathology

Bio-Environmental Response

Immune Regulation	Pathological Cell Biology
Molecular Virology	Pathological Biochemistry
Immunotherapeutics	Immunology
Cellular and Environmental Biology	Pediatrics and Developmental Biology
Biodefense Research	Medicine and Rheumatology
	Dermatology

Systemic Organ Regulation

Human Pathology	Stem Cell Regulation
Physiology and Cell Biology	Molecular Pharmacology
Molecular Cellular Cardiology	Molecular Cell Biology
Molecular Medicine and Metabolism	Functional Genomics
	Epigenetics

Chronobiology	Nephrology
Stem Cell Biology	Comprehensive Reproductive Medicine
Respiratory Medicine	Urology
Gastroenterology and Hepatology	Esophageal and General Surgery
Surgical Oncology	Thoracic Surgery
Cardiovascular Medicine	Disease-oriented Molecular Biology
Anesthesiology	
Cardiovascular Surgery	

Advanced Therapeutic Sciences

Clinical Anatomy	Materials Science and Bioengineering
Systems BioMedicine	Genetic Regulation
Comprehensive Pathology	Bioinformatics
Molecular Oncology	Applied Gene Medicine
Surgical Pathology	Molecular Cytogenetics
Experimental Animal Model for Human Disease	Biochemical Genetics
Signal Gene Regulation	Structural Biology
Biofunctional Molecular Science	Hematology
Medicinal Chemistry	Molecular Endocrinology and Metabolism
Biomedical Devices and Instrumentation	Hepato-Biliary-Pancreatic Surgery
Medical Instrumentation	Orthopaedic and Spinal Surgery
Biosystem Regulation	Investigative Radiology and Endoscopy
Biointerface Engineering	

Doctoral Program

Life Science and Technology

Microbial Genomics and Ecology	Developmental and Regenerative Biology
Biomedical Devices and Instrumentation	Immunology
Biomedical Information	Epigenetics
Bioelectronics	Computational Biology
Materials-based Medical Engineering	Structural Biology
Organic and Medicinal Chemistry	Neuroscience
Chemical Bioscience	Bio-informational Pharmacology
Metallic Biomaterials	Therapeutic Genomics
Inorganic Biomaterials	Molecular Genetics
Organic Materials	Epigenetic Epidemiology
Biosystem Analysis	Genome Structure and Regulation
Molecular Cell Biology	RIKEN Molecular and Chemical Somatology

Graduate Schools

Endowed Departments

Department of Pharmacovigilance

Department of Nanomedicine

Department of Translational Oncology

Department for Hepatitis Control

Department of Cartilage Regeneration

Department of Advanced Therapeutics for GI Diseases

Department of Orthopaedic Research and Development

Department of Sleep Modulatory Medicine

Department of Pediatrics, Perinatal and Maternal Medicine

Department of Community Pediatric Health Science

Department of Chronic Kidney Disease

Department of Organ Network and Metabolism

Department of Joint Reconstruction

Department of Women's Health

Graduate Schools

Graduate School of Health Care Sciences

Human Resource Development Goals

The Nursing Sciences and Laboratory Sciences course was founded upon the goal of developing individuals who are scrupulously steeped in the professional knowledge and technology of these domains. Graduates will manifest highly advanced practical skills on clinical frontlines, exhibit extensive intellectual and ethical understanding and interest in related fields, and retain a healthy zeal for learning and problem-solving using directed thought. The course has the ultimate goal of producing professionals who will strive, through the vigorous promotion of clinical-oriented research, to address issues in their specialized fields of expertise, going on to demonstrate leadership and educational prowess rooted in international and interdisciplinary perspectives.

Master's Course

This course is meant to nurture specialized professionals who have advanced practical abilities, leadership skills in clinical work, and clinically oriented research know-how as they forge the foundations to excel as outstanding educators and global and interdisciplinary leaders in research and practical applications.

Doctor's Course

This course is designed to develop individuals who were groomed through the Master's Course and who can work as dedicated professionals and clinical researchers while manifesting the aptitude needed to excel as international leaders in international and interdisciplinary research and practical applications of such research, while likewise shouldering the burdens of educating and developing outstanding medical practitioners, researchers, and fellow educators.

Doctoral Programs (Master's Course-Doctor's Course)

Comprehensive Health Nursing Sciences

Community Health and Home Care Nursing

Community Health Nursing

Home Care Nursing

Reproductive Health Nursing

Mental Health and Psychiatric Nursing

Nursing Function and Care Management

Fundamental Nursing and Life Support

Child and Family Nursing

Critical and Invasive-Palliative Care Nursing

Gerontological Nursing and Health Care System

System Management in Nursing

Health Care Education and Development

Analytical Health Science

Health Education

International Nursing Development

Biomedical Laboratory Sciences

Life Sciences and Bio-informatics

Biochemistry and Biophysics

Anatomy and Physiological Science

Biofunctional Informatics

Biophysical System Engineering

Moleculo-genetic Sciences

Analytical Laboratory Chemistry

Microbiology and Immunology

Molecular Pathology

Laboratory Molecular Genetics of Hematology

Advanced Analytical Chemistry

Graduate Schools

Biomedical Science PhD Program

Doctoral Programs (Master's Course-Doctor's Course)

Bioinformatics

Functional Biology

Faculties

Faculty of Medicine

School of Medicine

School of Health Care Sciences

Nursing Science

Medical Technology

Mission Statement

The Faculty of Medicine was established in 1951 and now consists of the School of Medicine and the School of Health Care Sciences. Subjects taught at the School of Medicine include Functional Morphology, Physiology and Pharmacology, Molecular Genetics, Infectious Immunology, Pathology, Environmental Social Medicine, Comprehensive Diagnostics, Internal Medicine, Pediatric Medicine, Neurology and Psychiatry, Surgery, Sensory Organ Sciences, Dermatology and Plastic Surgery, Female Medicine and Urology and Reproductive Medicine. School of Health Care Sciences includes two courses of Nursing Science and Medical Technology. Subjects of the former are Fundamental and Clinical Nursing and Community Health Nursing. Subjects of the latter are Laboratory Science and Laboratory Technology.

The School of Medicine and the School of Health Care Sciences welcome talented students who will become leaders in medical science and treatment not only in the future Japan but also in the future world. Furthermore, we seek students of lively imagination, with deep consideration for others and



M&D Tower

with strong spirit for contribution to people's welfare.

Based on the three fundamentals of educational philosophy of Tokyo Medical and Dental University (TMDU), all staff in the School of Medicine concentrate on training students to obtain academic and medical knowledge, high professional skills in clinical medicine, a researcher's mind, a heart full of humanity, and excellent insights. We hope that many of our students will contribute to our and international societies.

The School of Medicine has been improving its educational curriculum in recent years, introducing a tutor system in problem-based medicine, the MD-PhD course, the TMDU-Imperial College (London) Student Exchange Program and other international exchange programs, the Harvard Medical School Externship program for 8-11 selected students every year, the project semester program for learning basic research for the 4th-year students, and clinical clerkship for the 5th- and 6th year students.

The philosophy of the School of Health Care Sciences is based on sound knowledge and a high moral and ethical standard. We aspire to the development and personal training of health care professionals who possess originality and creativity in their ideas. The school offers professional education in nursing science and laboratory science based on an interdisciplinary approach.

Currently running projects in the Faculty of Medicine include "Human Resource Development Plan for Cancer," which is a training program for specialists in cancer in collaboration with Graduate School, "Program to Create an Infectious Diseases Research Center" which involves extensive research of emerging and re-emerging infectious diseases at the research center (Noguchi Memorial Institute for Medical Research) in Ghana, West Africa, and "Special Funds for Education and Research" which offers students medical education that meets the highest global standards.

Faculties

Faculty of Dentistry

School of Dentistry

Mission Statement

The educational philosophy of the School of Dentistry is primarily to foster dentists who can promote and maintain health by faithfully providing comprehensive dental care and contributing to the development of dental medicine and service from a global perspective. We deem it our mission to educate dental students who have attained the following goals at the time of graduation:

1. Acquire a broad range of general knowledge and have wide experience, so as to become a dentist with a rich sense of humanity.
2. Understand scientific principles and concepts and acquire knowledge in bioscience.
3. Have an inquiring mind to enable the independent discovery of problems and the solutions thereto.
4. Acquire knowledge and basic skills necessary for the prevention, diagnosis and treatment of diseases in the oral and maxillofacial regions, based on a deep understanding of normal and pathologic general conditions.
5. Fully understand the importance of the role of dental medicine and dental care in society.

School of Oral Health Care Sciences

Mission Statement

The educational philosophy of the School of Oral Health Care Sciences is to promote professional leaders with kind and well-rounded humanity, based on knowledge and technology of oral health and welfare, who can contribute to society for people's healthy and happy lives. The following goals are to be met by graduation:

1. Understand the dignity of life as well as scientific principles and concepts, and acquire knowledge in bioscience.
2. Respect fundamental human rights and acquire the ability to associate with people who understand the way other people feel and behave.
3. Understand the role and importance of oral health and welfare in society.

4. Understand various conditions of mind and body to acquire knowledge and utilize technology to promote oral health.
5. Acquire an inquiring mind and problem-solving ability and have the will to pursue lifelong learning.
6. Acquire the ability to act as a specialist of health, medical treatment or welfare.
7. Learn the ability to contribute internationally from the point of view of oral health.
8. Acquire high ethics as a medical professional with deep understanding of people and rich sensibilities.
9. Acquire the desire to contribute to society with advanced knowledge and the technical ability to be a "Manufacturing Specialist" who promotes QOL.

Oral Health Care Sciences

Lifetime Oral Health Care Sciences

Oral Care for Systemic Health Support

Preventive Oral Health Care Sciences

Oral Health Care Science for Community and Welfare

Oral Health Care Education

Basic Sciences of Oral Health Care

Oral Health Engineering

Fundamental Oral Health Engineering

Basic Oral Health Science

Comprehensive Oral Health Engineering

Oral Clinical Science

Oral Materials Science and Technology

Oral Health Information Technology

Oral Biomaterials Engineering

Oral Prosthetic Sciences

Fixed Prosthetic Engineering

Oral Prosthetic Engineering

Affiliated Educational and Research Facilities

School of Dental Technologists

Provide high level technology to dental technologists.

College of Liberal Arts and Sciences

Mission Statement

To become health professionals and citizens who can contribute to a global society, students need to develop the intellectual capacity to appreciate diverse cultures and values, and the emotional capacity to understand and empathize with others. In addition, these students need to learn about ethical standards and improve their ability to communicate with others.

To develop such students is the responsibility of the College of Liberal Arts at TMDU, the only national university in Japan with a faculty of liberal arts. To serve our institution's mission as a graduate university, we have the following aims for students in the College:

1. To develop as civic-minded professionals who can participate in a global society.
2. To develop the scientific and analytic mindset needed both to identify and solve problems.
3. To acquire the communication skills required to contribute to the global healthcare profession.
4. To acquire the strong foundation needed to support future study.

Human Sciences

Humanities and Social Sciences

Philosophy

Literature

Sociology

Health Sciences and Physical Education

Natural Sciences

Mathematics

Physics

Chemistry

Biology

Foreign Languages

English

Additional Foreign Languages

German

French

Chinese



Hippocrates Hall



Champ de Causerie

Research Institutes

Institute of Biomaterials and Bioengineering

Mission Statement

The Institute of Biomaterials and Bioengineering (IBB) was originally established in 1951 as the Research Institute of Dental Materials with the aim of developing innovative dental devices and materials. After being reorganized into the Institute for Medical and Dental Engineering in 1966, the Institute was given its present name in 1999. In 2012, the IBB took its present shape of having 4 large divisions consisting of 12 departments and the newly opened Medical and Dental Device Technology Incubation Center. Since its establishment, the IBB has been contributing to the development of biomaterials and medical devices as an international forerunner through the harmonizing of engineering and technological science with medical and dental sciences.

In particular, the IBB has been promoting three objectives in order to expand and deepen the basic science for biomaterials and bioengineering since 2004, when Tokyo Medical and Dental University was reorganized into a national university corporation, leading to the development of applied science and technologies for the advanced medicine and dentistry:

- (A) An inquiry into Nano-Bioscience for Advanced Medicine and Dentistry
- (B) The creation of Bio-Inspired Biomaterials for New Clinical Applications
- (C) The development of Bio-System Engineering for Advanced Medical and Dental Devices

While the research environment around us is drastically and rapidly changing, the IBB has been making continuous efforts to take a leading role as an international center of excellence of biomaterials and bioengineering.

Biomedical Materials

Metallic Biomaterials
Inorganic Biomaterials
Organic Biomaterials

Biofunctional Restoration

Material Biofunctions
Materials-based Medical Engineering
Biomechanics

Medical Devices

Bioelectronics
Biomedical Information
Biomedical Devices and Instrumentation

Biomolecular Chemistry

Medicinal Chemistry
Chemical Bioscience
Organic and Medicinal Chemistry

Medical and Dental Device Technology Incubation Center



Institute of Biomaterials and Bioengineering



Street view of the IBB

Research Institutes

Medical Research Institute

Mission Statement

Our research focus is to tackle issues in medical science with the hope of contributing to the development of measures for patients who are suffering from intractable diseases. These disorders include metabolic, neurological, psychiatric, cardiovascular, loco-motor, immunological, genetic, infectious and neoplastic diseases. The pathophysiological bases of these diseases should be understood on the bases of molecular analyses of the malfunction and impaired regulation of homeostasis.

State-of-the-art science into the cellular and molecular mechanisms operating in the life of basic organisms as well as humans has been sought vigorously in our institute and this activity has been continuously expanding in recent years. This is reflected in our record of recent publications as well as the amounts of major grants obtained in the field of medical science including the participation of many staff members of our institute in the 21st Century COE program of our university. The strength of the Medical Research Institute also lies in its close ties with the newly commenced graduate school system. The number of young investigators in our institute has increased significantly and the new educational system has been attracting attention of the medical science society.

The activity of our institute has been international. We have established scientific ties with a number of overseas universities and institutions such as Harvard University in addition to the various international collaborations in our research activities, we have been accepting many visitors worldwide including scientists from major institutes. International symposiums and seminars have been constantly held to provide cutting edge knowledge in medical science but also opportunities to establish relationship among young scientists and world top class investigators.

As the Medical Research Institute is growing in a number of respects as a young institution in the field of molecular medical science, we are welcoming everyone who is interested in joining us in our endeavor to seek for the clues to cure patients with intractable diseases in the future by unraveling the great mysteries of nature.

Advanced Molecular Medicine

Molecular Medicine and Metabolism
Molecular Pharmacology
Molecular Cell Biology
Molecular Neuroscience
Biodefence Research
Bio-informational Pharmacology
Stem Cell Regulation
Structural Biology
Oxygen Biology
Project Research Unit

Pathophysiology

Neuropathology
Pathological Biochemistry
Pathological Cell Biology
Developmental and Regenerative Biology
Stem Cell Biology
Immunology
Molecular Pathogenesis
Frontier Research Unit Virus Research Unit
Project Research Unit Stress Bio-Marker Research

Medical Genomics

Molecular Cytogenetics
Molecular Genetics
Molecular Epidemiology
Biochemical Genetics
Functional Genomics
Epigenetics
Bioinformatics
Frontier Research Unit Redox Response Cell Biology
Project Research Unit Neuroinformatics

Division of Integrative Research

Division of Biosystem Generation

Division of Pathogenetic Regulation

Advanced Technology Laboratory

Genome Laboratory
Laboratory of Cytometry and Proteome
Laboratory of Recombinant Animals
Laboratory of Anatomy and Cell Function
Bioresource Laboratory
Laboratory for Structure Analysis
Stem Cell Laboratory



Genome Laboratory



Laboratory of Anatomy and Cell Function



Laboratory of Cytometry and Proteome Research



Bioresource Laboratory

Library

Institute for Library and Media Information Technology

Department of Educational Media Development

Faculty of Institute for Library and Media Information Technology.

Media Education Division

Coordinating divisions related to e-learning and multi-media education

Library / Kounodai Branch Library

Collection and storage of academic documents/materials
Utilization of academic information/the library facility

Mission Statement

A new role is being demanded of university libraries as academic information is becoming increasingly computerized, modes of information distribution are undergoing unprecedented transformation, and the information utilization behavior of the users is changing greatly.

In particular, the following four functions need to be improved at future university libraries: 1) collection and storage of strategic paper documents representative of the special characteristics of the university, 2) establishment and improvement of collection and storage systems for various kinds of academic documents, 3) measures for space reduction, etc., through computerization, and 4) maintenance of basic facilities in university libraries.

In accordance with these requirements, the library of this university focuses on three points: (1) expansion of information use services, (2) integration and systematization of on-campus information resources, and (3) a strategy for quantitative and qualitative expansion of users, and has developed the following concepts:

- (1) Expansion of information use services
 - a) Computerization of library catalogs
 - b) Enhancement and reexamination of electronic media
 - c) Establishment of information outlets
 - d) Large-scale increase in the number and versatility of reading seats
 - e) Increase in the number of users of the medical and dental media center, and enhancement of installed equipment
- (2) Integration and systematization of on-campus information resources

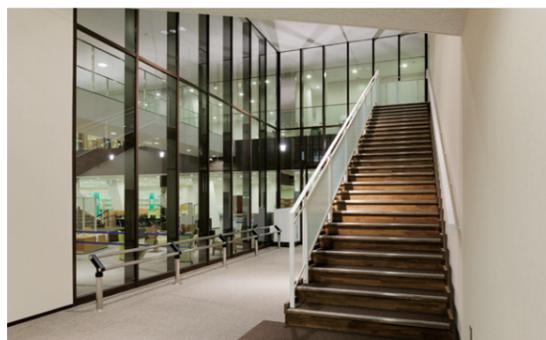
Information Technology Division

TMDU Intranet; Management and maintenance of the university's shared servers; Implementation of a new information security policy; Management and maintenance of the university websites; Research Information Database.

- a) Research-related materials stored in each field as research related information
- b) Application of e-learning systems based on automatic lecture recording systems to learning content, etc.
- (3) A strategy for expanding the services offered to patrons, quantitatively and qualitatively
 - a) Expansion of information literacy education
 - b) Response to multi-purpose needs of users
 - c) Creation of comfortable reading spaces

Fiscal Year 2011

	Library Weekdays 8:30–22:00 Holidays 8:30–17:00	Kounodai Branch Library Weekdays 9:00–22:00	
Library Holdings	Japanese Books including periodicals	93,726	71,791
	Foreign Books including periodicals	122,779	17,552
	Total	216,505	89,343
Total of Library and Kounodai Branch Library	Japanese Books	165,517	
	Foreign Books	140,331	
	Total	305,848	
Facilities	Floor Space	2,222m ²	280m ²
	Stack Room	388m ²	468m ²
	Office and Other	2,034m ²	285m ²
	Total	4,644m²	1,033m²
Utilization	Seats	301	125
	Total Days Open	358	244
	Visitors	134,873	53,145
	Books and Journals Checked Out	Students 13,720 Teaching Staff 3,353	Students 2,155 Teaching Staff 284



Lobby of the TMDU Library (M&D Tower, 3F)

Other Institutes

Nationwide Joint Institutes

Center for Education Research in Medicine and Dentistry

Research on the Model Core Curricula in Medicine and Dentistry, educational evaluation methods, and other matters regarding the improvement of the Japanese educational system for physicians and dentists.

Joint Institutes for Education and Research

Research Center for Medical and Dental Sciences

Human Gene Sciences Research Division

Research and education of disease related genes.

Instrumental Analysis Research Division

Development, research and education of the technology for advanced measurement and analysis. Promotion of individual utilization of shared analytical equipments and analysis service offer.

General Isotope Research Division

Education and research on radiology and radioisotope medicine.

Advanced Young Researchers Incubation Division

Promoting independent research opportunities for young researchers.

Center for Experimental Animal

Analysis of diseases and studies of animal care for medical use.

Health Service Center

Improving healthcare management at the university and promoting the health of students, faculty, and staff.

Support Office for Female Researchers

Carry out the draft plan for revitalizing support for the research activities of the female researchers at TMDU.

International Exchange Center

To integrate affairs related to the international exchange area, and to support the school's promotion of international exchange.

Office for Global Education and Career Development

Life Science and Bioethics Research Center

Implementing bioethics education and supporting clinical research planning.

Center for Interprofessional Education

Promoting comprehensive education for health professionals in an aging society by utilizing educational resources in the university. Compiling new undergraduate curricula in medicine and dentistry with an emphasis on a tighter integration between medicine and dentistry, and establishing a system for their effective and efficient management.

Student Center

Supporting students in terms of daily life needs, education, job hunting, mental health problems and the taking of measures against various kinds of harassment.

Hospital Administration Planning Division

Analysis and management of planning, execution, and the financial condition of the financial management strategy of the university hospitals.

Research & Industry Collaboration

TMDU Research Organization

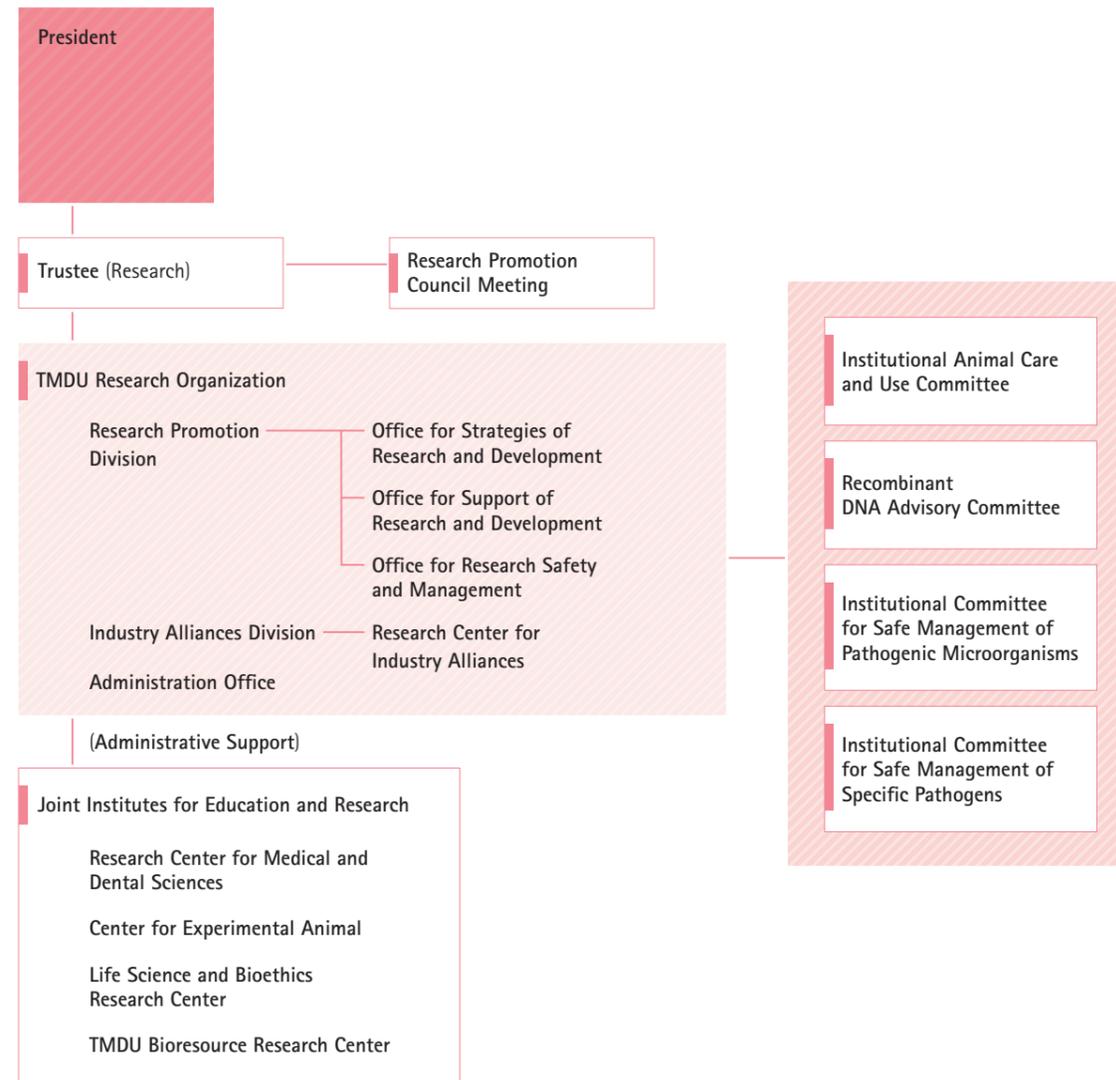
Supporting the promotion research activity, the planning of research activity and the creation / protection / management /exploitation of intellectual property.

Research Promotion Division

Supporting the promotion of research activity and the planning of research strategy.

Industry Alliances Division

Supporting research activity through the promotion of intra-/international alliances and contributing to society through the planning of research strategy and the creation/ protection/management/exploitation of intellectual property.



University Hospitals

Medical Hospital

Dental Hospital

Mission Statement

The Medical Hospital is committed to providing excellent patient care as well as advanced medical technology to the community. The mission of the Dental Hospital includes developing world-class staff as well as providing excellent dental care tailored to individual patient's needs. The success of these missions requires (1) the practical training of faculty, staff, students, and trainees and (2) innovative scientific research and breakthrough discoveries. Each member of Tokyo Medical and Dental University is devoted to accomplishing our missions by delivering high quality patient care, education, and research while respecting the human spirit.

Our ultimate goal is to provide the highest quality medical care and scientific knowledge in the future, which includes:

1. To provide patients with the best possible medical care and enable them to enjoy their daily life and health to the utmost extent.
2. To reduce the likelihood of illness with the application of new findings in preventive medicine and clinical studies.
3. To improve the cure rate of illness with the swift application of new findings from clinical trials.
4. To educate medical professionals who are sensitive to society's needs.
5. To train medical professionals who can offer clinical training for students in their internship in the TMDU teaching hospitals and other affiliated hospitals.

6. To develop medical educators and researchers who have vision for the future, and who can advance medical education and practice for coming generations.

In line with these general purposes, we have the following specific aims:

1. To provide a well-organized learning environment with multiple attending teaching staff and a variety of clinical experiences for undergraduate and postgraduate education.
2. To provide patients with safe and high quality medical care.
3. To develop cooperative relations with central hospitals in the Tokyo area, as well as establishing a support system for providing significant medical contributions to the global community.
4. To conduct collaborative studies including clinical trials with other affiliated hospitals, and widen the coverage of high quality medical care.
5. To promote an effective intercollegiate research environment and bring our intellectual resources in cutting-edge medical science to society.
6. To establish efficient and economical management of the hospitals and help bring medical security to the nation.



Medical Hospital
(Medical Building A)



Dental Hospital
(Dental Building South)

University Hospitals

Medical Hospital Beds: 800

Clinics

Department of Internal Medicine

Hematology	Geriatrics
Medicine and Rheumatology	Gastroenterology and Hepatology
Diabetes, Endocrinology and Metabolism	Cardiovascular Medicine
Nephrology	Pulmonary Medicine

Department of Surgery

Esophageal and Gastric Surgery	Vascular Surgery
Colorectal Surgery	Cardiovascular Surgery
Hepato-Biliary-Pancreatic Surgery	Thoracic Surgery
Breast Surgery	Urology
	Head and Neck Surgery

Department of Sensory, Motor System Medicine and Dermatology

Ophthalmology	Plastic, Reconstructive and Aesthetic Surgery
Oto-Rhino-Laryngology	Orthopaedic Surgery
Dermatology	

Department of Pediatrics, Maternal and Woman's Clinic

Pediatrics	Clinical Genetics Division
Maternal and Woman's Clinic	

Department of Neurology, Neurosurgery and Neuropsychiatry

Neurosurgery	Neuropsychiatry
Neurology	Psychosomatic and Palliative Medicine
Endovascular Surgery	Anesthesiology and Pain Clinic

Department of Radiology

Diagnostic Radiology and Oncology

Trauma and Acute Critical Care Medical Center

Central Clinical Facilities

Department of Pharmacy	Center for Medical Welfare and Liaison Services
Clinical Laboratory	Clinical Research Center
Operating Center	Center for Postgraduate Medical Education
Radiological Center	Hyperbaric Medical Center
Hospital Blood Transfusion Center	Medical Engineering Center
Physical Medicine Center	Center for Cell Therapy
Intensive Care Unit	Center for Minimally Invasive Surgery
Supply Unit	Heart Rhythm Center
Maternal Fetal Medicine Division	Department of Medical Records
Department of Pathology	Quality Management Section
Department of Endoscopy	Infection Control Section
Department of Medical Informatics	Sports Medical Center
Department of Blood Purification	Clinical Center for Pleasant Sleep
Department of General Medicine	Cancer Center
Positron Emission Tomography Center	Department of Nutrition

Nursing Department

University Hospitals

Dental Hospital Beds: 60 Chair Units: 317

Hospital Departments

Clinics for Dentofacial Growth and Development

Orthodontics	Pediatric Dentistry
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Clinics for Conservation of Oral and Maxillofacial Function

Operative Dentistry and Endodontics	Psychosomatic Dentistry Clinic
Periodontics	Temporomandibular Joint Clinic
Orofacial Pain Clinic	

Clinics for Oral and Maxillofacial Rehabilitation

Oral Surgery	Sports Dentistry
Maxillofacial Surgery	Speech Clinic
Prosthodontics	Dental Implant Clinic
Maxillofacial Prosthetics	

Clinics for General Dentistry

Oral Diagnosis and General Dentistry	Special Care Clinic
General Dentistry I	Dysphagia Rehabilitation
General Dentistry II	Fresh Breath Clinic
General Dentistry III	Cleanroom
Ambulatory Anesthesia Service	Oral Health Care
Oral and Maxillofacial Radiology Clinic	Dental Allergy

Clinical Laboratory

Clinical Laboratory	Center for Clinical Cooperation
Dental Laboratory	Center for Dental Information
Section of Clinical Safety Management	Center for Development of Devices and Drugs in Dentistry
Section of Infection Control	Division of Surgical Operation
Section of Clinical Information Management	Dental Ward
Center for Advanced Dental Clinical Education	Section of Central Supplies

Department of Pharmacy

Department of Nursing

Department of Dental Hygiene

Global COE Program

International Research Center
for Molecular Science in Tooth and Bone Diseases

Program Leader:
Masaki NODA, MD, PhD
Professor,
Medical Research Institute

Tokyo Medical and Dental University is a distinguished institution and is known as a world center for the study of "tooth" and "bone" diseases. The purpose of this Global COE (GCOE) program is to form a world-top class research center in the field of tooth and bone diseases. This program is a new development as well as succession of our previous 21st century COE (21COE) program. Through the new program, will promote our cutting-edge studies on tooth and bone diseases and form a unique international educational research center. Our GCOE program will nurture young researchers of the next generation who will work globally on molecular science in "tooth" and "bone" diseases. This is critical for the future welfare of all human beings and is of particular importance in Japan, the world's most rapidly aging society.

In modern developed countries, maintenance of not only life expectancy but also "healthy life expectancy" is an important issue, and "tooth" and "bone" diseases are major problems that need to be urgently addressed in this regard. In the 21st century COE program, this center has made a remarkable accomplishment in clarification of the mechanism of loss of tooth and bone and in discovery of novel methods for tooth and bone reconstruction by find-

ing "key elements" of the regulatory systems in the function of osteoclasts and osteoblasts and those in initiation for clinical medicine. However, identification of individual discoveries and accomplishments alone is not enough to understand the mechanisms of the comprehensive pathology and onset of the diseases. Thus, in the Global COE program, such achievements of basic studies and those of clinical research established in the previous 21st Century COE program will be integrated and developed into three areas: (1) elucidation of basic molecular mechanisms in pathology of the diseases leading to loss of tooth and bone, (2) fundamental clinical research for diagnosis and therapeutic treatments, and (3) advancement of functional genomic studies on tooth and bone diseases based on genomic and epigenetic science. Through the research concentrated into these three areas, this center will aim to become the highest standard organization in the world in terms of integrated research on molecular science for tooth and bone diseases. Moreover, we will further develop an international research network. Through these efforts, we will establish an intelligence hub that will create innovative science and lead the research in this field to provide cutting edge information worldwide.



<http://www.tmd.ac.jp/cm/gcoe/en>

Development of Human Resource System for Nurses

Development of The IKASHIKA Career Path for Nurses
based on Mentorship and Problem-based Learning

Principal Investigator:
Tomoko KOMUTA
Director of Nursing,
Medical Hospital

This project aims to develop and execute the original program, the IKASHIKA Career Path for Nurses, which incorporates the educational methods of mentorship and problem-based learning (PBL), thereby helping nurses and nursing students get through their career systematically and effectively.

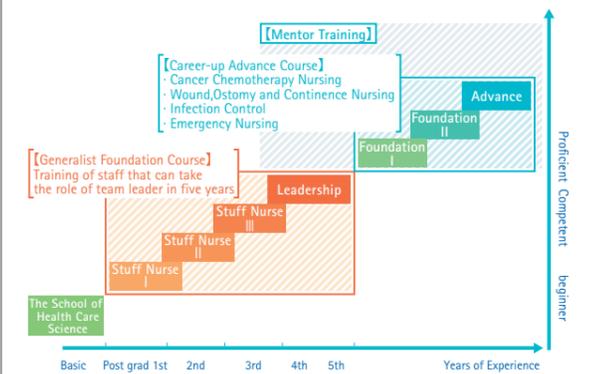
This program is designed to support nurses at all stages of their professional development, from nursing students to trained professionals, and specific behavioral objectives are set properly at each stage as part of the program.

Specifically, as shown in the figure below, participants are expected to develop as professionals in a step-by-step fashion, from the novice level to the expert level, in the program which adopts mentorship in its education and training.

This project also focuses upon the exchange of personnel between the Department of Nursing, the University Hospital of Medicine, and the School of Health Care Sciences. In particular, the following initiatives are set forward: (1) a training program by nurses for nursing students, (2) an advanced seminar by faculty members for nurses, (3) a special health care section for outpatients in the University Hospi-

tal, which is jointly operated by staff from both sides, and (4) the "Nursing Arts Room," where both nurses and nursing students can learn nursing skills at their convenience.

Though these plans, we aim to train nurses who have a high ability in nursing practice and in nursing education.



The Nursing IKASHIKA Career Path (Projection)
The new programs are shown in blue. The vertical axis shows the "Career Step Up" and the abscissa axis is "years of experience" on this path.

Training of Distinguished Specialists
by Mutual Cooperation between University HospitalsDevelopment of Advanced Medical Specialists
through the Urban-Rural
Interchange Educational Programs

Project Leader:
Nobuyuki MIYASAKA, MD, PhD
Director, Medical Hospital

The Faculties of Medicine of TMDU, Akita University, and Shimane University launched an interuniversity internship program in 2007. We have already extended this program, in 2009, by implementing new training programs for medical specialists and general practitioners. The participants in these programs can choose (i) a short-term program (one week to three months) or (ii) a one-year program to acquire extra merit as a specialist or a general practitioner. These programs have been showing fruitful results in several specialty fields of study through this complementary collaboration. For example, some Shimane residents received intensive training in clinical neurology at TMDU's hospital, which has been highly acclaimed in this field, while on the other hand some TMDU residents successfully completed their special training in the field of nerve block injection at Shimane. All three universities have the choice of graduate schools or continuing education programs for those

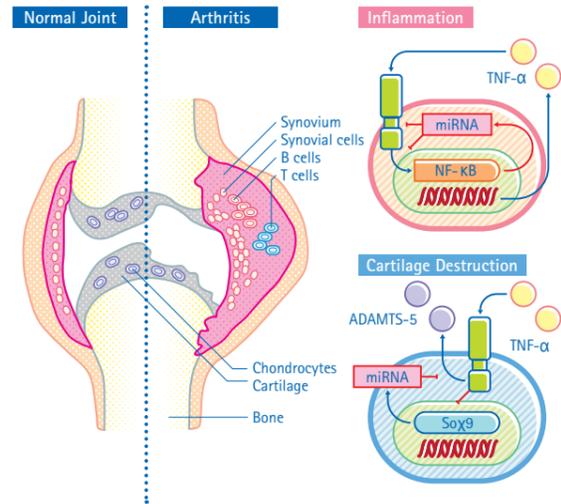
who already have some work experience. If participants wish to follow their academic interest in fields they have experienced during their intern training, they can take either an appropriate continuing education program or a degree program offered by these three graduate schools.



Strategic Basic Research Programs (CREST)

Regulation of Inflammatory Time Axis at the RNA Level

Chronic inflammation causes many diseases, including arthritis and autoimmune diseases. However, the precise molecular mechanisms involved in termination of disturbed inflammatory response remain unclear. We will address this question by examining the role of microRNA in the pathogenesis of inflammation and arthritis. Using high-throughput sequencing and cell-based functional screening systems, we will uncover novel molecular cascades regulating the inflammatory time signal at the RNA level. This may provide novel treatment strategies for inflammatory diseases such as rheumatoid arthritis.



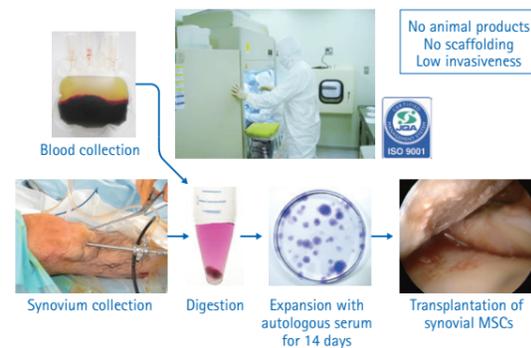
Principal Investigator:
Hiroshi ASAHARA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

Project for Realization of Regenerative Medicine

Meniscus Regeneration by Mesenchymal Stem Cells Derived from Synovium

The meniscus is a wedge-shaped fibrocartilage and plays important roles in load distribution and knee joint stability, but it has a poor regenerative potential. A new strategy to regenerate a meniscus with low invasiveness is required for a massive meniscal defect. Mesenchymal stem cells (MSCs) are an attractive cell source for meniscal regeneration. We previously reported that intraarticular injection of synovial MSCs promoted meniscal regeneration in rat, rabbit, and porcine massive meniscal defect models. In this project, we investigate the effectiveness and safety of our method to regenerate meniscus by autologous transplantation of synovial MSCs in a clinical situation. First of all, peripheral blood is collected to prepare autologous human serum. During arthroscopic observation at one day surgery, approximately 0.5 g synovial tissue is harvested. After enzyme digestion, synovial MSCs are expanded in our cell processing center with 10% human serum for 14 days. Ap-

proximately 50 million autologous synovial MSCs are transplanted arthroscopically. This procedure is possible without animal products, or scaffolding, and with low invasiveness.



Strategy of our cell therapy for meniscal regeneration

Principal Investigator:
Ichiro SEKIYA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

JST Strategic International Research Cooperative Program (Japan-Sweden)

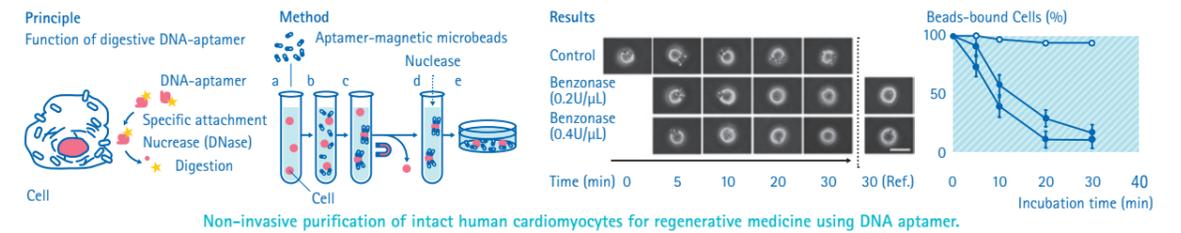
Development of Non-invasive Cell Purification Technology for Regenerative Medicine

Principal Investigator:
Kenji YASUDA
Professor,
Institute of Biomaterials and
Bioengineering

In this project, based on the complementary strong strategic collaboration of Japanese and Swedish advanced technologies for regenerative medicine, we are developing the next generation of non-invasive cell purification technology of intact homogeneous phenotypically identical differentiated cells from the mixture of heterogeneous differentiated cells of human embryonic stem (hES) cells. Our university provides a series of patented non-invasive cell purification technologies and protocols exploiting non-

invasively digestive DNA aptamers*. The Swedish group provides a variety of latest development and differentiation technologies of hES cells with the world's largest hES library. Our goal is to establish a global standard purification technology of human organ cells for regenerative medicine and cell-based drug discovery.

*DNA aptamer: single stranded DNA structure having a function to attach to specific target biomarkers.



Non-invasive purification of intact human cardiomyocytes for regenerative medicine using DNA aptamer.

Science and Technology Research Partnership for Sustainable Development

Studies of Anti-viral and Anti-parasitic Compounds from Selected Ghanaian Medicinal Plants

Principal Investigator:
Shoji YAMAOKA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

In 2008, TMDU established the Research Center for Infectious Diseases at the Noguchi Memorial Institute for Medical Research (NMIMR) in Ghana, West Africa, dispatched two researchers to NMIMR, and implemented research collaborations on virology and parasitology. In 2010 we began a new research project, supported by Japan Science and Technology Agency (JST) and Japan International Cooperation Agency (JICA), on Ghanaian medicinal plants whose components are effective in the control of viral or parasitic infections. Based on a request from the Ghanaian side, the research collaborations have been planned by the groups of Prof. Yamaoka (Virology, TMDU), Prof. Kannagi (Virology, TMDU), Prof. Ohta (Parasitology, TMDU), Prof. Shoyama (Pharmacology, Nagasaki International University), Prof. Nyarko (Toxicology, NMIMR) and Prof. Okine (Biochemistry, Centre for Scientific Research into Plant Medicine).



A meeting at NMIMR

A3 Foresight Program

Epigenetic Signatures in Gastric Carcinogenesis

Principal Investigator:
Yasuhito YUASA
Professor,
Graduate School of
Medical and Dental Sciences

Chinese PI:
Deng Dajun
Professor and Director,
Department of Aetiology,
Peking University School of
Oncology, China

Korean PI:
Kim Woo Ho
Professor,
Department of Pathology,
Seoul National University
College of Medicine, Korea

Based on an agreement among the Japan Society for the Promotion of Science (JSPS), the Korea National Research Foundation (KNRF) and the National Natural Science Foundation of China (NSFC), this program supports joint research conducted by researchers in Japan, China and Korea. The three countries (A3) work as consortium in advancing leading-edge research with an aim to establishing a top-level research hub in Asia.

The objectives of the present project are to explore the role of epigenetic pathway in gastric carcinogenesis and its application in molecular sub-typing of GC through the collaboration of researchers of the three countries. The other important objective is to educate young researchers in the three countries.



The 3 PIs: Drs. Yuasa, Kim and Deng (From left to right)

Project for Developing Innovation Systems

(Program for Promoting Self-Sustaining Management of Industry-Academia-Government Collaboration in Universities)

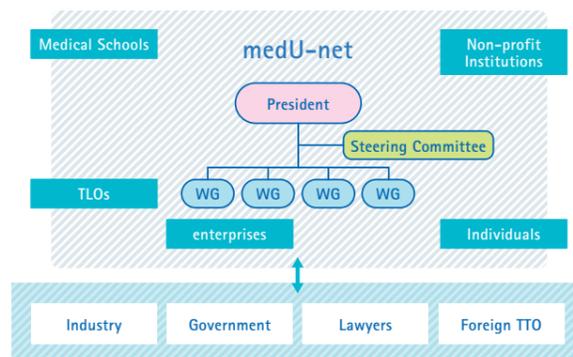
Promoting International Industry-University-Government (I-U-G) Collaborative Activities

Principal Investigator:
Kaori IIDA
Associate Professor,
Industry Alliances Division

The TMDU Industry Alliance Division (IAD), which implements this project, was established in April 2011 as the incoming organization of TMDU Intellectual Property Division. IAD's mission is to make strong relationships with industry and government and to manage the intellectual property of TMDU in an effort to promote TMDU's research activities and make contributions to global society. We believe the medical industry-government-academia collaboration will play a potent role for global health and longevity and create a more affluent society. Accordingly, IAD set up the Research Center for Industry Alliances to promote research and provide education. This Center's Office of Industry Alliances contract department or liaison and the Office of Technology Transfer manages intellectual property strategy. As regards international I-U-G collaboration strategies, the organization is committed to the improvement of the quality of patent applications and to efficient technology licensing activities, as well as to the expansion of technology licensing through activities with TLOs in and out of Japan, in addition to the technology licensing activities revolving around our collaborative associates.

With the support of this project, TMDU established the

Japanese Association of Medical University for Technology Transfer ("medU-net") in 2010. As of October 23th 2012, medU-net has 193 registered members and includes not only medical universities but also many partners in industry, including pharmaceutical companies and governmental units. I-U-G has a close partnership and dialogue with "medU-net" as they work together toward successful medical innovation through the improvement and vitalization of technology transfer.



Cabinet Office, Government of Japan Funding Program for Next Generation World-Leading Researchers (NEXT Program)

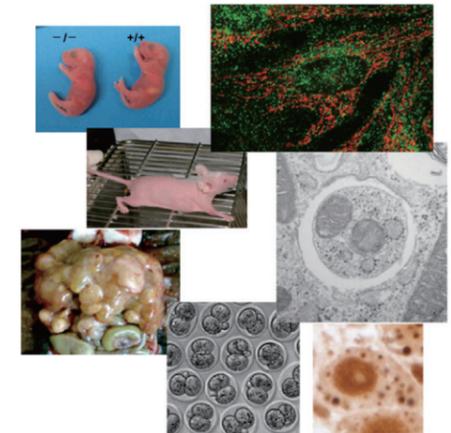
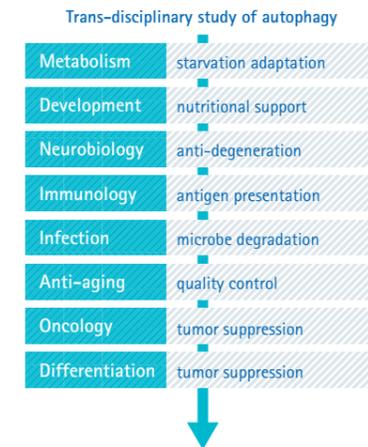
This program provides a research-support system for researchers who have the potential to be world leaders in their respective fields of science and technology. The Japanese government's "New Growth Strategy (Basic Policies) Toward a Radiant Japan" (Cabinet decision on December 30, 2009) calls for advancing a wide spectrum of research, from basic research that generates new sciences and technologies to current R&D that has near-future applications. By supporting the kind of cutting-edge research mandated by the New Growth Strategy, the program seeks to spur mid-to long-term S&T advancement, while contributing to the continued growth of Japan as a nation and the solution of policy-focused and societal issues.

Trans-disciplinary Study on the Molecular Mechanism and Physiological Role of Autophagy

Principal Investigator:
Noboru MIZUSHIMA
Professor,
Graduate School of
Medical and Dental Sciences

While all components of our bodies are constitutively synthesized, they are also constitutively degraded or eliminated. Whole organisms and even individual cells can maintain their function and freshness through recycling their own constituents (e.g. proteins and organelles) and

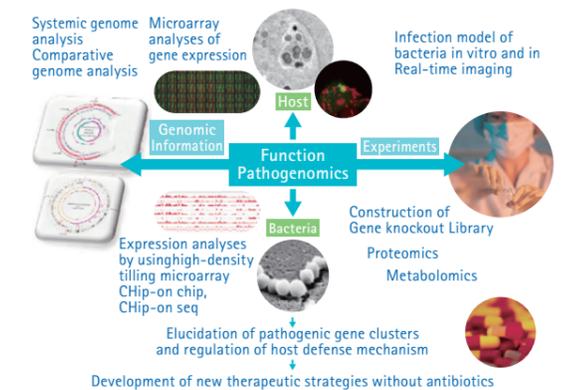
can adapt to various internal and external changes. The aim of this research is to reveal the biological significance and molecular mechanism of autophagic degradation by trans-disciplinary studies, and to provide novel concepts and therapeutic targets.



Development of a New Therapeutic Strategy Against Pathogenic Bacterial Infection by Using Genome Information and Regulation of Autophagy

Principal Investigator:
Ichiro NAKAGAWA
Professor,
Medical Research Institute

The evolution of pathogenic bacteria is constantly occurring as the micro organisms expand their habitat and adapt to new environments. In response to such environmental changes, bacterial genes have been evolving to acquire new phenotypes such as pathogenicity. Therefore, we try to clarify the evolution of pathogenic bacteria and to determine strain-specific pathogenic gene clusters by using comparative genome analysis and bioinformatics techniques. In addition, we also try to analyze the anti-bacterial effect and regulation of autophagic degradation mechanism. Our goal is to elucidate new therapeutic methods for efficient elimination of specific bacteria.



Development of new therapeutic strategies against pathogenic bacterial infection by using genome information and regulation of autophagy

Cabinet Office, Government of Japan
Funding Program for Next Generation World-Leading Researchers (NEXT Program)

Development of Postgraduate Educational Program
for Mid-Level Providers (Advanced Practice Nurses) and
the Innovation of a Healthcare Delivery Model

Project Director:
Tomoko INOUE
Professor and Chief,
Graduate School of
Health Care Sciences

Healthcare in Japan has urgent issues such as the increasing incidence of lifestyle-related diseases and the lack of or uneven distribution of medical providers. Mid-level providers are healthcare providers who are able to provide medical care independent from physicians. In other countries, advanced practice nurses (APNs) and nurse practitioners (NPs) are examples of such providers who have received graduate-level nursing education. In this project, we aim to develop APNs in our country and to propose a new healthcare system. By having ongoing discussions with related institutions, we will identify the role and function of the APNs suitable for our country and enforce an educational program for developing APNs. Then, with the cooperation of partner universities

overseas, we will implement the APN educational program composed of online lectures and small group lab sessions using the "Train-the-Trainers Approach," with mater's-prepared certified nurse (CNSs) who are currently practicing as prospective students. Through this project, we hope to pursue a new interdisciplinary approach and to propose the creation of a new healthcare industry.



Filming a scene for the simulation learning material



Internal collaborators with the symposium speakers, Dr. Cosby and Dr. Claus

Elucidation of the Mechanisms of Hair Follicle Ageing
by Focusing on Stem Cells

Principal Investigator:
Emi NISHIMURA
Professor,
Medical Research Institute

In this ageing society, treatment and prevention of ageing-related diseases such as cancer has become a serious and important issue. However, the underlying mechanisms leading to ageing-associated tissue changes and the contribution of those changes to the diseases are still largely unknown. We previously identified melanocyte stem cells in mammalian hair follicles as a reservoir for melanocytes which produce melanin pigment for hair pigmentation. Then we found that incomplete maintenance of this cell population causes hair graying, the most obvious sign of ageing in humans.

To understand the cellular and molecular mechanisms of hair graying and hair loss, we will focus on ageing-associated changes in melanocyte stem cells and hair follicle stem cells in mice to determine the underlying mechanisms of age-associated tissue changes and the mechanisms of stem cell maintenance which sustain young tissue homeostasis. Our

approach will reveal the precise regulatory mechanisms of tissue stem cells that are essential for regenerative medicine and also provide some clues that will help us develop new therapeutic strategies for the prevention of cancer and other age-associated diseases.



Hair graying induced by ionizing irradiation



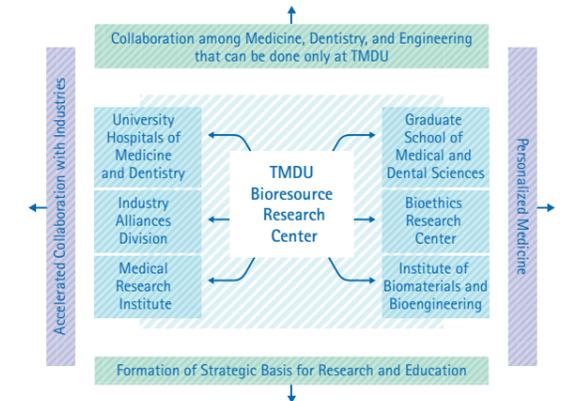
Hair graying and hair loss in an aged mouse

Special Funds

Bioresource Research Center (BRC)
for Personalized Medicine and Joint Research
between Industry and Academia

Principal Investigator:
Johji INAZAWA, MD, PhD
Professor,
Medical Research Institute

Personalized medicine, which should be the gold standard in human healthcare, provides diagnosis/therapeutics based on knowledge of each individual's environmental and genetic factors. For personalized medicine to be achieved, use of a biorepository system is prerequisite because such research must use human samples. Founded in 2012, the TMDU Bioresource Research Center (BRC) recruits tissue, serum and/or DNA from participants together with the relevant clinical information. These resources will be of great help in facilitating translational research in the field of personalized medicine as well as improving the prospect of future joint research between industry and academia.



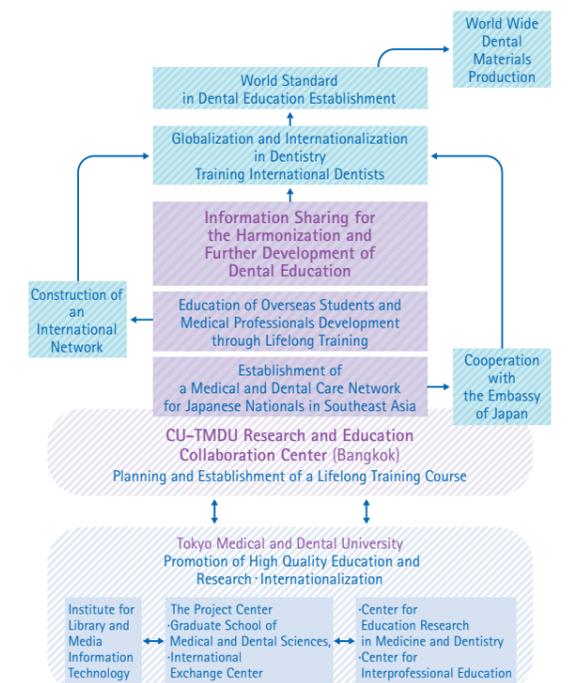
Harmonization in Dental Education in Asia:
ASEAN-Japan Information Sharing

Principal Investigator:
Junji TAGAMI
Professor and Chief,
Graduate School of
Medical and Dental Sciences

Tokyo Medical and Dental University, the Faculty of Dentistry and the Graduate School of Medical and Dental Sciences held a 10-year collaboration project (Dentistry) from 1996 to 2005, and TMDU accepted many overseas students through this project from Thailand. Based on an agreement signed by the presidents of Chulalongkorn University (CU) and Tokyo Medical and Dental University (TMDU) in November 2009, the CU-TMDU Research and Education Collaboration Center at CU Faculty of Dentistry was established in November 2010.

With this Center, the following four projects are now being conducted:

1. Information Sharing for the Harmonization and Further Development of Dental Education in Southeast Asia.
2. Lifelong Training Course Planning and Establishment for the Provision of Continuing Education Opportunities for Dental Health Professionals in Southeast Asia.
3. Supplying Information on Research and Education at TMDU and Studying in Japan for Prospective Students from Southeast Asia.
4. Establishment of a Medical and Dental Care Network for Japanese Nationals in Southeast Asia.



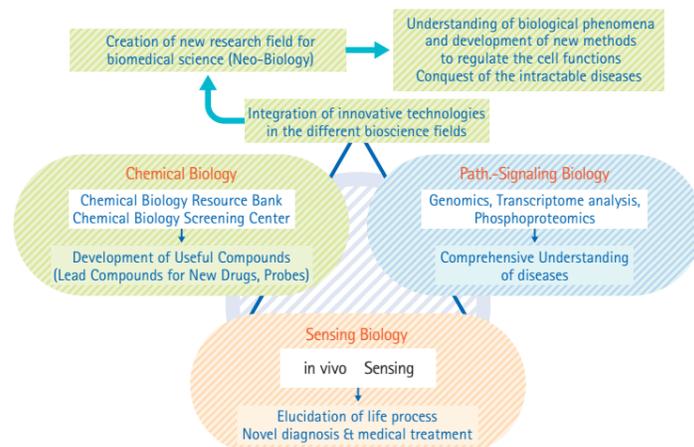
Special Funds

Research Promotion of Neo-biology: Integration of Different Bioscience Technologies

Principal Investigator:
Yoshio MIKI, MD, PhD
Professor,
Medical Research Institute

It is necessary to investigate life sciences by innovative technology from a wide viewpoint covering "a biological molecule", "a cell", and "an individual" for the understanding of various biomedical phenomena and the development of novel medical treatments for diseases. Three precedent projects (Path.-Signaling Biology Research Program, Research Promotion of Chemical Biology and Research Project

of Sensing Biology) were integrated into the project "Research Promotion of Neo-Biology" to enable cooperation between different bioscience fields. We are promoting the research of the new life science field of neo-biology and aim at the elucidation of cell functions and the development of methods to regulate these functions in "Research Promotion of Neo-Biology."

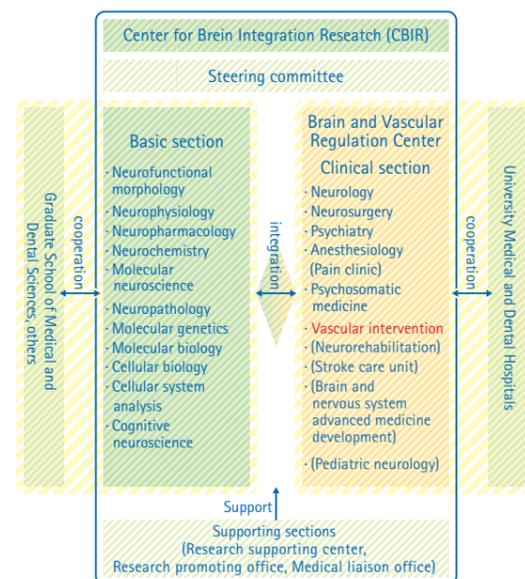


Development of the Brain and Vascular Regulation Center

Principal Investigator:
Hidehiro MIZUSAWA, MD, PhD
Director,
Center for Brain Integration Research

At TDMU, there has long been a tradition of brain and nervous system science as shown by the awarding of a five-year grant under the the 21st century COE (Center of Excellence) program "Brain Integration and its Disorders" (2003-2007). TMDU established the Center for Brain Integration Research (CBIR) in 2007 to follow the great success of the COE program. The mission of CBIR is to overcome diseases of the brain and nervous system by integrating basic and clinical neurosciences.

In 2008, upon application by TMDU, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) approved the establishment of a new Department of Vascular Intervention and the formation of the Brain and Vascular Regulation Center as the clinical section of CBIR, to which Department of Neurology, Department of Neurosurgery, Department of Psychiatry, Department of Anesthesiology (Pain Clinic) as well as Department of Vascular Intervention belong.



Strategic Research Program for Brain Sciences Field E "Understanding of Molecular and Environmental Bases for Brain Health"

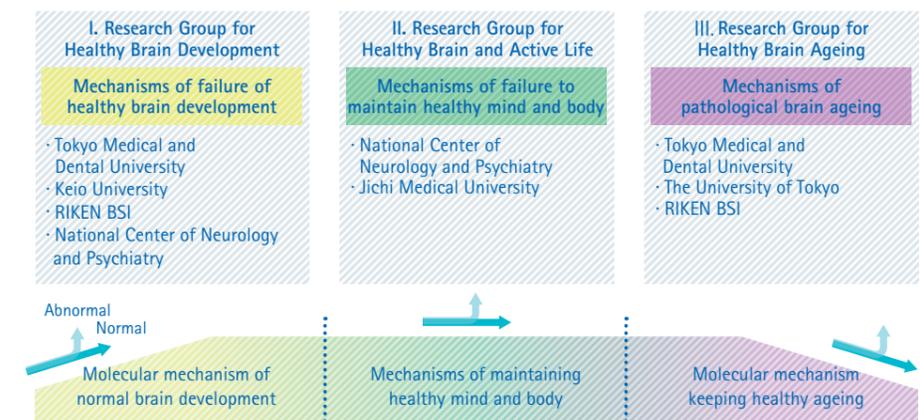
Elucidation of Molecular Bases, Environmental Factors and their Organization in the Brain, Enabling Lifelong Mental and Physical Health

Field Leader:
Hidehiro MIZUSAWA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

There is growing expectation from society that brain science will overcome the various problems that our modern – and aging, diversifying, and complicated – society faces. Therefore, the Ministry of Education, Culture, Sports, Science and Technology, Japan decided to promote the Strategic Research Program for Brain Science (SRPBS) for the benefit of society. Field E works on molecular bases and environmental factors to enable the brain to maintain lifelong mental and physical health.

In order to make this magnificent project succeed, three research groups were formed. The healthy development group investigates the organization of the cerebral cortex,

hippocampus, amygdala, thalamus and hypothalamus, which are related to developmental disorders, by studying phenotypes, molecular pathology and environmental effects on mouse models. The active life group handles depression, sleep disorders, eating disorders, and so on, in order to elucidate molecular bases for environmental stresses that destroy the homeostasis of the mind and body. The healthy aging group investigates the molecular bases and environmental factors of normal and pathological aging, including dementia and cerebellar ataxia. Overall, and in detail, influences from lifestyle-related diseases to normal and pathological aging of the cerebrum and cerebellum are studied precisely.



Other Current Projects

Strategic Basic Research Programs JST (CREST)

Novel Mechanisms of Allergy and its Regulation

Hajime KARASUYAMA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

2009 - 2015

Research on Developing Diagnosis and
Therapy of Purkinje Cell Degeneration Based on
its Molecular Pathogenesis

Hidehiro MIZUSAWA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

2009 - 2015

Analysis of Molecular and Cellular Basis of Synapse-
Glia-D-Serine System Dysfunction in Schizophrenia
toward the Development of Novel Strategies
for its Diagnosis and Treatment

Toru NISHIKAWA, MD, PhD
Professor,
Graduate School of
Medical and Dental Sciences

2009 - 2015

In April 2009, the TMDU International Student Center (ISC) was reorganized, given many new responsibilities, and rechristened as the "International Exchange Center", or IEC. One of the newly assumed tasks of the IEC is to facilitate and coordinate the international activities of the various divisions of the university. While each division of TMDU has been actively engaged in international exchange in the past decade, it was decided that it was necessary to set up unified procedures and promote coordination for the most effective implementation of our international endeavors. The IEC is thus expected to set up a system which will enable the leadership of the university to readily use and refer to necessary information on international activities as part of their decision-making.

Our international student alumni are very important to TMDU for this project, since they have a very good understanding of TMDU and now play a key role in the development of medical services in their home countries. Unfortunately we lose contact with some of our alumni, so the IEC has begun to form an international alumni database. This informational infrastructure will also be conducive to helping set up or support TMDU Alumni organizations around the world.

Encouraging promising students and young researchers to attend TMDU is another important activity of the IEC. We organized our first International Summer Program (ISP) in September 2009, and, at this writing, are just about to host the third one, ISP2011. We will continue to organize future ISPs so as to support TMDU's efforts to appeal to young people around the world. The IEC will also continue its effort to establish a comprehensive support system for international students: more detailed information before coming to Japan; counseling and guidance during the period of study in Japan; and follow-up after going back to their own countries.

We are now located in Building No.1 West 4F and as always greatly appreciate the support that the related divisions of the university have given us as we strive to accomplish our new mission.

Ghana-Tokyo Medical and Dental University Research Collaboration Program

A Stage for "Hideyo Noguchis" in the 21st Century

Research collaboration between Tokyo Medical and Dental University (TMDU) and the Noguchi Memorial Institute for Medical Research (NMIMR), University of Ghana was launched in 2008, and we are in 5th year of our collaboration programme. The aims of this project are not only the implementation of research collaboration, but also the development of individuals through the mutual exchange of researchers. Our project in Ghana is now one of the core international exchange activities of TMDU. TMDU has dispatched two researchers to NMIMR; one for virology and other for parasitology. As virology research activities, two main subjects are the targets. Monitoring drug efficacy for HIV in Ghana after the WHO's recommendation and molecular evolution of HIV, especially genetic recombination of HIV in Africa are the on-going subjects. As for parasitology research, analysis of new drug targets of African trypanosomiasis and construction of an epidemiological platform of parasitic infections in West Africa are the main targets. Since 2011, research on genetic modulation of malaria-transmitting mosquitoes has been added to the research scheme. For the purpose, insectaries for keeping mosquitoes was rebuilt in NMIMR.

Bidirectional exchanges of young researchers/students are important parts of the project. In 2011, 6 undergraduate students were dispatched to NMIMR and stayed there for their "Project semester" component of our medical school curriculum. From NMIMR, two young staff members were invited to Japan to join the Asia Africa Research Forum held in Kobe. They then stayed at TMDU to enhance their research skills and strengthen our research collaboration.



The sign on the door of the joint project office at NMIMR



Six medical students dispatched from TMDU on a visit to the Japanese Embassy in Accra.



Professor Ernest Aryeetey, University of Ghana, visited Professor Takashi Ohyama to talk about more intensive exchange between TMDU and NMIMR.

Latin American Collaborative Research Center (LACRC), Santiago, Chile

Support for a Chilean National Public Health Program of Colorectal Cancer Screening

TMDU and Clinica Las Condes (CLC), a renowned clinic in Chile that has been tackling the public health problem of an increasing mortality rate of colorectal cancer in the country, agreed in 2009 to establish clinical, scientific and academic collaboration between the two institutions. On July 15, 2009, TMDU, CLC and the Ministry of Health of Chile concluded a Memorandum of Understanding (MOU) relating to the said collaboration.

In accordance with the agreement, TMDU and CLC established the "Latin American Collaborative Research Center (LACRC)" in April 2010. LACRC will promote education, research and medical training in Latin American countries.

LACRC's activities will have the following specific purposes: 1) Achieve a reduction of colorectal cancer mortality both in Chile and other Latin American countries. Over a period of 15 years, TMDU held a training course for doctors in the region on the early detection, diagnosis and treatment of colorectal cancer in Latin America. Building on this experience, TMDU will support the holding of lectures, the provision of education and the accomplishment of research in CLC's "National Screening Program for Colorectal Tumors," a

program which will be carried out in the coming five years. 2) Develop clinical and scientific cancer research through interdisciplinary collaboration, using materials and databases obtained from community-based projects. The collaborative research activities will include basic medical research in the use of genetic precursors in diagnostic work as well as clinical research in the pathological anatomy of malignant and pre-malignant colon lesions.



TMDU President Ohyama, Sr. Alfredo Schonherr, CLC CEO, and Dr. Julio Montt Vidal, Ministry of Health, Undersecretary of Health Care Networks, sign the MOU establishing LACRC.

CU-TMDU Research and Education Collaboration Center

President Ohyama receives CU Honorary Degree from Princess Sirinthon

TMDU President Takashi Ohyama was awarded an Honorary Degree from Chulalongkorn University (CU) for his longstanding contribution to CU in the fields of education, research and clinical practice. After the conclusion of the Agreement of Academic Affiliation between both Dental Schools in 1991, many projects have been carried out. An Agreement of Academic Affiliation was also signed between Medical Schools in 2009, and the CU-TMDU Research and Education Collaboration Center was established at CU in 2010. President Ohyama has also participated in mobile dental services for dentistless areas in Thailand over the years, and has contributed to the improvement of oral health in the Thai population. For these international accomplishments that have

benefited CU and Thailand, President Ohyama is highly regarded by CU, leading to the awarding of his honorary degree. On July 7th, 2011, a grand ceremony was held at CU and Princess Sirinthon gave a Certificate of Honorable Degree to President Ohyama.

In 2011, a new video conference system was installed in the CU-TMDU Center to enable smooth communication between the two universities. We hope more collaborative activities in education and research in the field of medical and dental sciences will be conducted through this center.



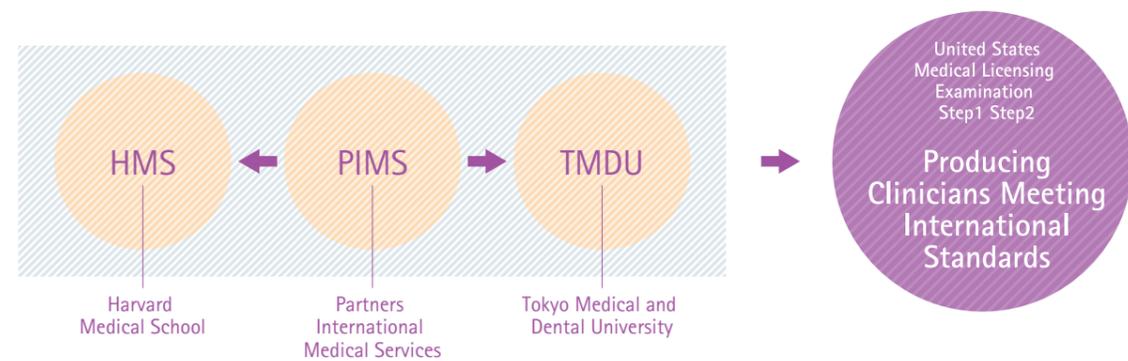
President Ohyama receives a CU Honorary Degree from Princess Sirinthon

Tokyo Medical and Dental University and Partners International Medical Services – Alliance for Medical Education

Since 2002, TMDU has cooperated with Harvard Medical International, Inc. (Partners International Medical Services, since 2012) and implemented wide-ranging reforms into our medical education. One of the chief aims of this alliance is to create a new model of medical education in Japan in order to meet various challenges we face in the 21st century. Partnering with PIMS, closely related to Harvard Medical School, TMDU has introduced new ideas and approaches into its curriculum, including patient-doctor relationship courses, hybrid programs integrating basic science and clinical studies, and innovative clinical clerkship programs.

The alliance with PIMS also provides TMDU students with a chance to take part in a clinical clerkship at Harvard Medical School. As a part of a recent curriculum reform,

TMDU introduced the Harvard Medical School Externship program in 2004. The students who pass the selection process go through nine months of preparatory training and then take part in clinical clerkships at Harvard Medical School. They stay in Boston for two or three months and complete three, four-week elective clerkship rotations. Harvard Medical School provides exchange students from all over the world with a chance to experience the same clinical training as Harvard students receive at HMS affiliated teaching hospitals. Working hard with talented and enthusiastic students of HMS and other elite medical schools, TMDU students can develop their clinical skills and get a better understanding of the American healthcare system as well as acquire an international way of thinking.



Student Exchange Programme between the Faculty of Medicine, Graduate School, Tokyo Medical and Dental University and the Faculty of Medicine, Imperial College of Science Technology and Medicine

Imperial College

Imperial College London is a science-based university founded in 1907, and its main campus is located in South Kensington in London. It has Faculties of Engineering, Medicine, and Natural Sciences, as well as a School of Business. Imperial has long enjoyed a high reputation and is consistently rated among the world's top universities, placing 3rd in university rankings in the United Kingdom, and 10th in rankings of universities worldwide.

Exchange Program

The exchange program between TMDU and Imperial College London was launched in 2004. This program provides students with a chance to gain firsthand experience doing world-class research. Credits attained by students at the host institution can be transferred to their home institution. Participants are provided with accommodations and are exempt from tuition fees at the host institution. Participants can enjoy strong and warm support during their stay. The experience of the past seven years has shown that students can gain valuable experience through this exchange program, which has led this program to become very popular and competitive.

From Tokyo to London

TMDU students passing the selection process spend the second semester of their fourth year at Imperial College. About four students a year are accepted; thirty (30) students have taken part in the program over the last seven years. The students undertake research topics under the supervision of a faculty member. New opportunities are being introduced: the participants will have a chance to visit hospitals that are affiliated with Imperial.

From London to Tokyo

As partial fulfillment of the BSc degree at Imperial College, each student undertakes a three-month research project. About four Imperial students, selected by their school, undertake research at TMDU every year; thirty-seven (37) Imperial students have participated in this program so far. They stay in Tokyo from February to May and are offered a very wide range of research topics. Each of the twenty departments of the Graduate School of Medicine at TMDU suggest one to three projects, from which Imperial students can choose a topic they are most interested in.

Upper left: Incoming students (2010) and Supervisors

Lower left: President Ohyama and Incoming students (2010)

Upper right and lower right: Dispatched students (2010)



International Summer Program (ISP)

To introduce TMDU to the world and attract top international students, especially from Asia, TMDU has held an annual International Summer Program (ISP) from 2009. Each year, the ISP includes lectures by invited overseas leading researchers and TMDU professors, an international symposium, and poster presentations by invited participants as well as TMDU international students.

The theme of the first ISP (September 6–9, 2009) was "Recent Advances in Cancer Research". The second ISP (September 5–8, 2010) had the theme of "Infection and Immunity". The third annual ISP was held August 28–31, 2011, and explored the theme of "Organ/Tissue Development and Regeneration: Fundamentals and Clinical Applications". The ISP2011 Working Group was chaired by Prof. Tetsuya Taga of the Medical Research Institute. Due to the leadership of Prof. Taga and the support of the members of Working Group, the invited speakers, and the TMDU speakers, ISP2011 was successfully held despite the unstable conditions in Tokyo, including a shortage of electricity, after the Great East Japan Earthquake.

As for attendees, ISP2009 received 76 applications from 15 Asian countries and regions and 35 students and researchers from 11 Asian countries and regions were selected as invited participants. ISP2010 received 96 applications from 16 Asian countries and regions, of which 24 participants were selected. In addition, two young researchers from the TMDU Research Collaboration Center in

ISP2011 Invited Students

Country / Region	Applicants			Invited participants		
	M	F	Total	M	F	Total
Vietnam	1	4	5	2	2	2
China	4	20	24	1	4	5
Bangladesh	3	2	5	1	1	1
Thailand	2	3	5	1	1	1
Nepal	3	1	4	1	1	1
Malaysia	2	2	4	1	1	1
Sri Lanka		2	2	1	1	1
India		3	3	1	1	1
Mongolia	1	2	3	1	1	2
Tajikistan	1		1			0
Republic of Korea		1	1	1	1	1
Cambodia		3	3	2	2	2
Pakistan	1		1	1		1
Hong Kong	1		1			0
Myanmar	2	2	4	1	1	2
Indonesia	1	2	3	1	1	2
Total	22	47	69	6	17	23

Ghana also participated in ISP2010. Twenty-three participants from 14 Asian countries and regions were invited to ISP2011. (Please see the below table for details.)

We are glad to report that several students who participated in the International Summer Program are now TMDU graduate students. As ISP has evolved, the participants have been given more opportunities and a greater amount of time to visit labs and communicate face-to-face with potential future advisers at TMDU. TMDU professors were very keen to meet invited students even though ISP was held during the summer holidays. The opportunity for TMDU and ISP participants to get to know each other has helped us recruit excellent international students. Three invited students for ISP2011 were admitted after taking an entrance examination.

ISP2012, the fourth annual ISP, is scheduled to be held from August 26th – 29th 2012 under the theme of "Brain and Mind: Neuroscience Up-to-date". The chair of ISP2012 is Prof. Hidehiro Mizusawa of the Graduate School of Medical and Dental Sciences. We expect that ISP2012 will continue to provide excellent exchanges between invited speakers and TMDU professors. A new feature for ISP2012 is the "Special Selection for ISP International Student PhD Program". Under this program, ISP participants will be able to take an entrance exam for TMDU's Graduate School on the day following ISP2012 (August 30).



ISP2011 Social Hour
(M&D Tower, Faculty Lounge, August 29th, 2011)

ISP2009	76 applicants, from 15 countries or regions 35 invited participants, from 11 countries or regions
ISP2010	96 applicants, from 16 countries or regions 26 invited participants, from 14 countries or regions

Undergraduate Overseas Studying Awards

To cultivate professionals with sensitivity and international awareness, TMDU offers Undergraduate Overseas Studying Awards to excellent undergraduate students who wish to undergo overseas training. This award was initiated in 2006 and 54 students, 9 in 2011, have taken advantage of this opportunity to study abroad.

2011 TMDU Undergraduate Overseas Studying Awards

Area	Host Institution	Number of students
Faculty of Medicine School of Medicine 4 th year	USA · Duke University · Woods Hole Oceanographic Institution · Scripps Research Institute	3
Faculty of Medicine School of Health Care Sciences 3 rd year	Thailand · Mahidol University Finland · Seinäjoki University of Applied Sciences	2

Area	Host Institution	Number of students
Faculty of Dentistry School of Dentistry 6 th year	Australia · University of Melbourne	
Faculty of Dentistry School of Dentistry 4 th year	UK · Kings College London · Kings College	3
Faculty of Dentistry School of Oral Health Care Sciences	USA · Eastern Washington University · University of California, Los Angeles	1

2011 Postgraduate Overseas Studying Awards

To cultivate leading researchers and highly talented medical personnel, the Postgraduate Overseas Studying Awards program was initiated in 2011. This award is presented to postgraduate students who have achieved excellent research in their field of study and are expected to be excellent researchers in the future.

2011 Postgraduate Overseas Studying Awards

Area	Host Institution
Graduate School of Medical and Dental Sciences	USA · Massachusetts General Hospital USA · Weis Center for Research · Geisinger Clinic
Graduate School of Health Care Sciences	USA · University of Texas · MD Anderson Cancer Research Center

Studying Abroad during Project Semester

Project Semester is aimed to cultivate fundamental skills that are necessary for medical doctors who have a scientific perspective. The 5-month program is open to undergraduate medical school students who have completed major subjects and experiments and is held in the second semester of the 4th year.

During Project Semester, students study and conduct research at TMDU and overseas collaborating institutions, such as Imperial College (UK), the University of Chile, Clinica Las Condes (Chile), Chulalongkorn University (Thailand), and the Noguchi Memorial Institute for Medical Research, University of Ghana (Ghana).

Students Studying Abroad during Project Semester

Imperial College (UK)		4
University of Chile and Clinica Las Condes (CLC) (Chile)		6
Chulalongkorn University (Thailand)		2
Noguchi Memorial Institute for Medical Research, University of Ghana (Ghana)		6
Others: Institutions in the USA, Australia, and the Republic of Korea		10

Tokyo Medical and Dental University and Partners International Medical Service – Alliance for Medical Education

United States of America
Partners International Medical Services

Overseas Affiliated Universities / Inter-Faculty Agreements

Graduate School of Medical and Dental Sciences (Medical Division) / Graduate School of Health Care Sciences / Faculty of Medicine

Republic of Finland
Seinajoki University of Applied Sciences
University of Tampere
Department of Nursing Science
United States of America
University of Washington
School of Nursing
University of Colorado
Denver College of Nursing

United Kingdom of Great Britain and Northern Ireland
Imperial College London
Faculty of Medicine
The University of Sheffield
School of Nursing and Midwifery
Kingdom of Thailand
Faculty of Medicine,
Chulalongkorn University

Republic of Ghana
Noguchi Memorial Institute for Medical Research
Taiwan
National Yang Ming University
People's Republic of China
Tianjin Medical University
Kingdom of Denmark
University of Copenhagen,

Graduate School of Pharmaceutical Science
Republic of Chile
Faculty of Medicine,
Universidad de Chile
Clinica Las Condes and the Ministry of Health of Chile

Graduate School of Medical and Dental Sciences (Dental Division) / Faculty of Dentistry

Republic of Korea
College of Dentistry,
Seoul National University
School of Dentistry,
Kyungpook National University
School of Dentistry,
Chonnam National University
Kingdom of Thailand
Faculty of Dentistry,
Chulalongkorn University
Faculty of Dentistry,
Mahidol University
Faculty of Dentistry,
Chiang Mai University
Faculty of Dentistry,
Prince of Songkla University
Faculty of Dentistry,
Khon Kaen University
Faculty of Dentistry,
Naresuan University
Faculty of Dentistry,
Srinakharinwirot University

People's Republic of China
College of Stomatology, Jilin University
Stomatology College of Dalian Medical University
School of Stomatology, Peking University
School of Stomatology, Capital Medical University
Tongji University,
School of Stomatology,
Inner Mongolia Medical College
Taiwan
College of Oral Medicine,
Taipei Medical University
School of Dentistry,
College of Medicine,
National Taiwan University,
College of Dental Medicine,
Kaohsiung Medical University
Republic of Indonesia
Faculty of Dentistry,
University of Indonesia

Republic of Singapore
Faculty of Dentistry,
National University of Singapore
Malaysia
Faculty of Dentistry,
University of Malaya
Kingdom of Denmark
School of Dentistry,
Faculty of Health Sciences,
University of Copenhagen
Union of Myanmar
Institute of Dental Medicine, Yangon
Socialist Republic of Vietnam
Faculty of Odonto-Stomatology,
The University of Medicine & Pharmacy at Ho Chi Minh City
University of Odonto-Stomatology, Hanoi
Mongolia
School of Dentistry,
Health Sciences University of Mongolia
Democratic Socialist Republic of Sri Lanka
Faculty of Dental Sciences,
University of Peradeniya

Kingdom of Cambodia
Faculty of Odonto-Stomatology,
University of Health Sciences,
Phnom Penh Cambodia
Lao People's Democratic Republic
Faculty of Medical Sciences,
National University of Laos
United Kingdom of Great Britain and Northern Ireland
King's College London Dental Institute
Czech Republic
Masaryk University, Faculty of Medicine
United States of America
School of Dental Medicine,
University of Pennsylvania
Harvard School of Dental Medicine
School of Dentistry, University of North Carolina at Chapel Hill
School of Dentistry, University of California San Francisco
Canada
Faculty of Dentistry, McGill University
Australia
School of Dental Science,
Faculty of Medicine,
Dentistry and Health Sciences,
The University of Melbourne

Biomedical Science PhD Program / Graduate School of Biomedical Science / Medical Research Institute

Republic of Poland
Medical University of Gdansk
Federal Republic of Germany
Deutsches Rheuma-Forschungszentrum Berlin
Humboldt-Universität zu Berlin
Faculty of Biosciences,
University of Heidelberg
The Spemann Graduate School of Biology And Medicine,
University of Freiburg

United Kingdom of Great Britain and Northern Ireland
University of Dundee
College of Medical, Veterinary and Life Sciences, University of Glasgow
People's Republic of China
Peking Union Medical College
Health Science Center
China Medical University
Shanghai Center for Bioinformation Technology
Socialist Republic of Vietnam
University of Hanoi Medical University, Hanoi

Institute of Biomaterials and Bioengineering

United Kingdom of Great Britain and Northern Ireland
Bioengineering Unit,
University of Strathclyde
Interdisciplinary Research Centre in Biomedical Materials and Science,
Queen Mary and Westfield College,
University of London
Kingdom of Sweden
Department of Biomedical Engineering, Linköping University

Republic of Poland
Institute of Biocybernetics and Biomedical Engineering and International Center of Biocybernetics,
Polish Academy of Science
Republic of Korea
Institute for Biomaterials Research and Development,
Kyungpook National University
People's Republic of China
School of Stomatology,
Peking University

Medical Research Institute

Republic of Singapore
Oncology Research Institute,
National University of Singapore
Republic of Korea
Institute of Molecular Biology and Genetics, Seoul National University

Kingdom of Thailand
Faculty of Dentistry,
Chulalongkorn University
French Republic
École Normale Supérieure de Lyon

Number of International Students

as of May, 1, 2012

Country/Area	Graduate Students			Undergraduate Students		Graduate Int'l Research Students				Japanese Language Course Students	Subtotal		Total									
	Medical and Dental Sciences	Health Care Sciences	Biomedical Science PhD Program	Faculty of Medicine	Faculty of Dentistry	Faculty of Medicine	Faculty of Dentistry	Institute of Biomaterials and Bioengineering	Medical Research Institute		National Expense	Private Expense										
Korea	3		1	1								1	4	5								
China	6	51	8	5	3	3	4	2				14	68	82								
Mongolia	1	2	1				1				1	2	4	6								
Philippines	3											3	0	3								
Indonesia	4											4	0	4								
Singapore			1									1	0	1								
Vietnam	4		1									4	1	5								
Cambodia	3											3	0	3								
Malaysia	2		1									1	2	3								
Thailand	17	2						1			1	18	3	21								
Myanmar	1	5					1					1	6	7								
Nepal	3		1								1	1	4	5								
Bangladesh	9	6										9	6	15								
India	3	4										3	4	7								
Sri Lanka	2	1										2	1	3								
Pakistan			1									0	1	1								
Iran	1	1	1									2	1	3								
Iraq		1										0	1	1								
Jordan	3											3	0	3								
Saudi Arabia		5										0	5	5								
Afghanistan	2											2	0	2								
Yemen	1											1	0	1								
Taiwan		5										0	5	5								
Slovakia	1											1	0	1								
Belarus							1					1	0	1								
Turkey			1									1	0	1								
Egypt	2	1	1				1					2	3	5								
Tanzania	2											2	0	2								
Ghana	1											1	0	1								
Sudan	1											1	0	1								
Canada			1	1								1	1	2								
Brazil	1											1	0	1								
Paraguay	1											1	0	1								
Honduras	1											1	0	1								
Venezuela	1											1	0	1								
Peru								1				0	1	1								
Subtotal	71	92	0	0	13	12	1	3	0	3	0	7	1	4	0	0	0	0	3	89	121	210
Grand Total	National Expense		Private Expense		National Expense		Private Expense		National Expense		Private Expense		National Expense									
	84		104		1		6		1		11		3						210			
					188				7				12				3					

Number of Staff Members

as of May, 1, 2012

	Director	Academic Staff				Subtotal	Other Staff				Subtotal	Total
		Professor	Associate Professor	Junior Associate Professor	Assistant Professor		Clerk	Co-medical	Nurse	Subtotal		
President	1											1
Trustee	5											5
Auditor	2 (1)											2 (1)
Inspection Office							1			1		1
Administration Bureau							141			141		141
Hospital Administration Planning Bureau							5			5		5
Graduate School of Medical and Dental Sciences		50	24	22	73	169	0	0	0	0		169
Graduate School of Medical and Dental Sciences		34	27	22	84	167	0	0	0	0		167
Graduate School of Health Care Sciences		16	7	2	14	39	0	0	0	0		39
Faculty of Medicine		0	0	0	0	0	68	6	0	74		74
Medical Hospital		1	8	34	103	146	0	125	713	838		984
Faculty of Dentistry		5	1	3	2	11	27	2	0	29		40
Dental Hospital		0	4	14	20	38	0	57	56	113		151
College of Liberal Arts and Sciences		9	9	2	2	22	4	0	0	4		26
Institute of Biomaterials and Bioengineering		11	7	2	17	37	6	0	0	6		43
Medical Research Institute		19	24	2	18	63	11	0	0	11		74
Institute for Library and Media Information Technology		1	0	0	1	2	17	0	0	17		19
Center for Education Research in Medicine and Dentistry		2	1	1	0	4	0	0	0	0		4
Research Center for Medical and Dental Sciences		1	2	1	2	6	2	0	0	2		8
Center for Experimental Animal		1	0	0	2	3	0	0	0	0		3
International Exchange Center		0	5	0	0	5	5	0	0	5		10
Life Science and Bioethics Research Center		1	0	2	1	4	0	0	0	0		4
Center for Interprofessional Education		0	1	1	0	2	0	0	0	0		2
Health Service Center		1	0	0	0	1	0	0	1	1		2
TMDU Research Organization		0	1	0	0	1	13	0	0	13		14
Center for Brain Integration Research		0	2	0	0	2	0	0	0	0		2
Number of Staff Members	8 (1)	152	123	108	339	722	300	190	770	1,260		1,990 (1)

*Note: The numbers in parentheses () indicate part-time directors.

Number of Graduate Students

Graduate School of Medical and Dental Sciences

as of May, 1, 2012

Specialized Courses	Capacity of Admission	Total Capacity	Master's Program			Doctoral Program				Subtotal	Total									
			1st year	2nd year	Subtotal	1st year	2nd year	3rd year	4th year		Subtotal									
Medical and Dental Sciences	-	50	1	0	54	27	55	27				55	27							
Medical and Dental Sciences (MMA Course)	-	10			11	6	11	6				11	6							
Medical and Dental Science and Technology	95	95	91	53			91	53				91	53							
Medical and Dental Science and Technology (MMA Course)	15	15	16	9			16	9				16	9							
Medical and Dental Sciences	189	189					224	85				224	85							
Life Science and Technology	25	25					9	2				9	2							
Oral Health Sciences	-	129					10	7	49	25	59	28	51	23	169	83				
Maxillofacial and Neck Reconstruction	-	86					1	1	21	10	25	5	46	12	93	28				
Bio-Matrix	-	51						12	4	16	7	22	8	50	19	50	19			
Public Health	-	59					8	2	29	12	17	7	37	17	91	38				
Gerontology and Gerodontology	-	36							19	9	12	5	26	7	57	21				
Comprehensive Patient Care	-	25							12	8	9	6	11	6	32	20				
Cognitive and Behavioral Medicine	-	55							11	4	18	7	15	4	44	15				
Bio-Environmental Response	-	49					2	1	11	6	14	5	17	10	44	22				
Systemic Organ Regulation	-	87					1	1	37	11	35	8	40	6	113	26				
Advanced Therapeutic Sciences	-	65							12	4	16	7	40	11	68	22				
Subtotal	324	1,026	108	62	65	33	173	95	225	99	213	93	221	85	305	104	994	381	1,167	476

Graduate School of Health Care Sciences

as of May, 1, 2012

Specialized Courses	Capacity of Admission	Total Capacity	Master's Program			Doctoral Program				Subtotal	Total									
			1st year	2nd year	Subtotal	1st year	2nd year	3rd year	4th year		Subtotal									
Comprehensive Health Nursing Sciences	M 17 D 8	M 34 D 24	17	16	23	19	40	35	11	9	11	9	34	32			56	50	96	85
Biomedical Laboratory Sciences	M 12 D 6	M 24 D 18	12	9	14	11	26	20	4	0	6	4	12	8			22	12	48	32
Subtotal	M 29 D 14	M 58 D 42	29	25	37	30	66	55	15	9	17	13	46	40			78	62	144	117

M: Master's Course D: Doctor's Course

Biomedical Science PhD Program

as of May, 1, 2012

Specialized Courses	Capacity of Admission	Total Capacity	Master's Program			Doctoral Program				Subtotal	Total									
			1st year	2nd year	Subtotal	1st year	2nd year	3rd year	4th year		Subtotal									
Bioinformatics	-	M 21 D 16	1	1	18	7	19	8	1	0	12	6	6	2			19	8	38	16
Functional Biology	-	M 24 D 14	4	4	29	16	33	20	2	1	7	0	18	10			27	11	60	31
Subtotal	-	M 45 D 30	5	5	47	23	52	28	3	1	19	6	24	12			46	19	98	47

M: Master's Course D: Doctor's Course

	Capacity of Admission	Total Capacity	Master's Program			Doctoral Program				Subtotal	Total									
			1st year	2nd year	Subtotal	1st year	2nd year	3rd year	4th year		Subtotal									
Total	367	1,201	142	92	149	86	291	178	273	109	249	112	291	137	305	104	1,118	462	1,409	640

Research Students

Graduate Schools	Number of Students	Female Students (in number)	International Students (in number)
Graduate School of Medical and Dental Sciences	196	91	9
Graduate School of Health Care Sciences	3	3	0
Total	199	94	9

*Note 1: The numbers in red indicate female graduate students.

*Note 2: The numbers in angle brackets < > indicate Advanced Oral Science International Program Students.

*Note 3: The numbers in brackets [] indicate International students in the Graduate Public Health Leader Course.

*Note 4: The numbers in parentheses () indicate Biomedical Science International Education Program students.

Number of Undergraduate Students

Faculty of Medicine

as of May, 1, 2012

		Capacity of Admission	Total Capacity	1st year	2nd year	3rd year	4th year	5th year	6th year	Total
School of Medicine		100 (5)	555	107 34	105 (3) 32 (1)	102 (5) 32	91 (5) 30 (1)	87 (7) 31 (1)	88 (6) 15	580 (3) [23] 174 (1) [2]
School of Health Care Sciences	Nursing Science	55	220	58 58	57 54	55 51	54 53			224 216
	Medical Technology	35	140	41 34	35 27	37 32	33 26			146 119
Subtotal		90	360	99 92	92 81	92 83	87 79			370 335

Faculty of Dentistry

as of May, 1, 2012

		Capacity of Admission	Total Capacity	1st year	2nd year	3rd year	4th year	5th year	6th year	Total
School of Dentistry		53	346	58 24	52 24	62 [1] 23 [1]	51 22	62 [9] 29 [5]	65 [7] 29 [5]	350 [17] 151 [11]
School of Oral Health Care Sciences	Oral Health Care Sciences	22 (6)	110	24 23	20 20	33 [6] 32 [6]	33 33 [6]			110 [12] 108 [12]
	Oral Health Engineering	10 (5)	25	12 9	14 (5) 6 (2)	0 0	0 0			26 (5) 15 (2)
Subtotal		32	135	36 32	34 26	33 32	33 33			136 123

as of May, 1, 2012

		Capacity of Admission	Total Capacity	1st year	2nd year	3rd year	4th year	5th year	6th year	Total
Total		275	1,396	300 182	283 (8) 163 (3)	289 [12] 170 [7]	262 [11] 164 [7]	149 [16] 60 [6]	153 [13] 44 [5]	1,436 (8) [52] 783 (3) [25]

*Note 1: The numbers in red indicate female students.

*Note 2: The numbers in angle brackets < > indicate the maximum number of students who can transfer into the third-year program from other institutions. They are not included in the numbers above them.

*Note 3: The numbers in angle brackets { } indicate the maximum number of students who can transfer into the second-year program from other institutions. They are not included in the numbers above them.

*Note 4: The numbers in brackets [] indicate the students transferring into the third-year program from other institutions.

*Note 5: The numbers in brackets () indicate the students transferring into the second-year program from other institutions.

Research Students

as of May, 1, 2012

Classification		Male	Female	Total
Faculty of Medicine	School of Medicine	7	4	11
	School of Health Care Sciences	0	0	0
Faculty of Dentistry	School of Dentistry	8	3	11
	School of Oral Health Care Sciences	0	0	0
Institute of Biomaterials and Bioengineering		1	0	1
Medical Research Institute		3	0	3
Total		19	7	26

Degrees Conferred

Doctoral Programs

as of May, 1, 2012

	Doctor									
	Philosophy in Medical Science	Philosophy in Dental Science	Philosophy	Nursing Science	Medical Laboratory Science	Philosophy in Bio-informatics	Philosophy in Functional Biology	Philosophy in Biomedical Science	Philosophy in Science	Philosophy in Engineering
Academic Year 2011	115	83	12	6	5	0	0	1	8	1
Total	1,841	2,036	141	84	49	1	1	2	65	2

Granted by Merit of Thesis

as of May, 1, 2012

	Doctor				
	Philosophy in Medical Science	Philosophy in Dental Science	Philosophy	Nursing Science	Medical Laboratory Science
Academic Year 2011	3	1	1	11	0
Total	1,752	508	23	22	13

Master's Programs

as of May, 1, 2012

	Master											
	Medical Science	Dental Science	Medical Administration (1)	Medical Administration (2)	Nursing Science	Medical Laboratory Science	Bioinformatics	Functional Biology	Biomedical Science	Science	Engineering	Philosophy
Academic Year 2011	44	3	5	10	20	12	5	1	1	32	5	1
Total	362	12	65	70	278	232	12	3	7	245	7	2

Educational Facilities

Enrollment

as of May, 1, 2012

	1st year	2nd year	Total
School of Dental Technologists	7 4	8 4	15 8

*Note 1: The numbers in red indicate female students.

Grants-in-Aid for Scientific Research (Fiscal Year 2012)

	Number	Amount
Grant-in-Aid for Scientific Research on Priority Areas	1	1,900
Grant-in-Aid for Challenging Exploratory Research	82	142,090
Grant-in-Aid for Young Scientists (A)	7	66,170
Grant-in-Aid for Young Scientists (B)	147	240,370
Grant-in-Aid for JSPS Fellows	41	35,600
Grant-in-Aid for Scientific Research (S)	3	117,910

in thousands of yen

as of May, 1, 2012

	Number	Amount
Grant-in-Aid for Scientific Research (A)	11	132,860
Grant-in-Aid for Scientific Research (B)	52	317,460
Grant-in-Aid for Scientific Research (C)	174	288,210
Grant-in-Aid for Research Activity Start-up	10	15,340
Grant-in-Aid for Scientific Research on Innovative Areas	46	471,770
Grant-in-Aid for Encouragement of Scientists	5	3,000
Total	579	1,832,680

in thousands of yen

Entrusted Research Funds (Fiscal Year 2011)

	Number	Amount
Entrusted Research	131 (32)	1,640,879 (111,834)
Cooperative Research	149 (91)	267,248 (100,712)
Donation for Promotion of Learning	796	1,252,998
Total	1,076	3,161,125

in thousands of yen

*A multi-year contract means the research was conducted for more than two years including the fiscal year 2010. The "Amount" is the sum of all the money entrusted to the projects in the fiscal year 2010.

*Figures in parentheses indicate values related to multi-year projects.

Grants-in-Aid for Scientific Research from Ministry of Health, Labour and Welfare

	Number	Amount
Research on Policy Planning and Evaluation	1	49,000
Research on Statistics and Information	1	2,000
Research on Global Health Issues	2	22,200
Research on Regenerative Medicine for Clinical Application	1	52,000
Public-Private Sector Joint Research on Publicly Essential Drugs	1	3,900
Research on Medical Device Development	1	39,000
Third Term Comprehensive Control Research for Cancer	2	30,500

in thousands of yen

as of May, 1, 2012

	Number	Amount
Comprehensive Research on Life-Style Related Diseases including Cardiovascular Diseases and Diabetes Mellitus	1	6,388
Research on Rare and Intractable Diseases	11	331,015
Comprehensive Research on Disability Health and Welfare	3	24,467
Research on HIV/AIDS	2	10,071
Research on Region Medical	4	26,900
Research on Health Security Control	1	3,600
Total	31	601,041

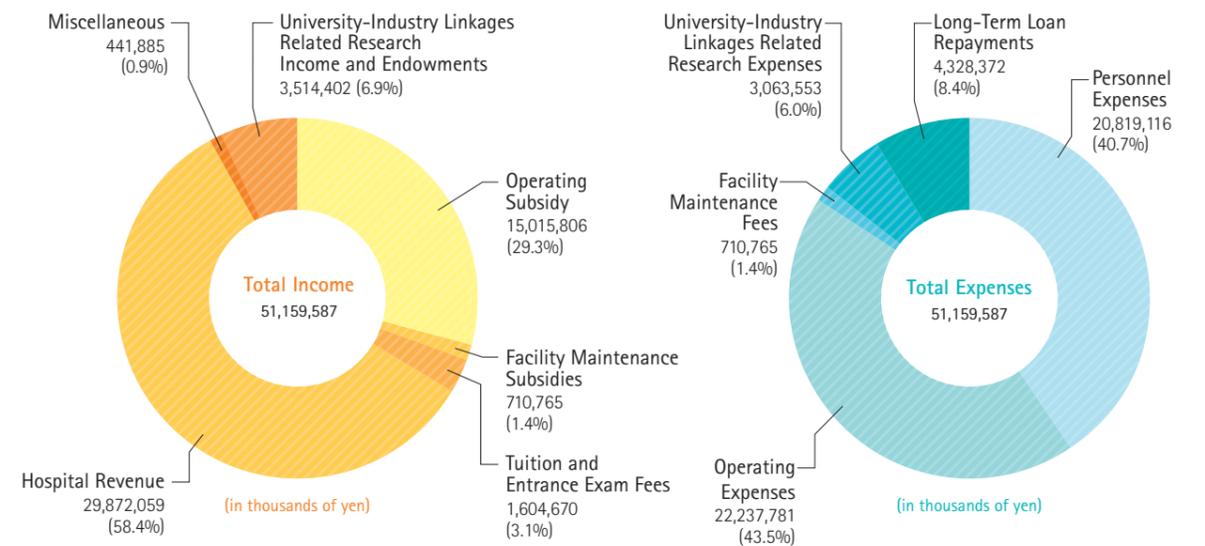
in thousands of yen

Endowed Departments

as of May, 1, 2012

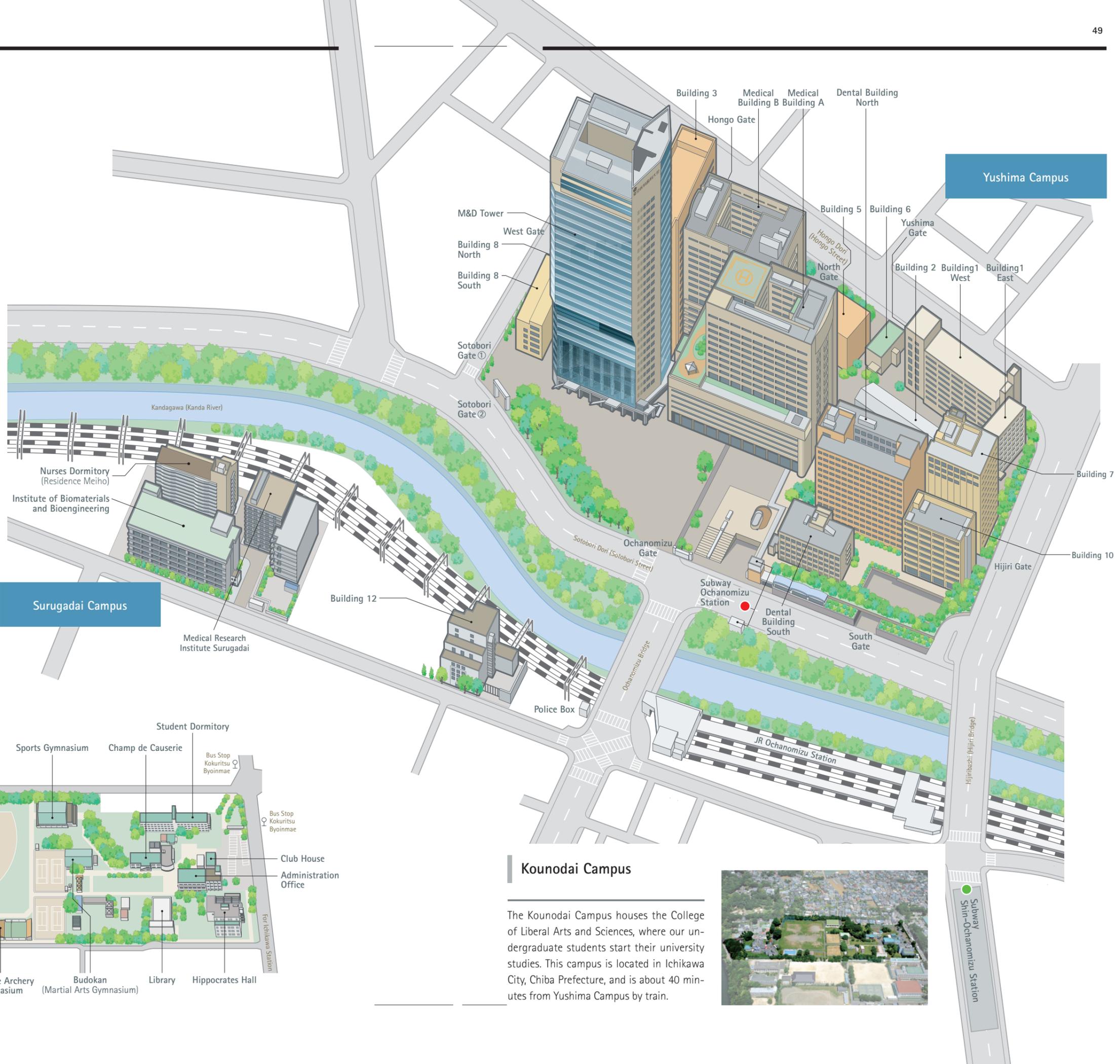
Departments / Institutes	Term	Donor
Department of Pharmacovigilance	H17.4.1-H25.3.31	Mitsubishi Tanabe Pharma Corporation / Takeda Pharmaceutical Co., Ltd. / Abbott Japan Co., Ltd. / Eisai Co., / Wyeth K.K. Ltd. / Chugai Pharmaceutical Co., Ltd. / Bristol-Myers K.K.
Department of Nanomedicine	H17.4.1-H25.3.31	Dai Nippon Printing Co., Ltd.
Department of Translational Oncology	H17.10.1-H26.9.30	Taiho Pharmaceutical Co., Ltd.
Department for Hepatitis Control	H18.4.1-H25.3.31	MSD K.K.
Department of Cartilage Regeneration	H18.6.1-H27.3.31	Zimmer K.K. / Japan Medical Materials Corporation
Department of Advanced Therapeutics for GI Diseases	H19.4.1-H27.3.31	Kyorin Pharmaceutical Co., Ltd. / Asahi Kasei Medical Co., Ltd. / Ajinomoto Pharma Co., Ltd. / UCB Japan Co., Ltd. / Otsuka Pharmaceutical Co., Ltd. / Eisai Co., Ltd. / JIMRO Co., Ltd. / Zeria Pharmaceutical Co., Ltd. / Mitsubishi Tanabe Pharma Corporation / Abbott Japan Co., Ltd. / Kyowa Hakko Kirin Co., Ltd.
Department of Orthopaedic Research and Development	H19.8.1-H25.3.31	Stryker Japan K.K. / Medtronic Sofamor Danek, Co., Ltd. / Hoya Corporation / Itoh Medical, Inc. / Teijin Pharma Limited
Department of Sleep Modulatory Medicine	H21.6.1-H27.3.31	Fukuda Denshi Co., Ltd. / Teijin Home Healthcare Limited / GlaxoSmithKline Co., Ltd. / Philips Respironics GK / Saiwai Medix Co., Ltd. / Terumo Medical Care K.K. / Fukuda Life Tech Tokyo Co., Ltd.
Department of Pediatrics, Perinatal and Maternal Medicine	H22.4.1-H26.3.31	Ibaraki Prefecture
Department of Community Pediatric Health Science	H22.4.1-H25.3.31	Tokyo Metropolitan Government
Department of Kidney Disease	H22.4.1-H25.3.31	Chugai Pharmaceutical Co., Ltd.
Department of Organ Network and Metabolism	H23.4.1-H26.3.31	Shionogi & Co., Ltd.
Department of Joint Reconstruction	H23.5.1-H25.4.30	Biomet Japan, Inc / Johnson & Johnson K.K.
Department of Women's Health	H24.4.1-H28.3.31	Kikkoman Corporation

Finances (Fiscal Year 2012 Budget)



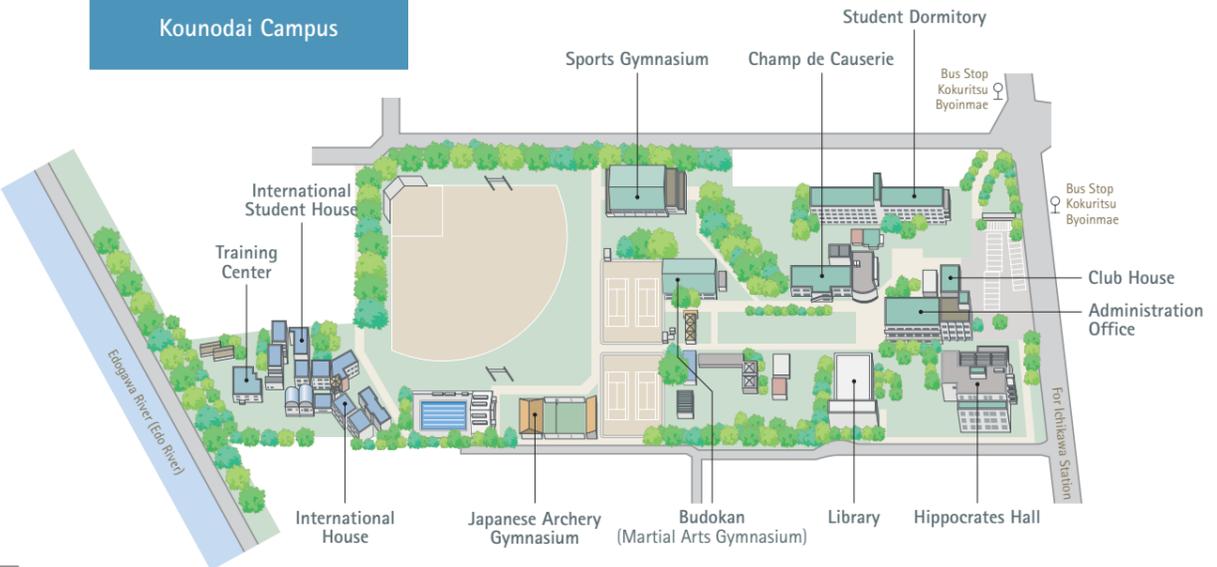
Yushima and Surugadai Campuses

TMDU is headquartered in the center of Tokyo, amid many sites of historic interest. The main campus, Yushima Campus, and the satellite campus, Surugadai Campus, contain our research buildings and hospitals. At these campuses, highly specialized education in clinical and basic research contexts is offered so as to foster health care professionals with advanced knowledge and skills.



Surugadai Campus

Kounodai Campus



Kounodai Campus

The Kounodai Campus houses the College of Liberal Arts and Sciences, where our undergraduate students start their university studies. This campus is located in Ichikawa City, Chiba Prefecture, and is about 40 minutes from Yushima Campus by train.



Location of University Campuses and Buildings (as of May 1, 2012)

Yushima Campus

Grounds 45,115m²
Buildings 240,436m²
(sq. metre)

- Administration Bureau
- Graduate School of Medical and Dental Sciences
- Graduate School of Health Care Sciences
- Biomedical Science PhD Program

5-45, Yushima 1 chome, Bunkyo-ku, Tokyo 113-8510 03-3813-6111

- Faculty of Medicine
- Medical Hospital

5-45, Yushima 1 chome, Bunkyo-ku, Tokyo 113-8519 03-3813-6111

- Faculty of Dentistry
- Dental Hospital

5-45, Yushima 1 chome, Bunkyo-ku, Tokyo 113-8549 03-3813-6111

- Institute for Library and Media Information Technology
- Center for Education Research in Medicine and Dentistry
- Research Center for Medical and Dental Sciences
- Center for Experimental Animal
- International Exchange Center
- Life Sciences and Bioethics Research Center
- Center for Interprofessional Education
- Health Service Center
- Student Center
- Support Office for Female Researchers
- TMDU Research Organization
- Hospital Administration Planning Division

5-45, Yushima 1 chome, Bunkyo-ku, Tokyo 113-8510 03-3813-6111

- School of Dental Technologists

5-45, Yushima 1 chome, Bunkyo-ku, Tokyo 113-8549 03-3813-6111

Surugadai Campus

Grounds 5,597m²
Buildings 19,912m²
(sq. metre)

- Institute of Biomaterials and Bioengineering

3-10, Kanda Surugadai 2 chome, Chiyoda-ku, Tokyo 101-0062 03-5280-8000

- Medical Research Institute

3-10, Kanda Surugadai 2 chome, Chiyoda-ku, Tokyo 101-0062 03-5280-8050

Kounodai Campus

Grounds 61,287m²
Buildings 13,900m²
(sq. metre)

- College of Liberal Arts and Sciences
- Institute for Library and Media Information Technology-Kounodai Branch Library
- Health Service Center, Kounodai Branch

8-30, Kounodai 2 chome, Ichikawa-city, Chiba Prefecture 272-0827 047-300-7103

- International House
- International Student House

8-1, Kounodai 2 chome, Ichikawa-city, Chiba Prefecture 272-0827 047-371-7936

		Grounds	Buildings
Toda Boat-House	60, Todakoen 1 chome, Toda-city, Saitama Prefecture	696m ²	479m ²
Akakura Resort House	6120, Akakura, Myoko-city, Niigata Prefecture	1,621m ²	434m ²
Tateyama. Oga-Resort House	Oga, Tateyama-city, Chiba Prefecture	4,357m ²	834m ²
Hakusan Residence Housing	36-3, Hakusan 2 chome, Bunkyo-ku, Tokyo	497m ²	91m ²

		Grounds	Buildings
Wakamiyacho Residence Housing	26, Wakamiya-cho, Shinjuku-ku, Tokyo	995m ²	—
Tonoyama Residence Housing	50-3, Chuo 1 chome, Nakano-ku, Tokyo	1,974m ²	1,945m ²
Etchujima Residence Housing	3, Etchujima 1 chome, Koto-ku, Tokyo	17,967m ²	25,480m ²
The Ossuary (Nokotsu-do)	10-1, Kounodai 3 chome, Ichikawa-city, Chiba Prefecture	(115m ²)	—

Total	Grounds	Buildings
	140,106m ² (115m ²) (sq. metre)	303,511m ² (sq. metre)

*The numbers in parentheses show temporary or long-term rental grounds and buildings.

Access

Yushima and Surugadai Campus

- JR Line Ochanomizu Sta.
- Subway Marunouchi Line Ochanomizu Sta.
- Subway Chiyoda Line Shin-Ochanomizu Sta.

Kounodai Campus

- Keisei Line Kounodai Sta.
- Sobu Line Ichikawa Sta.
- Bus for Matsudo Sta. from No.1 Keisei Bus Stop to Kokuritsu Byoinmae

