

Tokyo Medical and Dental University Postgraduate Programs for International Students (Dentistry)





Message from the President



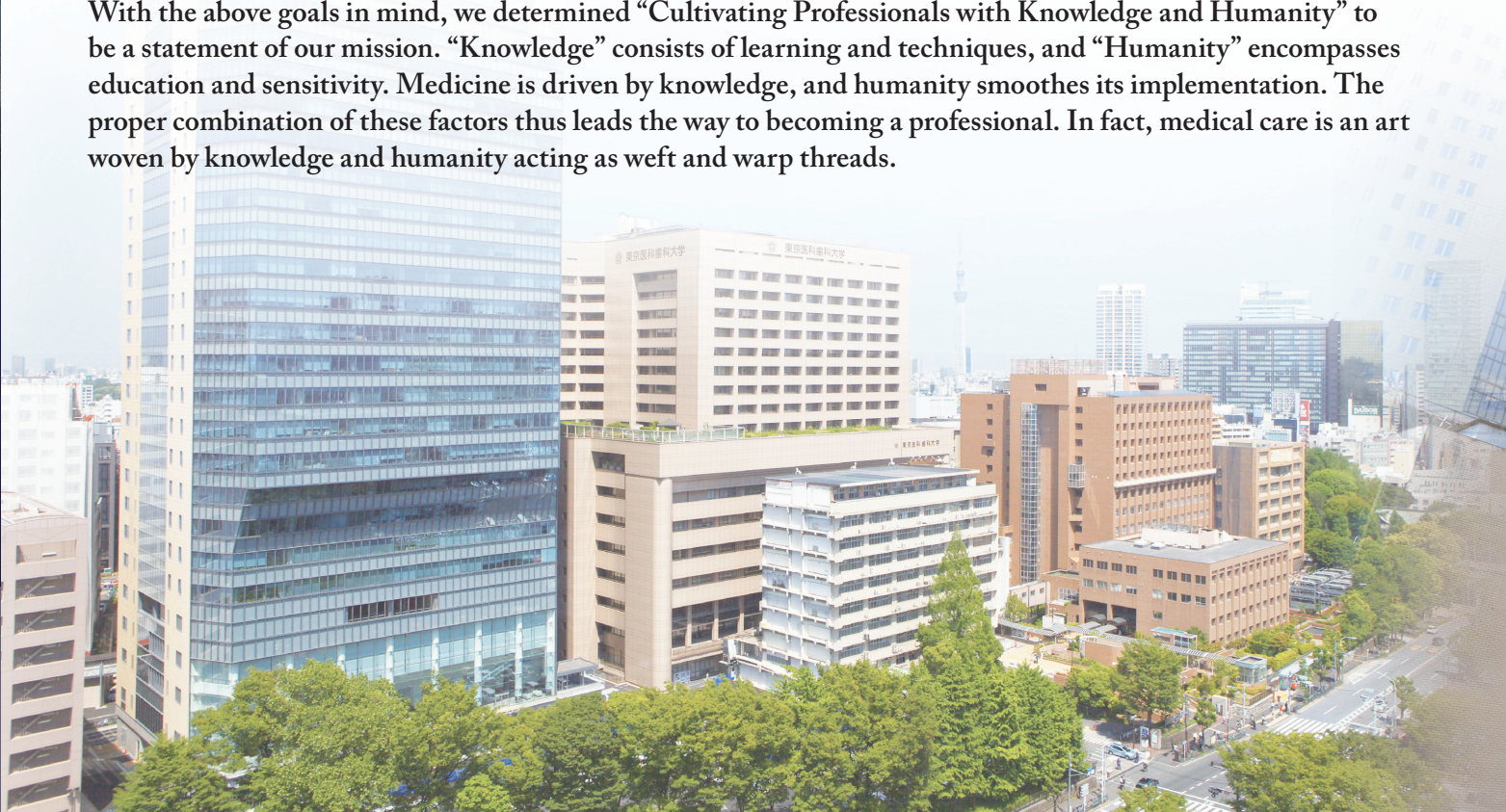
Takashi OHYAMA, D.D.S., Ph.D., President

“Cultivating Professionals with Knowledge and Humanity”

Tokyo Medical and Dental University is unique among medical and dental universities in Japan in that we have three divisions dedicated to graduate education and research: Medical and Dental Sciences, Health Care Sciences, and Biomedical Sciences (Education and Research). In all, TMDU is composed of four undergraduate faculties (Medicine, Dentistry, Health Care Sciences and Oral Health Care Sciences), an undergraduate College of Liberal Arts and Sciences, two research institutes (the Institute of Biomaterials and Bioengineering and the Medical Research Institute), a university hospital attached to the Faculty of Medicine, and a university hospital attached to the Faculty of Dentistry.

At TMDU we strive to produce scientists who expend every possible effort in seeking the truth, and who have the courage and ability to explore new areas, the tolerance and humility to respect diversity and accept new ideas, and the intellectual curiosity born of a broad education. These qualities are necessary for successfully engaging in clinical practice or research, and, indeed, are required for ensuring the future of mankind. Meeting the challenging standards expected of a TMDU student will lead you to a satisfying and fulfilling scientific career, one that will completely reward the hard work you will invest in your studies.

With the above goals in mind, we determined “Cultivating Professionals with Knowledge and Humanity” to be a statement of our mission. “Knowledge” consists of learning and techniques, and “Humanity” encompasses education and sensitivity. Medicine is driven by knowledge, and humanity smoothes its implementation. The proper combination of these factors thus leads the way to becoming a professional. In fact, medical care is an art woven by knowledge and humanity acting as weft and warp threads.



Message from the Supervisor



Junji Tagami, D.D.S., Ph.D.
Professor and Chair,
Cariology and Operative Dentistry

Our oral health care programs all share one ultimate mission: to ensure the well-being of our patients. In our department, we aim to help people maintain their own teeth throughout their lives, as sound, natural and aesthetically pleasing teeth are very important to one's overall health and quality of life. In order to achieve this goal, we carry out high-caliber research projects to enhance and evaluate dental materials and techniques in operative dentistry, particularly regarding adhesives, caries prevention, diagnosis, treatment, and oral health maintenance, and we provide clinical training to licensed graduate students. Another important aspect of our approach is to promote the use of minimally invasive treatment, a treatment methodology that is optimal from a caregiver's perspective and which will become popular with patients once they understand its benefits.

I would thus like to extend an invitation to all who wish to pursue high-level research and gain an insight into modern dentistry to join the international team of scientists in Cariology and Operative Dentistry.

Messages from Alumni



Chalida Nakalekha Limjeerajarus, D.D.S., Ph.D.,
Lecturer at Chulalongkorn University, Thailand (Graduation in 2009 (Fixed Prosthodontics))

Dear friends around the world,
It is my privilege to be able to let you know about my PhD study life in Japan. I came to Japan in 2005 with no knowledge of Japanese language or culture. After spending five years in Japan, and finishing my PhD, I went back to my country full of experiences and with new knowledge and friends from around the world — and I was fluent in Japanese, too! TMDU's International Exchange Center not only provided me the opportunity to learn Japanese, but also gave us lots of opportunities to experience Japanese cultural activities and experiences.

I hope you will enjoy your life experience in Japan as much as I did mine.



Yang Yuan, D.D.S., Ph.D.,
Clinical Staff at Oral Diagnosis and General Dentistry (General Dentistry 2), Dental Hospital, TMDU
(Graduation in 2007 (Cariology and Operative Dentistry))

Message to future students

I came to Japan in 2002, and joined the Department of Cariology and Operative Dentistry as a PhD student in 2003.

The university is well organized. The labs are well equipped with a variety of research instruments. The library provides a large number of textbooks, including internationally-renowned ones, and all the research journals I needed to get the necessary information and expand my view. The university also has many research journals online, so that you can also get information whenever you need.

During my time as a PhD student, my mentor gave me great support for my research. Also, other staff members and teachers were very kind and supportive. Owing to their help, I had the chance to present my research in conferences held in Japan and abroad. At the same time, I published several papers, with most of them as the first author. The journals that accepted my papers included the *Journal of Dental Research* and *Dental Materials*, which I could not have even dreamed about it before I came to Japan. As far as I know, most former international students and researchers continue the success of their career in Japan, in their home countries, or somewhere else in the world. Some of them contributed to building a partnership between the TMDU and their current institutes.

I received my PhD degree from TMDU in 2007. Later, I passed the Japanese National Board Examination for dental practice. Currently, I am a resident dentist in Oral Diagnosis and General Dentistry (General Dentistry 2), at TMDU's Dental Hospital.



Pariksha Bharti Raghav, B.D.S., Ph.D.,
(Graduation in 2012 (Periodontology))

Cherished moments at TMDU

I always wanted to get my higher education from abroad to gain an international experience. When my husband was invited to Japan for a work-related project, I saw it as an opportunity to explore my options in Tokyo. I contacted Tokyo Medical and Dental University's International Student Section for course information. Everyone I talked to was very helpful. I was given an overview of various departments after which I decided that I fit perfectly in the Periodontology department. Prof. Yuichi Izumi was very kind to accept me as a PhD candidate.

Soon after I enrolled in the program, I joined Japanese classes at TMDU, which helped me learn the language, and it made my everyday life quite easier. I also got to learn about the rich Japanese culture during these classes.

Dr. Sayaka Katagiri, Dr. Hiroaki Kobayashi and Dr. Yasuo Takeuchi, my supervisors were a great support. I appreciate all their time and energy that they put, to guide me and helped to bring out the best out of me. Their constant motivation inspired me to perform better.

I made amazing friends during my time in TMDU. Everyone was from a different culture and that helped me expand my horizons. We shared good laughs and I am so happy that I made some friends for life.

I am so glad that I chose TMDU. Each and every project taught me something new. The University gave me a chance to attend various conferences and seminars to represent my research at national and international platforms. This university is the reason that I have become the refined person I am today. I cherish the days spent at TMDU. Even though I have moved on to the next phase of my life, the foundations built at this place will forever be with me.

Overview of the Postgraduate Programs in Dental Sciences

Diploma Policy (Ph.D. in Dentistry/Science)

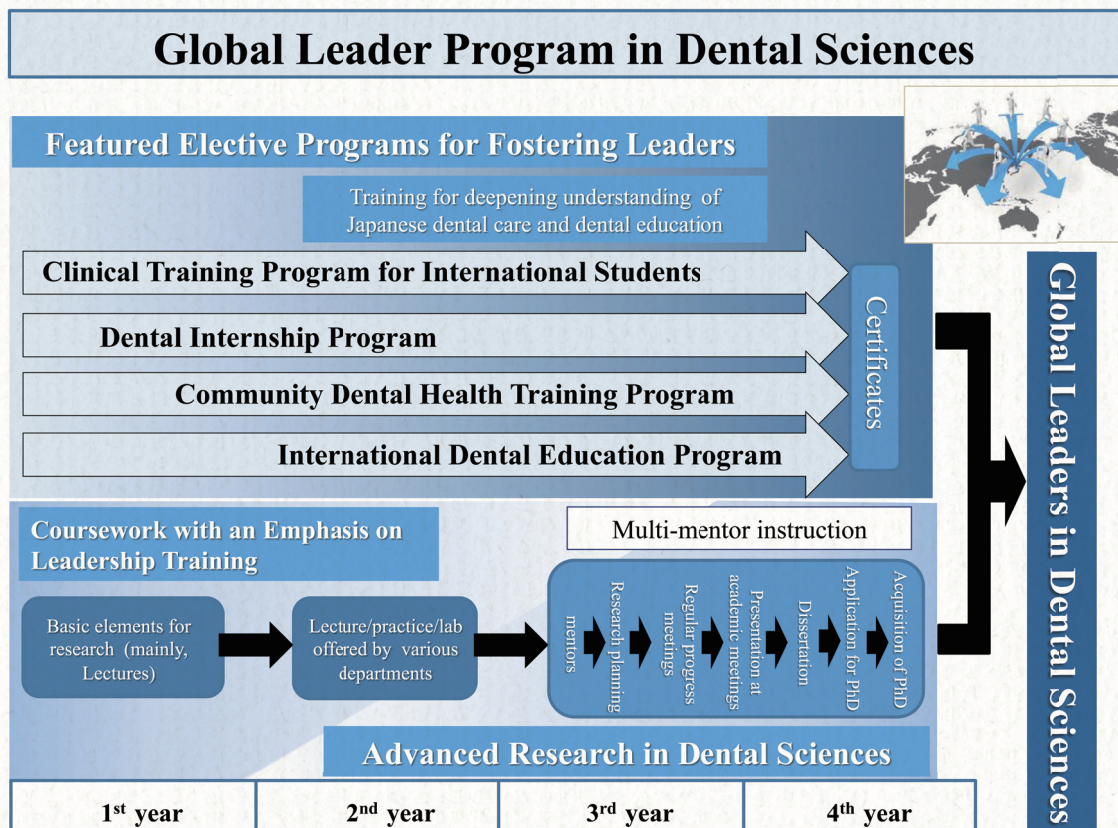
This course is devoted to developing researchers who have a high level of specialized knowledge in dentistry; educators who are rich in spirit and have highly developed expertise in devising and implementing effective educational strategies; highly specialized dental professionals who have uncompromising ethical views and a passionate interest in research; and opinion leaders who will act as pioneers in a new and more progressive era.

Curriculum Policy (Four-year course, matriculation in October; graduation in September)

This course is based on a well-balanced combination of coursework and research. Students will take various courses mainly in their first and second years, and will also be able to take seminars, clinical practice sessions (by clinical sections), special lectures, and other programs geared for graduate students. Students will engage in research work in the framework of a multi-mentor system, and publishing papers in peer-reviewed international journals.

Admission Policy

Applicants to this program are expected to have broad knowledge and skills in dentistry and a habit of learning independently. Applicants should have a strong, inquiring mind, passion for their field, and patience for conducting research.



This PhD course is shown as an example.

Profile of Faculty

Department of Oral Health Sciences

Section	Chief	Research Theme
Oral Pathology	YAMAGUCHI Akira akira.mpa@tmd.ac.jp	<ul style="list-style-type: none"> Clinico-pathological studies on oral lesions Molecular mechanism of bone regeneration Notch signaling in embryogenesis and regeneration
Bacterial Pathogenesis	NAKAGAWA Ichiro ichiro-n.bac@tmd.ac.jp	<ul style="list-style-type: none"> Analysis of bacterial survival strategy based on bacterial whole genome gene expression Regulation of bacterial gene acquisition and evolution by comparative genomics Analysis of recognition system and immune response against intracellular bacteria
Molecular Immunology	AZUMA Miyuki miyuki.mim@tmd.ac.jp	<ul style="list-style-type: none"> Mechanism of immune responses in oral diseases Studies on lymphocyte functional molecules Immunotherapy by molecular targeting
Advanced Biomaterials	UO Motohiro uo.abm@tmd.ac.jp	<ul style="list-style-type: none"> X-ray related analyses of dental materials, biomaterials and biological tissues Microstructural analysis and development of dental ceramics Development of esthetic and durable dental composite resins
Diagnostic Oral Pathology	IZUMO Toshiyuki izumo.dlab@tmd.ac.jp	<ul style="list-style-type: none"> Surgical pathology of oral cancer New diagnostic approach based on molecular pathology Diagnostic science on oral lesions
Oral Radiation Oncology	MIURA Masahiko masa.mdth@tmd.ac.jp	<ul style="list-style-type: none"> Molecular imaging of tumor microenvironment Radio sensitization of tumor cells Radiotherapy of oral cancer
Oral and Maxillofacial Surgery	OMURA Ken omura.osur@tmd.ac.jp	<ul style="list-style-type: none"> Clinical and basic study on oral cancer Clinical and basic study on dentofacial deformity Clinical and basic study on reconstruction and regeneration of jaw bone
Oral and Maxillofacial Radiology	KURABAYASHI Toru kura.orad@tmd.ac.jp	<ul style="list-style-type: none"> Improvement of efficacy of maxillofacial imaging Novel MRI techniques for maxillofacial diagnosis Molecular mechanisms of cellular radiosensitivity
Anesthesiology and Clinical Physiology	FUKAYAMA Haruhisa fukayama.anph@tmd.ac.jp	<ul style="list-style-type: none"> Development of drug delivery system using alternating current Conditioned pain modulation New methods for local anesthesia indentistry
Orofacial Pain Management	SHIMADA Masahiko mshimada.ofpm@tmd.ac.jp	<ul style="list-style-type: none"> New treatment methods for neuropathic pain Analyses of abnormal orofacial sensations Study of orofacial chronic pain
Pediatric Dentistry	Will be named soon	<ul style="list-style-type: none"> Development and developmental disturbances of tooth and jaw Tooth and stomatognathic function of children Growth of dento-maxillofacial complex of children
Orthodontic Science	ONO Takashi t.ono.orts@tmd.ac.jp	<ul style="list-style-type: none"> Orthodontic studies on occlusal and system function Neurophysiological studies on dentomaxillofacial function Biological and biomaterial studies on functional adaptation
Cariology and Operative Dentistry	TAGAMI Junji tagami.ope@tmd.ac.jp	<ul style="list-style-type: none"> Development and evaluation of dental adhesive Studies on caries prevention, diagnosing and treatment Development of aesthetic dental treatments
Fixed Prosthodontics	MIURA Hiroyuki h.miura.fpro@tmd.ac.jp	<ul style="list-style-type: none"> Studies on occlusion of crown-bridge restorations Clinical studies on new equipment and materials for crown-bridge restorations Systemic affects of materials for crown-bridge
Pulp Biology and Endodontics	SUDA Hideaki h.suda.endo@tmd.ac.jp	<ul style="list-style-type: none"> Molecular biology of pulp and periapical tissues Neurophysiology of dental pain Application of lasers to endodontics
Removable Partial Prosthodontics	IGARASHI Yoshimasa igarashi.rpro@tmd.ac.jp	<ul style="list-style-type: none"> Evaluation of stomatognathic system after tooth loss Development of innovative removable prosthodontics Evaluation of restorations for partially edentulous patients
Oral Implantology and Regenerative Dental Medicine	KASUGAI Shohei kas.mfc@tmd.ac.jp	<ul style="list-style-type: none"> Development of dental implant Diagnosis and treatment of peri-implantitis Bone and soft tissue regeneration
Complete Denture Prosthodontics	MINAKUCHI Shunsuke s.minakuchi.gerd@tmd.ac.jp	<ul style="list-style-type: none"> Fabricating complete dentures applying CAD/CAM Development of denture materials Newly developed implant overdenture system

Department of Maxillofacial/Neck Reconstruction

Section	Chief	Research Theme
Maxillofacial Anatomy	SHIBATA Shunichi sshibata.mfa@tmd.ac.jp	<ul style="list-style-type: none"> Structural features of mandibular bone and condylar cartilage Histology and embryology of teeth and periodontal tissue Mechanism of root formation in organ culture system
Cognitive Neurobiology	TAIRA Masato masato.cnb@tmd.ac.jp	<ul style="list-style-type: none"> Neural mechanisms for control of motor behavior Neural mechanisms for perception and cognition Processing of vocalizations in auditory cortex
Molecular Craniofacial Embryology	ISEKI Sachiko s.iseki.emb@tmd.ac.jp	<ul style="list-style-type: none"> Molecular mechanisms of craniofacial development and anomalies Regeneration of hard tissue of craniofacial region Regulation of gene expression in cell proliferation and differentiation
Cellular Physiological Chemistry	MORITA Ikuo morita.cell@tmd.ac.jp	<ul style="list-style-type: none"> Regulation of diseases by controlling angiogenesis Study for connexins and gap junction Molecular aspects of inflammation
Maxillofacial Surgery	HARADA Kiyoshi haradak.mfs@tmd.ac.jp	<ul style="list-style-type: none"> Research for cleft lip & palate and facial deformity Research for oral cancer and precancer Molecular biology of oral diseases
Maxillofacial Orthognathics	MORIYAMA Keiji k-moriyama.mort@tmd.ac.jp	<ul style="list-style-type: none"> Orthodontic/orthognathic treatments for birth defect and jaw deformity patients Molecular genetic research for birth defects Research on remodeling of craniofacial organs
Maxillofacial Prosthetics	TANIGUCHI Hisashi h.taniguchi.mfp@tmd.ac.jp	<ul style="list-style-type: none"> Diagnosis for maxillofacial prosthetic Modal analysis for human dentition Acoustic analysis of speech and voice

Department of Bio-Matrix

Section	Chief	Research Theme
Biostructural Science	TAKANO Yoshiro takanoy.bss@tmd.ac.jp	<ul style="list-style-type: none"> •Mechanisms of biological mineralization •Molecular mechanisms of tooth development and evolution •Regeneration of dental and periodontal tissues
Pharmacology	OHYA Keiichi kohya.hpha@tmd.ac.jp	<ul style="list-style-type: none"> •Pharmacological studies of the formation and resorption of teeth and bone •Drug effects on the cell differentiation process in the hard tissues •Detection of the new drug targets for the hard tissue diseases
Connective Tissue Regeneration	SHINOMURA Tamayuki t.shinomura.trg@tmd.ac.jp	<ul style="list-style-type: none"> •Study of chondrogenic differentiation •Maintenance mechanisms of chondrogenic phenotype •Study of extracellular matrix
Biochemistry	YANAGISHITA Masaki m.yanagishita.bch@tmd.ac.jp	<ul style="list-style-type: none"> •Functions and regulation of extracellular matrix •Cell-surface assembly of transmembrane proteins •Bone and central nervous system in weightlessness
Cell Signaling	Will be named soon	<ul style="list-style-type: none"> •Signal transduction in osteoclasts and osteoblasts •Interaction between the immune system and bone •Novel therapies for rheumatoid arthritis
Periodontology	IZUMI Yuichi y-izumi.peri@tmd.ac.jp	<ul style="list-style-type: none"> •Etiology, host responses and periodontal medicine •Periodontal regeneration by tissue engineering and cell sheet engineering •Clinical application of laser in periodontics

Department of Public Health

Section	Chief	Research Theme
Forensic Dentistry	Will be named soon	<ul style="list-style-type: none"> •Judicial autopsy •Forensic pathology •Forensic dentistry
Health Care Economics	KAWABUCHI Koichi kawabuchi.hce@tmd.ac.jp	<ul style="list-style-type: none"> •Research on health care economics •Research on health care management •International comparison on health care reform
Dental Education Development	MORIO Ikuko imorio.edev@tmd.ac.jp	<ul style="list-style-type: none"> •Comparative study of dental education •Research projects for dental students •English education programs for dental students
Oral Health Promotion	KAWAGUCHI Yoko yoko.ohp@tmd.ac.jp	<ul style="list-style-type: none"> •Epidemiology and oral disease prevention •Community dentistry and oral health promotion •International studies on oral health
Sports Medicine/Dentistry	UENO Toshiaki t.ueno.spm@tmd.ac.jp	<ul style="list-style-type: none"> •Improvement of oral health care for athletes •Oral functions and body motor functions •Prevention of oral injuries and mouthguards
Educational System in Dentistry	ARAKI Kouji k.araki.gend@tmd.ac.jp	<ul style="list-style-type: none"> •Development of evaluation method in dental curriculum •Development of program for improving clinical skill by simulation system •Accreditation standards for dental education
Educational Media Development	KINOSHITA Atsuhiko kinoshita.emdv@tmd.ac.jp	<ul style="list-style-type: none"> •Development and application of computer assisted simulation system for education •Application of e-learning system on health science education •Development and application of new educational media for health science

Department of Gerontology and Gerodontolgy

Section	Chief	Research Theme
Gerodontolgy	Will be named soon	<ul style="list-style-type: none"> •Oral function related aging •Swallowing disorder of the aged •Medical management during dental treatment

Department of Comprehensive Patient Care

Section	Chief	Research Theme
Dentistry for Persons with Disabilities	SHINOZUKA Osamu o.shinozuka.dpd@tmd.ac.jp	<ul style="list-style-type: none"> •Study on oral biofilm formation and elimination •Study on drug-induced gingival overgrowth •Oral health status of the medically-compromised patient
General Dentistry	Will be named soon	<ul style="list-style-type: none"> •Study on application of ArF laser to teeth adhesion treatment •Study of oral appliance therapy in obstructive sleep apnea •Study on diagnostic system of dental caries using digital images
Psychosomatic Dentistry	TOYOFUKU Akira toyoompm@tmd.ac.jp	<ul style="list-style-type: none"> •Study on pathophysiological mechanisms of oral psychosomatic disorders •Psychosomatic study on oro-facial unidentified complaints such as dysaesthesia and chronic pain •Therapeutic research and development for oral psychosomatic disorders
Behavioral Dentistry	MATAKI Shiro mataki.diag@tmd.ac.jp	<ul style="list-style-type: none"> •Communication ability in clinical dentistry •Application of behavioral sciences to education •Stress assessment of patients and medical staff
Temporomandibular Joint and Occlusion	KINO Kouji k-kino.tmj@tmd.ac.jp	<ul style="list-style-type: none"> •Study for factors of temporomandibular disorders •Study for psychosomatic factors of TMD patients •Study of modifying factors for sleep bruxism

Types of Admissions and Scholarships for International PhD Students (Dentistry)

Entrance Period: **April / October**
Entrance Examination: **August**

Tuition Fee		Admission Fee	Examination Fee
(Annual)	(for 6 months)		
535,800 yen	267,900 yen	282,000 yen	30,000 yen

For the Japanese Government Scholarship students, fees for the entrance examination, matriculation, and tuition will be exempted.

International Students with a Japanese Government scholarship

Recommended by the Japanese Embassy

Candidates will be recruited and selected at their locale.
Entrance period: April or October



Recommended by the University (for new international students)

General admission quota [1 or 2 new student(s)]
Entrance period: Entering as a Graduate International Research Student in October, and then as a Ph.D. student the next April



Special admission quota [12 new students]
Global Leader Program in Dental Sciences for International Students
Entrance period: October



Recommended by the University (for current international students)

Several current international students will be selected for special Japanese Government scholarships.
Transition period: April



International Students (privately funded)

- Home government scholarship
- International Summer Program (ISP) International Student PhD Program Special Selection [up to 3 new students]
 - Waiver of application, enrollment, and tuition fees
 - Eligible to apply for a special TMDU scholarship**Entrance period:** April and October (Academic year 2013)
- Global Leader Program in Dental Sciences for International Students (private funds) [12 new students]
 - For students who do not have a scholarship
 - For both new and current international students**Entrance/Transition period:** October
- Private association scholarships



Please contact us if you require any further information.

More information about the Japanese government scholarships can be found at the following websites:

Ministry of Education, Culture, Sports, Science and Technology-Japan
www.mext.go.jp/english/

Independent Administrative Institution Japan Student Services Organization
www.jasso.go.jp/index_e.html

International Exchange Center, TMDU +81-3-5803-4723
Please call between 1 p.m. and 4 p.m. (Japan Standard Time).



TMDU

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