# 2023

# Graduate School of Oral Sciences Tokushima University

#### APPLICATION GUIDELINES FOR STUDENTS FROM FOREIGN COUNTRIES

# 1. Admission Policy

The Graduate School of Oral Sciences, Doctor Course of Oral Sciences Program aims to foster human resources who study academic theories and applications about oral science and other relevant areas, have wide range of scientific basis, and can play a leading role in the education, research, clinic, and dental administration. For this purpose, we seek the following candidates.

### ● Ideal candidates

(Knowledge, technique, interest and motivation)

Those who have interests in and passion about oral science, and have outstanding knowledge and technique about oral science and clinical practice required in a 6-year dentistry course, have the ability to leading by polishing up their knowledge and technique, and have a motivation to make progress for oral science and solve social problems.

(Ability to think, judge, and express oneself)

Those who respect bioethics and try to develop and practice oral care based on logical thinking and scientific basis.

(Attitude to work with self-direction and learn together with various people)

Those who are independent and work through social and regional problem, accept others' opinion to solve the problem, and try to work together to develop an international society and community.

### 2. Necessary Qualifications for Applicants

Prior to admission, the applicant is desirable to be able to communicate in Japanese and must be qualified according to one of the following categories:

- 1) The applicant must have completed a total of 18 years of formal schooling. The final school course must have been in dentistry, medicine, pharmacy or veterinary medicine.
- 2) The applicant must have completed or will have completed at least 18 years of formal school education of a foreign country by studying the relevant subject in Japan via correspondence course provided by a school of the country by March 31, 2023. The final school course must have been in dentistry, medicine, pharmacy or veterinary medicine.
- 3) The applicant must have completed a total of 16 years of formal schooling in dentistry, medicine, pharmacy or veterinary medicine, and be judged by Tokushima University, Graduate School of Oral Sciences to have superior scholastic ability.

- 4) The applicant must be judged by Tokushima University, Graduate School of Oral Sciences to have equivalent scholastic ability to that of Japanese university graduates.
- 5) The applicant must have already successfully completed, or expect to complete on or before March 31, 2021, a course of study abroad (the graduate of which must have completed an 18-year course in the educational system and completed dentistry, medicine, pharmacy or veterinary medicine as his/her final school course) that has been assessed in Japan to have university-level courses in that education system comparable to those in Japan and specifically designated as such by the Minister of Education, Science and Culture.
- 6) The applicant has already had or expects to have a degree corresponding to that of a bachelor's or professional's through the completion of courses with a term of study for five years or more by March 31, 2023 (which includes the completion of an equivalent degree taken through a correspondence course in Japan provided by a foreign university, and also includes the completion of an equivalent degree issued by an educational institute which is designated as equivalent to those in Japan based on the conditions stated above and is acknowledged as a part of the formal education in the applicant's home country) at a foreign university or another overseas educational institute (limited to those appropriately rated by an accreditation agent of the government of the applicant's home country or by another officially approved accreditation institute, or specifically and independently designated as equivalent by the Minister of Education, Science and Culture).

# 3. Application Procedures

1) Application Period

July 25 (Monday) - August 5 (Friday), 2022.

\*In cases of 3) and 4) of above categories, the applicant should fill in "Pre-Judgment Form," prepare "Official Transcript" and "Certificate of Graduation," and then send them the Student Affairs Office by July 19 (Tuesday), 2022.

2) Applications should be mailed or brought in person at the following times:

9:00-17:00 (From Monday to Friday)

to the following address:

Office of Admissions and Student Affairs Graduate School of Oral Sciences Tokushima University 3-18-15 Kuramoto, Tokushima 770-8504 Japan

### 4. Necessary Documents for Application

- 1) Completed APPLICATION FORM and APPLICANT'S CARD
- 2) Official Transcript

A transcript completed on the designated form and sealed by the appropriate authority of the university from which the applicant has graduated or will be graduating.

3) Certificate of Graduation

A Certificate of Graduation from the last school attended or an official letter stating the expected date of graduation from the university which the applicant is attending.

## 4) Examination fee of 30,000 yen

If you are an applicant residing in Japan, please make payment by postal account transfer and receive "Certificate of Payment (for application): *kentei-ryo harai-komi shomeisho* (*syutsugan-you*)". Applicants must put it on "Certificate of Entrance Examination Fee Payment" (the form attached on this brochure) and submit the form along with the other application materials. Examination fee is non-refundable.

If you are an applicant residing outside Japan, payment by credit card is available by making an online application through "International Students Portal" of the University's website.

https://www.tokushima-u.ac.jp/isc/admission/

Foreign students supported by a scholarship from the Japanese Government and the applicants who are presently in the Master's program in this university are exempted from the examination fee.

# 5) Photograph

Affix one photograph each to the Application Form and Application Card in the places indicated

This photograph should be

- 1) Taken within 3 months before application.
- 2) Front view of the head, with no hat, and body to the waist.
- 3) 5.0 cm x 4.0 cm (length x width), with no margin.

# 6) Alien Registration Certificate

Foreign students must submit a copy of their Alien Registration Certificate.

#### 5. Date and Place of Examination

# 1) English Examination

Date and Time: August 23 (Tuesday), 2022, 10:00-12:00

Note: In the English Examination, use of one hard copy dictionary is permitted. However, use of either the technical dictionary such as medical dictionaries or the electronic dictionary is prohibited.

## 2) Examination in subjects

As subjects of examination, applicants must choose 1 subject (Applicants' main Department) from 20 subjects which appear in pages 4 - 8

Examination questions are given in both Japanese and English. Applicants are allowed to answer in either Japanese or English.

Date and Time: August 23 (Tuesday), 2022,13:00-14:00

# 3) Interviews

Interviews will be held in both Japanese and English about a research and study project of choice.

Date and Time: August 23 (Tuesday), 2022, 14:30-

4) Place of Examination

Graduate School of Oral Sciences Tokushima University 3-18-15 Kuramoto, Tokushima 770-8504, Japan

### 6. Announcement of Examination Results

1) Date: September 16 (Friday), 2022, 10:00 am

2) Place:

The results will be mailed to the applicants and also uploaded to the portal site of "Faculty of Dentistry in Tokushima University."

URL: https://www.tokushima-u.ac.jp/dent/

Note: The university will not accept any telephone or telegram inquiries about the results of the admission examination.

# 7. Payment for the First Year

- 1) Admission fee and Tuition (2022 basis)
  - (a) Admission fee: 282,000 yen

Foreign students supported by a scholarship from the Japanese Government and the applicants who are presently in the Master's program in this university are exempted from the admission fee.

- (b) Tuition: 267,900 yen for the first semester (Annually 535,800 yen)

  Foreign students supported by a scholarship from the Japanese Government are exempted from the tuition.
- 2) Casualty and accident insurance for students' education and research: 3,370 yen (covers four years)
- 3) Tokushima University student affairs fund: 11,000 yen (covers four years)

Note: In case of increase in the tuition during the period of study, students are required to pay the additional fee.

# 8. Tokushima University International Office

For international applicants, on the following website, we provide information regarding each faculty, graduate school, teachers/researchers, admission procedures, scholarships, dormitories, and employment assistance after completion of the academic course.

Visit the "Tokushima University International Office" site to understand more about Tokushima University.

URL: https://www.isc.tokushima-u.ac.jp/english/

# 9. About Security Export Control

Tokushima university has established the 'Tokushima University Security Export Control Regulations' based on the 'Foreign Exchange and Foreign Trade Act' and rigorously determines the acceptance of students by considering the goods exported, the technology provided, and the exchanges in human resources that will take place. If your activities fall within the ambit of any of these regulations, your desired research activities may be restricted, or you may not be able to take certain coursework. Hence, please be careful when you are applying and take any necessary precautions such as consulting with your prospective academic advisor before submitting your application.

For details, please refer to the Center for Research Administration & Collaboration website below:

URL: https://www.tokushima-u.ac.jp/ccr/active/ip/yusyutsukanri/yusyutsu.html

Contact information for inquiries:

Intellectual Property and Legal Division
Center for Research Administration & Collaboration

Tel: +81-88-656-9773

 $E\text{-}mail: iag\text{-}safety@tokushima-u.ac.jp}$ 

Information Specific to Each Department (2022.5)

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Department (Subject)	Chairperson	Major Research Fields
Oral and Maxillofacial Anatomy	Professor BABA Otto	<ul> <li>Gross anatomy of head and neck structures</li> <li>Development and bioengineering of teeth and periodontium</li> <li>Effect of far-infrared radiation and preventive medicine</li> </ul>
Tissue-regeneration	Professor YAMAMOTO Akihito	<ul> <li>Development of regeneration therapies using stem cells from oral cavity</li> <li>Analysis of the tissue-regenerative mechanisms by the factors-derived from stem cells</li> </ul>
Molecular Oral Physiology	Professor YOSHIMURA Hiroshi	<ul> <li>NMDA receptor and synaptic plasticity</li> <li>Integration and interaction of oral Sensory information in the brain</li> <li>Improvement of cognitive dysfunction by activations of masticatory systems</li> <li>Expression and regulation of aquaporins, water channel proteins</li> <li>Induction of inflammation cytokines in the salivary gland and the defense system of oral cavity</li> </ul>
Oral Bioscience	Professor KUDO Yasusei	<ul> <li>Cell growth and differentiation</li> <li>Invasion &amp; metastasis of oral cancer</li> <li>Gene expression &amp; metabolic regulation</li> <li>Engineering of pluripotent stem cell</li> <li>Biomarkers in saliva</li> </ul>
Oral Molecular Pathology	Professor ISHIMARU Naozumi	<ul> <li>Pathogenesis of Sjogren's syndrome</li> <li>Sex difference in autoimmunity</li> <li>T cell dysfunction in autoimminity</li> <li>Aging in autoimmunity</li> <li>Nanomaterials and immune system</li> <li>Carcinogenesis and tumor immunity</li> <li>Cell cycle and carcinogenesis</li> </ul>
Oral Microbiology		<ul> <li>Pathogenicity of oral bacteria</li> <li>Preventing periodontal disease using bio-nanocapsule</li> </ul>

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		<ul> <li>Development of high-performance small molecule antibodies</li> <li>Application and bioengineering of bacteriophage</li> </ul>
Biomaterials and Bioengineering	Professor HAMADA Kenichi	<ul> <li>Development of new functional implant materials</li> <li>Development of new alloys for biomedical devices</li> <li>Development of new bio-ceramics and its application</li> <li>Development of dental smart cement establishing both strong-bonding and easy-debonding</li> </ul>
Preventive Dentistry	Professor ITO Hiro-O	<ul> <li>Control of oxidative stress for preventing dental and systemic diseases</li> <li>Development of novel saliva tests fordiagnosis of periodontal diseases and bad breath</li> <li>Mucosal immunity, immune network, and immunological memory</li> <li>Clinical and epidemiological studies for prevention of dental diseases</li> </ul>
Regenerative Dental Medicine	Professor HOSAKA Keiichi	<ul> <li>Adhesive dentistry: Basic research and expanded regenerative bonded biological restorations</li> <li>Development and application of ultra-highspeed and terahertz pulse imaging techniques</li> <li>Introducing next-generation clinical restorative techniques using digital technologies</li> <li>Studies on the bacterial invasion of dental caries and infected root canals</li> <li>Development of a new method of caries-treatment using sealed restoration of carious dentin</li> <li>Studies on pulpal pathosis and diagnosis</li> <li>Studies on the periodontal tissue destruction and its control</li> <li>Development of treatment method for dentin hypersensitivity</li> </ul>

Department (Subject)	Chairperson	Major Research Fields
Periodontology and Endodontology	Professor YUMOTO Hiromichi	<ul> <li>Relationship between periodontal disease and diabetes mellitus</li> <li>Diagnostic biomarkers of periodontitis</li> <li>Relationship between chronic kidney disease and periodontal disease</li> <li>Biological study on bone formation and resorption</li> <li>Clinical study on periodontal regeneration therapy</li> <li>Pathophysiological analysis and development of novel treatments for pulpitis and refractory periapical periodontitis</li> <li>Elucidation of the roles of virulence factors derived from periodontopathic bacteria</li> <li>Development of preventive agent for aggravation of periodontal disease</li> </ul>
Oral and Maxillofacial Prosthodontics and Oral Implantology	Professor ICHIKAWA Tetsuo	<ul> <li>Oral function and management of the elderly</li> <li>Basic and clinical research on biomaterial</li> <li>Biomechanical and biological research on dental implant</li> <li>Speech physiology and pathology in dentistry</li> <li>Development of prosthetic material and apparatus and CAD/CAM.</li> <li>Integration and interaction of oral sensation and behaviour</li> </ul>
Stomatognathic Function and Occlusal Reconstruction	Professor MATSUKA Yoshizo	<ul> <li>Three dimensional analysis of jaw movements and occlusion</li> <li>Sleep bruxism</li> <li>Basic and clinical research for temporomandibular disorders and orofacial pain</li> <li>Basic and clinical research for tooth and tissue regeneration</li> <li>Metal allergy</li> <li>Clinical epidemiological research for prosthodontic treatment</li> </ul>

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Oral Medicine		<ul> <li>Functional regeneration of salivary glands</li> <li>Development of novel diagnostic methods and treatment of oro-facial pain</li> <li>Study on dental psychosomatic disorder and abnormality of autonomic nervous system</li> <li>Therapy of oral mucosal diseases based on molecular targeting</li> </ul>
Oral Surgery	Professor MIYAMOTO Yoji	<ul> <li>Novel bone tissue engineering</li> <li>Novel bioresorbable bone substitute</li> <li>Mechanism of the temporomandibular joint osteoarthritis</li> <li>Regeneration of articular cartilage</li> <li>The prediction for neck metastasis of oral cancer using radiomics</li> <li>Mechanism of bone invasion of oral cancer</li> <li>Regeneration of salivary glands</li> <li>Metastasis prediction marker for oral cancer</li> </ul>
Orthodontics and Dentofacial Orthopedics	Professor TANAKA Eiji	<ul> <li>Mechanism of craniofacial growth and development</li> <li>Mechanism of periodontal tissue remodeling induced by mechanical stress</li> <li>Biological study on bone formation and resorption</li> <li>Study on congenital anomaly and jaw deformity patients</li> <li>Development of novel orthodontic materials</li> <li>Tissue engineering in oral and maxillofacial region</li> </ul>
Pediatric Dentistry	Professor IWASAKI Tomonori	<ul> <li>Study of children with obstructive sleep apnea</li> <li>Study on association between breathing and maxillofacial dentition form</li> <li>Dental and craniofacial development</li> <li>Stem cell research</li> <li>Mechanisms and treatments of drug induced gingival hyperplasia</li> <li>Pediatric behavior management</li> <li>Epidemiological research on dental cariesin children</li> </ul>

Department (Subject)	Chairperson	Major Research Fields
Oral and Maxillofacial Radiology		<ul> <li>Quantification of image findings</li> <li>Improvement of image diagnostic accuracy using engineering technology</li> <li>Improvement of clinical diagnosis using advanced MR or CT scanner</li> </ul>
Dental Anesthesiology	Professor KAWAHITO Shinji	<ul> <li>Myocardial protection via mTOR: novel therapy for ischemic-reperfusion injury</li> <li>Role of longevity gene, Sirtuin in the cardioprotection by anesthetic preconditioning</li> <li>Development of preventive and therapeutic methods for periodontal-induced vascular abnormality using genetic scientific method and anesthetic effect</li> <li>The effects of intravenous anesthetics on the release of vascular endothelial growth factor and the angiogenesis</li> </ul>
Comprehensive Dentistry	Professor KAWANO Fumiaki	<ul> <li>Studies on occlusal scheme for denture</li> <li>Development of esthetic materials and its evaluation</li> <li>Development of new biomaterials</li> <li>Clinical studies on maxillofacial prosthesis</li> <li>Study of the relationship between head and nech muscle activities and pain during sleep</li> </ul>