

Admissions Guide  
for  
International Applicants  
  
2024

Matsumoto Dental University  
Graduate School

Doctoral Course  
Graduate School of Oral Medicine



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## **Our Policy on Confidentiality of Personal Information**

To protect the confidentiality of personal information, our Graduate School for Oral Medicine will handle any information that you submit according to the following criteria:

1. Your personal information will be maintained under the strict guidelines of the “Regulations for the Protection of Personal Information” of the Matsumoto Dental University Board of Admissions for the Graduate School.
2. Your personal information will only be used for mailing the documents that you request, and for the procedures that are needed for the admissions process. However, this protection may be excluded without your agreement, when a request is made by an appropriate legal authority, or for the safety or wellbeing of the applicant or other persons.
3. The documents that you submit will be properly disposed of after a period that is defined by Matsumoto Dental University.

Note: Please submit your agreement to this Protection Policy on Confidentiality of Personal Information.

## **Admissions Policy**

Our objective is to attract students who will contribute to the advance of oral medicine and treatment, and who will become world leaders in this field. We therefore seek applicants with diverse backgrounds, including students from overseas.

# Doctoral Course, Graduate School for Oral Medicine

## **1. Purpose**

The Graduate School at Matsumoto Dental University is independent of our undergraduate programs, and the school awards graduates a doctoral degree. The Graduate School is managed with cooperation of Institute for Oral Science (IOS) with the aim of implementing high-level, state-of-the-art, and interdisciplinary education and research in oral medicine and treatment, while avoiding the sort of insulation or stagnation that is often seen in course-oriented graduate programs. Our Graduate School is devoted to the production of dental professionals whose creativity and intelligence are challenged so they can acquire the type of interdisciplinary knowledge and professional skills to deal with oral diseases and tissue engineering.

## **2. Outline of Graduate School**

The Graduate School was established in 2003 through the Institute for Oral Science (IOS). IOS is an alliance of three research divisions - the Division of Hard Tissue Research, the Division of Oral and Maxillofacial Biology, and the Division of Oral Health Promotion. These three research divisions correspond to three departments of the Graduate School—the Department of Hard Tissue Research, the Department of Oral and Maxillofacial Biology, and the Department of Oral Health Promotion. These three departments work cooperatively to pursue high-level, state-of-the-art, and interdisciplinary work on oral diseases and tissue engineering. IOS supports the education and research of the Graduate School.

The Department of Hard Tissue Research and the Department of Oral and Maxillofacial Biology are both dedicated to life sciences, and the Department of Oral Health Promotion is dedicated to social sciences in oral medicine. The Department of Hard Tissue Research specializes in the study of hard tissues, mainly in terms of molecular and cellular biology, and the Department of Oral and Maxillofacial Biology specializes in the study of mechanisms for mastication and deglutition, mainly in terms of neuroscience. The Department of Oral Health Promotion encompasses social needs to ensure quality of life, with an emphasis on oral treatment and fieldwork in oral health.

## **3. Admissions Schedule**

Graduate students typically enter at the beginning of the academic year, in April. However, students with permission may also enter at the beginning of the second semester, in October.

## **4. Curriculum**

### **4-1. Subjects**

Subjects that are available to our graduate students include introductory compulsory courses (2 subjects, 2 credits each), and electives. Electives courses include introductory electives (2 subjects, 2 credits each), core research courses (52 subjects, 4 credits each), associated research courses (37 subjects, 4 credits each), and specialized research courses (3 subjects, 4 credits each).

Each student must earn at least 30 credits, within the following guidelines, in order to complete the program:

- At least 6 credits must be introductory compulsory and introductory elective courses.

Note: Each student must select more than one subject out of two introductory elective courses, in addition to the two introductory compulsory courses.

- At least 16 credits must be chosen from the core research courses (i.e.,  $\geq 4$  courses).
- At least 4 credits must be chosen from the associated research courses (i.e.,  $\geq 1$  course).
- At least 4 credits must be chosen from the specialized research courses (i.e.,  $\geq 1$  course).

### **4-2. Requirements for Completing Learning**

Each student must earn at least 30 credits, succeed in defending a doctoral thesis, and pass a final examination to complete the four-year Graduate Course. However, after a minimum of three years of study, students showing outstanding performance in research may qualify for Merit-based Accelerated Graduation and may be eligible to complete the course early, upon successful review by the Graduate School Board.

# Special Admissions for International Applicants

## 1. Number of Students Admitted

Major	Department	Number of Students Admitted
Oral Diseases and Tissue Engineering	<ul style="list-style-type: none"><li>• The Department of Hard Tissue Research</li><li>• The Department of Oral and Maxillofacial Biology</li><li>• The Department of Oral Health Promotion</li></ul>	18 in total including: <ul style="list-style-type: none"><li>• Special admission for social applicants, and</li><li>• Special admission for international applicants</li></ul>

## 2. Awarding of Degrees

A doctoral degree—PhD in Dentistry, PhD in Clinical Dentistry, or PhD in Science—is awarded to a student who successfully completes four or more years of required course work and research, succeeds in defending a doctoral thesis, and passes a final examination. For Merit-based Accelerated Graduation, please see 4-2 in the Graduate School Guide.

## 3. Requirements for Admissions

- 3-1. The candidate must have graduated, or expect to graduate from a medicine, dentistry, or veterinary undergraduate course.
- 3-2. The candidate must have completed, or expect to complete, 18-years of schooling abroad, including the abovementioned medicine, dentistry, or veterinary course.
- 3-3. The candidate must be recognized by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) to be eligible for the study in Japan, according to Clause-39 in the MEXT Announcement, 1955, specifically:
  - A candidate who has graduated from a medicine or dentistry undergraduate course, according to the former University Law, Clause-338 of Imperial Decree, 1918.
  - A candidate who will graduate or has graduated from National Defense Medical College, according to the Defense Agency Establishment Act, Clause-164, 1954.
  - A candidate who will complete, or has completed a Master course, or will be awarded a Master degree, and who has completed two or more years of required course work and research of a 5-year Doctoral course and to be higher or equivalent as recognized by our Graduate School.
  - A candidate who has graduated from a Bachelor course of other than medicine, dentistry, or veterinary school, or has completed 16-year schooling abroad, experienced two or more years research, and to be higher or equivalent to those who are graduated from a medicine, dentistry, or veterinary undergraduate course.
- 3-4. The candidate must be admitted to be higher or equivalent to those who have completed 6-year course of medicine, or dentistry, or veterinary undergraduate school by our Graduate School.
- 3-5. The candidate must acquire a high-level of Japanese proficiency or English before entering our Graduate School.

## 4. Application for Eligibility

Applicants are strongly recommended to consult our **International Admissions Office** to ensure they have all required documents in advance of application.

### 4-1. Acceptance

Prospective students may apply for admission at any time.

### 4-2. Documents Required:

- Application form (in English).
- Official transcript of previous university studies (in English).
- Graduation certificate or diploma; or similar document that certifies graduation (in English).
- A letter explaining your reasons for choosing this graduate school, as well as your plan for research (in English). (Please type your letter on A4-size paper; there is no special format required.)
- A document that describes any clinical experience (in English). (A4-size paper; no special format required.)
- Two letters of recommendation (in English). (A4-size paper; no special format required.)
- One photocopy of your valid passport. (Important: The copy must be of the passport information page, showing the applicant's name, passport number and photograph.)
- One photocopy of your valid Foreign Resident Registration Card if you are a resident in Japan. (Important: The copy must be no more than three months old.)

### 4-3. Review of Eligibility

Eligibility will be determined based on the abovementioned documents.

#### 4-4. Notification of Eligibility

Applicants will be directly notified about the result of the review.

Note) The foreign students should not leave Japan from the institution instructed by their supervisor after enrolling.

#### 4-5. Indication of the English ability

An applicant who has earned either a TOEFL iBT score of 32 or above, IELTS score of 5.0 or above not more than two years before the application date. If the applicants have not taken above examination, could provide any English skill test result.

### 5. Applications for Admission

Prospective students may apply for admission at any time.

### 6. Submission of Documents

Anyone wishing to apply to our Graduate School is encouraged to contact a potential supervisor to discuss plans for education and research before submitting documents. Our **International Admissions Office** may be helpful for making the initial contact.

#### 6-1. Applicants should send a complete set of application documents to the following address:

International Admissions Office
Matsumoto Dental University
1780 Gobara-Hirooka, Shiojiri, Nagano 399-0781 Japan
Phone: +81-263-51-2012

#### 6-2. Please contact the International Admissions Office immediately if there is any change in your situation.

#### 6-3. Your application documents and the examination fee cannot be reimbursed once they are received.

### 7. Documents Required for Entrance Application

In addition to submitting the documents listed in **Section 4-2 (Documents Required)**, applicants must also submit the Entrance Examination Fee, paid by bank transfer. Please do not send your examination admission card. For further instructions about making a bank transfer, please contact the International Admissions Office

### 8. Fee for Entrance Examination

The fee for the entrance examination is ¥30,000.

### 9. Selection

In addition to a review of the documents submitted, there may be an interview.

### 10. Notification of Results

Applicants will be directly notified of the results.

### 11. Entrance Formalities

#### 11-1. Entrance Formalities

Successful applicants will receive a letter of acceptance and an admissions guidebook. Accepted students are expected to complete the matriculation process by the specified deadline, according to the instructions given in the guidebook. Those who complete the process will receive an acceptance form.

#### 11-2. Declining Entrance

Tuition and miscellaneous fees can be refunded provided that an application for refund is submitted at least one week before the start of the semester. The matriculation fee, however, will not be reimbursed.

## 12. Fees Required for Matriculation

### 12-1. Fee Table

(As of April 2024)

Grander	Student Payment		Institution Expansion Expenses	Miscellaneous ※1	Additional costs ※2	Total
	Matriculation	Tuition				
1	¥300,000	¥600,000	¥100,000	¥3,370	¥30,000	¥1,033,370
2	-	¥600,000	-	-	¥20,000	¥620,000
3	-	¥600,000	-	-	¥20,000	¥620,000
4	-	¥600,000	-	-	¥20,000	¥620,000
Total	¥300,000	¥2,400,000	¥100,000	¥3,370	¥90,000	¥2,893,370

※1.Student Insurance(4year)

※2.Only for foreign student(incl.visa fee etc)

### 12-2. Payment

- Bank Transfer

All of the fees required for matriculation must be paid by bank transfer.

- Installment Payment

Tuition may be paid by an installment payment for each semester. The entire miscellaneous fee must be paid in full when completing entrance formalities.

For further information, please contact:

International Admissions Office
Matsumoto Dental University 1780 Gobara-Hirooka, Shiojiri, Nagano 399-0781 Japan E-mail: info aogs@mdu.ac.jp

# List of Research Projects

lecture	Specialism	Instructor	Main study contents
<b>Department of Hard Tissue Research</b>	Tissue and Cell Biology of the Hard Tissues	Hiroaki Nakamura, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Development and regeneration of tooth</li> <li>2. Coupling of resorption to formation in bone</li> </ol>
	Molecular and Cell Biology of the Hard Tissues	Nobuyuki Udagawa D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Signal transduction of osteoclast differentiation and function</li> <li>2. Mechanism of bone destruction in periodontal disease and rheumatoid arthritis</li> <li>3. Identification of osteoclast-derived osteoblast differentiation factors</li> <li>4. Alveolar bone regenerative medicine using human bone marrow stem cells</li> </ol>
		Yasuhiro Kobayashi D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Roles of Wnt and its inhibitor in bone metabolism</li> <li>2. Orthodontic force-induced periodontal tissue remodeling</li> <li>3. Mechanisms of bone metabolic diseases associated with aging</li> <li>4. Molecular mechanisms of osteoclast differentiation and functions</li> </ol>
		Midori Nakamura D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Coupling mechanism between osteoblasts and osteoclasts</li> <li>2. Identification of new compound for the enhancement of bone volume</li> <li>3. Role of gravity on bone metabolism</li> <li>4. Molecular mechanism of dental pulp cell calcification</li> <li>5. Clinical research on alveolar bone regeneration</li> </ol>
		Teruhito Yamashita, Ph.D.	<ol style="list-style-type: none"> <li>1. Regulatory relationships among transcription factors in osteoclast differentiation</li> <li>2. Roles of osteocytes in the balance of bone resorption and formation</li> <li>3. Bone cell differentiation under the control of circadian rhythms</li> <li>4. Molecule mechanism of osteoclast polarization</li> </ol>
		Yuko Nakamichi, Ph.D.	<ol style="list-style-type: none"> <li>1. Roles of Wnt signaling in metabolic bone diseases</li> <li>2. Molecular mechanisms underlying pleiotropic effects of vitamin D</li> <li>3. Exploration of druggable targets for metabolic bone diseases using sensitive reporter systems and integrative proteogenomic approaches</li> </ol>
		Shunsuke Uehara Ph.D.	<ol style="list-style-type: none"> <li>1. The roles of Wnt non-canonical pathways in the regulation of osteoclast function</li> <li>2. Regulatory mechanisms of cytoskeleton in osteoclasts via Rho-Pkn3 signaling</li> <li>3. Regulation of osteoclasts polarization by dynamin</li> </ol>
		Masanori Koide D.D.S., Ph.D.	<ol style="list-style-type: none"> <li>1. Inhibition of alveolar bone resorption and regeneration of alveolar bone</li> <li>2. Coupling mechanism from bone resorption to bone formation</li> <li>3. Communication mechanism between osteoclasts, osteoblasts and osteocytes</li> </ol>
		Masayoshi Ishida Ph.D.	<ol style="list-style-type: none"> <li>1. Research on cellular senescence and mechanisms of differentiation of senescent mesenchymal stem cells</li> <li>2. Mechanisms of bone formation and resorption in the aged mice.</li> <li>3. Development of treatment for metabolic syndrome by regenerative medicine</li> </ol>



	Development and Engineering for the Hard Tissues	Michiko Yoshizawa, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Regeneration of tooth and periodontal tissue by stem cells</li> <li>2. Study on non-invasive early diagnosis of superficial oral cancer</li> <li>3. Oral mucosa regeneration by tissue-engineered oral mucosa fabricated with oral keratinocyte-enriched populations of small-sized progenitor/stem cells</li> </ol>
	Molecular Engineering and Drug Developmental Science	B. Yukihiro Hiraoka, Ph.D.	<ol style="list-style-type: none"> <li>1. Development of inhibitors for superoxide dismutase from <i>Porphyrromonas gingivalis</i>, a key causative agent of adult periodontitis.</li> <li>2. Analysis of structure and function for peptidase.</li> </ol>
		Norio Sogawa, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Analysis of regulatory mechanisms for feeding behavior by monoamines and monoamine- related factors.</li> <li>2. Analysis of physiological functions of metal-binding protein, metallothionein.- especially for relevance to oral diseases</li> </ol>
		Toshiaki Ara D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Basic study of kampo medicine for treatment of periodontal disease</li> <li>2. Basic study of drugs affecting conditions of periodontal disease</li> <li>3. Mechanism of LPS tolerance in gingival fibroblasts</li> </ol>
	Hard Tissue Pathology	Toru Hiraga, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Mechanisms of cancer metastasis to bone</li> <li>2. Development of treatment strategies for cancer bone metastasis</li> <li>3. Mechanisms of bone invasion by oral cancer</li> <li>4. Regeneration mechanisms of periodontal tissues</li> </ol>
		Yuji Kurihara, D.D.S.,Ph.D	<ol style="list-style-type: none"> <li>1. Study on 3D virtual treatment planning and new protocol for orthognathic surgery</li> <li>2. Clinical assessment and development of new procedure in bone regeneration technique for orthognathic surgery</li> <li>3. Analysis of growth abnormalities and gene expressions in the maxillofacial region</li> </ol>
		Satoshi Murakami D.D.S., Ph.D	<ol style="list-style-type: none"> <li>1. Development of a new inspection method for oral examination</li> <li>2. Pathophysiology of oral mucosa, dentin pulp complex and periodontium by carbon dioxide laser</li> <li>3. Oral pathophysiology based on female medicine</li> <li>4. Pathophysiology of periodontal tissue regeneration therapy</li> </ol>
	Experimental Biomaterials	Akihiro Kuroiwa D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Development of biomaterial</li> <li>2. Proper use condition of biomaterial</li> <li>3. Suitable mechanical considerations of biomaterials and organ</li> <li>4. Studies on the clinical application of titanium and titanium alloys</li> <li>5. Studies on the fitness of prosthesis</li> <li>6. Clinical application for Dental CAD/CAM</li> <li>7. Finite-element-analysis of prosthesis</li> <li>8. Studies on the color of the resin cement</li> </ol>
		Yukiko Yokoi D.D.S.,Ph.D	<ol style="list-style-type: none"> <li>1. Development and analysis of ceramic biomaterials.</li> <li>2. Analysis of mechanism in tooth movement by finite element method.</li> </ol>
	Clinical Evaluation	Norimasa Okafuji, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Bone remodeling after experimental tooth movement</li> <li>2. Assessment of cell proliferation during mandibular distraction osteogenesis</li> <li>3. Morphological changes of the pharyngeal airway in patients before and after the surgery of the maxillofacial deformity</li> <li>4. Reconstruction of experimental mandibular defect with rhBMP-2 and atelocollagen gel</li> </ol>

		Akira Taguchi, D.D.S.,Ph.D.,PgCert (University of Washington)	<ol style="list-style-type: none"> <li>1. Screening for osteoporosis by dental radiographs</li> <li>2. Early detection of atherosclerosis by dental radiographs</li> <li>3. Influence of genetic factor on three-dimensional trabecular bone structure of the jaws</li> <li>4. New ultrasound system for estimation of bone quality of the jaws</li> <li>5. Association between osteoporosis and atherosclerosis</li> <li>6. Establishment of uniform international standard for screening for osteoporosis in dental clinics</li> <li>7. Establishment of remote education system for screening for osteoporosis</li> <li>8. Three-dimensional analysis of trabecular bone structure of the jaws in patients with therapeutic drug for osteoporosis</li> </ol>
		Keiichi Uchida, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. A study on the functional role of the liquid crystal system in dental digital diagnostic imaging</li> <li>2. Hybrid CD-ROM diagnosed with dental radiographic image development of the system</li> <li>3. Dental imaging using wireless LAN</li> <li>4. Building Web Information systems and applications for education</li> </ol>
		Toru Kageyama, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Effects of orthodontic tooth movement</li> <li>2. Morphological changes in the temporomandibular joint before and after tooth movement</li> <li>3. Morphological study on the relationship between arch dimensions and craniofacial structures</li> <li>4. Cell proliferation during experimental tooth movement</li> <li>5. Assessment of Pain regarding an orthodontics tooth movement</li> </ol>
		Xianqi Li M.D., D.D.S., Ph.D	<ol style="list-style-type: none"> <li>1. Signal transduction of pluripotent mesenchymal stromal cells in shperoidization</li> <li>2. Effect of human pluripotent mesenchymal stromal cells for bone regeneration</li> </ol>
		Noriyuki Sugino, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Evaluation of alveolar bone density by intraoral radiographs</li> <li>2. Development of screening system for osteoporosis by AI on panoramic radiographs</li> <li>3. Usefulness of MRI and ultrasonography</li> <li>4. Physical characteristics of cone beam CT</li> </ol>
<b>Department of Oral and Maxillofacial Biology</b>	Oral and Maxillofacial Neurophysiology	Yuji Masuda, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Role of neural network on regulation of masticatory behavior</li> <li>2. Influence of change in oral sensation on mastication</li> <li>3. Central nervous system involved in expression of orofacial movement disorder</li> <li>4. Property of lip-motor function</li> </ol>
	Oral Neuroscience	Tohru Shibutani, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Assessment of local anesthetic effect by trigeminal somatosensory evoked potentials</li> <li>2. Assessment of the depth of general anesthesia and psychosedation by bispectrum analysis (BIS) monitor</li> <li>3. Assessment of autonomic nervous activity by spectral analysis in R-R interval of electrocardiogram.</li> </ol>
		Eiji Kondo, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. An analysis of the basic mechanism of orofacial pain</li> <li>2. Correlation between TRP channels and thermal thresholds in humans</li> <li>3. Gene expression dynamics during neuropathic pain in the trigeminal system</li> </ol>

		Junichi Kitagawa, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Mechanism of neuropathic pain</li> <li>2. Involvement of glial cell activation in modulation of orofacial motor dysfunction</li> <li>3. Functional involvement of ion channels including TRP channels in the swallowing reflex</li> <li>4. A physiological study of NODOGOSHI feeling</li> </ol>
		Osamu Tadokoro, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Clinical anatomy of head and neck</li> <li>2. Morphology of Malassez epithelium</li> <li>3. Morphology of sensory receptors and transmission in oral cavity</li> <li>4. Roles of endocrine cells in oral epithelia</li> <li>5. Regulatory mechanism of exocytosis in parotid gland</li> </ol>
		Kiichi Taniyama, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Assessment of the depth of psychosedation</li> <li>2. The effect of psychosedation on autonomic nerve activity</li> <li>3. The effect of blood flow by local anesthetic</li> </ol>
		Hiroshi Ando, Ph.D.	<ol style="list-style-type: none"> <li>1. Sensory receptors in the swallowing reflex</li> <li>2. Sensory receptors in the feeling during swallowing (Nodogoshi)</li> <li>3. Innervation of taste cells and taste buds</li> </ol>
		Shumpei Unno Ph.D.	<ol style="list-style-type: none"> <li>1. Sensory transduction mechanisms involved in triggering swallowing reflex</li> <li>2. Neurophysiological mechanisms of swallowing</li> </ol>
		Mohammad Zakir Hossain B.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Transduction mechanism of sensory stimuli-induced swallowing reflex.</li> <li>2. Targeting chemosensory ion channels to facilitate triggering of swallowing reflex.</li> <li>3. Neurophysiological mechanism of swallowing.</li> <li>4. Targeting endocannabinoid system for the management of orofacial neuropathic pain.</li> </ol>
	Evaluation of Orofacial Function	Daisuke Higuchi, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Clinical research: patient-reported outcomes</li> <li>2. Functional Assessment of prosthesis</li> <li>3. Implant-assisted removable denture prostheses</li> </ol>
<b>Department of Oral Health Promotion</b>	Oral Health Analysis	Jun-ichi Otogoto, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Effect of KPT laser irradiation for treatment of periodontal disease</li> <li>2. Development and analysis on system of dental education</li> </ol>
		Nobuo Yoshinari, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Clinical assessment and development of new procedure in periodontal tissue regeneration technique</li> <li>2. Epidemiological and experimental research for the relationship between periodontal disease and systemic diseases</li> <li>3. Effect of periodontal disease on aging, creation of anti-aging therapy</li> <li>4. Development of laser-based minimally invasive periodontal disease treatment for the elderly</li> <li>5. Survey of the peri-implantitis, development of treatment method</li> </ol>
		Naoto Osuga, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Eruption state of mandibular molar and morphology of mandible</li> <li>2. Serial changes in pH and fluoride-recharge and release in various condensation and filling materials</li> <li>3. Observations of pulpotomy in rats using in vivo Micro-CT</li> </ol>
		Akihiro Yoshida, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Oral biofilm formation and intracellular bacterial communication</li> <li>2. Molecular genetics for the virulence of periodontopathic bacteria</li> <li>3. The etiological analysis of aggressive periodontitis</li> <li>4. Elucidation of the mechanism of disease onset due to the breakdown of oral flora.</li> </ol>

		Atsushi Kameyama, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Bond durability between tooth structure and restorative materials</li> <li>2. Quest for the solution regarding the adhesion inhibiting factors of dental adhesive materials</li> <li>3. Influence of self/professional oral health care on the surface texture of dental restorative materials</li> <li>4. Curing characteristics of light-cured dental materials with various light sources</li> <li>5. Bonding characteristics between Er:YAG laser-irradiated tooth structure and dental restorative materials</li> <li>6. Character/personality traits and self-reported oral complaints of the patients with oral malodor</li> <li>7. Structural change of teeth/restorative materials by the ingredients of tooth whitening materials</li> </ol>
		Yoshiko Masuda, D.D.S.,Ph.D	<ol style="list-style-type: none"> <li>1. Root canal irrigation using photodynamic therapy with laser irradiation.</li> <li>2. Analysis of the released-growth factors into root canal by irrigation.</li> <li>3. Investigations of the new treatments for irreversible pulpitis.</li> <li>4. Elucidation of the mechanism of reparative dentine formation of the pulp cells.</li> </ol>
	Oral Health Promotion	Hiroyuki Haishima, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Research about the aging and development of eating function</li> <li>2. Inspection about the effect of the dysphagia rehabilitation</li> <li>3. Development of the meal assistance training kit</li> </ol>
		Ichiro Kawahara, D.D.S.,Ph D.	<ol style="list-style-type: none"> <li>1. The epidemiologic study of the needs and problems for regenerative medicine.</li> <li>2. The science for biomaterials.</li> </ol>
		Masahito Shoumura, D.D.S.,Ph.D.	<ol style="list-style-type: none"> <li>1. Study on the shock absorption capability of mouthguards for sports</li> <li>2. Relationship between strain and stress in tooth</li> <li>3. Research on the motor function impact of the change in stomatognathic system</li> </ol>
		Takayuki Yamaga, D.D.S.,Ph.D	<ol style="list-style-type: none"> <li>1. The influence of oral health status on the incidences of coronary heart disease or cerebrovascular disease</li> <li>2. The establishment a cut-off point of volatile sulfur compounds concentration in oral cavity for predicting periodontal disease progression</li> </ol>
	Health Care Management and Policy	Naoto Osuga, D.D.S.,Ph.D. and Others	<ol style="list-style-type: none"> <li>1. System of medical insurance and medical expenses in Japan</li> <li>2. Statistics on the trend of patients and diseases</li> <li>3. Management strategy for stable, good quality medical and dental services offer</li> <li>4. Efficient distribution of the medical resource</li> <li>5. International comparison of medical syst</li> </ol>

# 2024Application Form

## Graduate Course (PhD)

### ID Photo

Height 4cm  
×  
Wide 3cm

Taken within the  
application 3 months

Today's Date	Day	Month	Year

Nationality	<i>Circle one</i> <b>Japanese</b> Non-Japanese _____ <i>(Country)</i>	<i>Leave blank</i> Registration Number
Major	<i>Indicate your choice of major and specify a supervisor to whom you wish to be assigned</i> Major _____ Supervisor _____	
Language	<i>Circle your preference for the language examination</i> <input type="checkbox"/> Japanese <input type="checkbox"/> English	

Full Name				(Sex: )
Birth Date	Day	Month	Year	(Age: )
Mailing Address				
Place of Work				
Academic Record	<i>Undergraduate Studies (Institution, Date, Degree)</i>  I will graduate/have graduated from _____ on _____ with the following undergraduate degree(s): _____			
	<i>Graduate Studies (Institution, Date, Degree)</i>  I will graduate/have graduated from _____ on _____ with the following graduate degree(s): _____			
Alternate Contact	<i>Please specify <u>someone other than yourself</u></i>  N a m e: Relation: Address: P h o n e:			



## Personal History

**Academic Record:**

*Provide your academic history, with dates, from high-school to the present. Attach a separate sheet, if necessary*

**Employment History:**

*List all employment in detail. Attach a separate sheet, if necessary.*

**National License(s):**

*Describe any licenses that you hold (physician, dentist, veterinarian, etc) along with date received.*

**Awards:**

I confirm that all of the statements above described are true.

**N a m e:** \_\_\_\_\_

**D a t e:** \_\_\_\_\_





# 松本歯科大学キャンパス Matsumoto Dental University campus



## ◆交通案内

### Transportation guide

本学は、J R塩尻駅から車で約5分のところにあり、初めての方は、J R塩尻駅から大学シャトルバス（駅東口発着）またはタクシー利用が便利です。

There is this school by car from JR Shiojiri Station to approximately five minutes, and, in the first one, a university shuttle bus (station east exit departure and arrival) or the taxi use is convenient from JR Shiojiri Station.

### ◎ J R 新宿～塩尻

#### JR Shinjuku - Shiojiri

特急「あずさ」で約2時間30分

It is approximately two hours 30 minutes in limited express "Azusa"

### ◎ J R 大阪～塩尻

#### JR Osaka - Shiojiri

新幹線・特急「しなの」で約3時間

It is approximately three hours in Shinkansen, limited express "Shinano"

### ◎道路 東京～塩尻

#### Road Tokyo - Shiojiri

中央自動車道→長野自動車道で約2時間30分

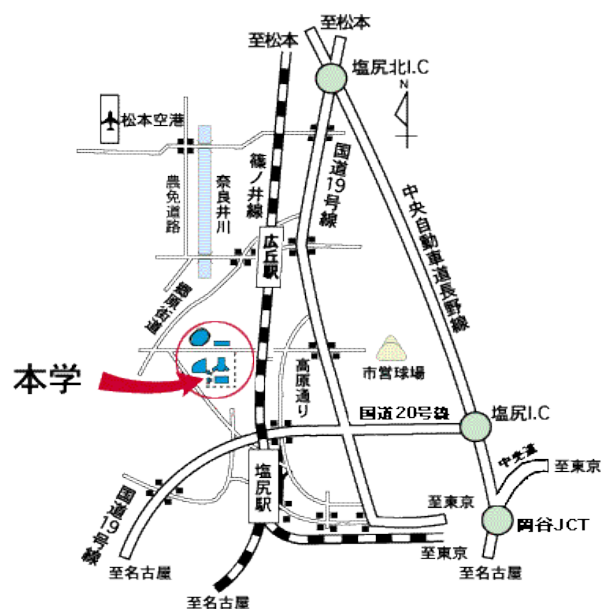
It is approximately two hours 30 minutes in Chuo Expressway → Nagano Expressway

### ◎道路 名古屋～塩尻

#### Road Nagoya - Shiojiri

名古屋自動車道→中央自動車道で約2時間

It is approximately two hours in Nagoya Expressway → Chuo Expressway





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