Tokyo Medical and Dental University

Biomedical Science Ph. D. Program

Admission Guide 2008

For TMD – RIKEN International School

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### 1. Introduction

Tokyo Medical Dental University (hereafter referred to as TMD) and RIKEN, a leading advanced research institute in Japan (http://www.riken.go.jp/engn/), inaugurate TMD-RIKEN International School on April 1, 2007. Its main purpose is to offer overseas students an opportunity to enroll directly in the International Ph. D. Program for Biomedical Science at TMD. In this program all courses are lectured in English. In cooperation with TMD, RIKEN will basically cover the student living expenses and housing cost, and provide research opportunities in RIKEN. The academic advisors for the students will be both TMD and RIKEN professors, who are closely connected each other in the student research field.

#### 2. Academic Policies

#### Outline of the Biomedical Science Ph. D. Program

From the end of the 20th century to the beginning of the 21st, the entire genome sequences of various organism species were decoded. In Japan – which is becoming unique as a country with a low birthrate and large elderly population – post-genome research stemming from the decoded genome information and a better understanding of phenomena such as molecular structures, together with the development of the technology to control them, are expected to lower the cost burden on society as well as contribute to a higher quality of life through materialization of a healthy elderly society devoid of diseases and in which revolutionary therapies and medicines are developed and the burden on the environment is reduced. The 21st century is becoming a century of life science. Now that academic fields and social and industrial structures are changing, it is necessary to promote practical research in fusing the interdisciplinary fields related to complex disease research with leading-edge life science, and to foster human resources who have the managerial ability to realize innovations based on life science analysis and the ability to resolve practical problems. The aim of this Ph. D. program is to nurture such young talents.

The Biomedical Science Ph. D. Program has two courses: Bioinformatics and Functional Biology. A summary of each can be found below.

#### **Bioinformatics**

The course in bioinformatics processes diverse information of diseases, genome, proteome, three-dimensional structures, the phenotypes of genetically engineered animals and genetic diseases. It teaches methods and technologies to link in organic manner diverse pieces of information, and has classes and conducts experiments and exercises in genome informatics, molecular structure informatics, proteome informatics, cell informatics and life system informatics.

### **Functional Biology**

This course educates students in the understanding of the mechanisms of life system controls – from cells to the highly developed functions of individual living

creatures – and recognizes diseases as a partial aberration of such controls. It offers classes and conducts experiments and exercises in the science of nerve function control, biological response control, cell tissue control, and biological system engineering.

#### **Affiliated Institutes**

In order to promote exchanges of talent in the area of life science, to expand intellectual and human networks, and to conduct graduate school education that correctly meets the social needs and trends in scientific research and progress, this Graduate School promotes cooperation with RIKEN research centers (<a href="http://www.riken.jp/engn/r-world/research/lab/">http://www.riken.jp/engn/r-world/research/lab/</a>) including Discovery Research Institute (DRI) and Brain Research Institute (BSI) at Wako, and Genomic Sciences Center (GSC) and Research Center for Allergy and Immunology (RCAI) at Yokohama, staffed with superior researchers in the field of life sciences.

Also, other various national and private research institutes listed below are affiliated with this Ph. D. Program in fiscal 2008.

Computational Biology Research Center of the National Institute of Advanced Industrial Science and Technology
Research and Development Headquarters, NTT Data Corporation
International Medical Center of Japan
National Center for Child Medical Health and Development
The Tokyo Metropolitan Institute of Medical Science
The Cancer Institute of Japanese Foundation for Cancer Research
Research Institute of National Cancer Center
Drug Discovery Institute of Astellas Pharma Inc
National Center of Neurology and Psychiatry

#### 3. Graduate Admission

#### **Doctor's Program**

- Admission Requirements

Applicants must have a Master's degree and have a minimum school education of 16 years or an academic capability equivalent to Master's degree holders outside of Japan when you enroll to the graduate school. Please keep in mind that applicants are not allowed to defer their admission to the next academic year.

Applicants need to take contact with the supervisor of the RIKEN laboratory you wish to belong to so that you are able to establish own research plan.

- Application Filing Period

November 9, 2007 to May 15, 2008

- Application Fee

30,000 Japanese Yen

The application fee should be included with your application form. Please pay the fee as International Postal Money Order. Applicants from the United States of America, People's Republic of China, Taiwan, or Republic of Korea may submit a 30,000 Japanese Yen demand draft. If you are unable to send an International Postal Money Order, contact us by the email address below:

grad.bio.adm@cmn.tmd.ac.jp

- Acceptance of Admission

The results will be posted to all applicants on June 11, 2008.

## 4. Application Documents

The applicant should first obtain approval of a course of study from the supervisor of the RIKEN laboratory you wish to belong to. The supervisors are listed at <a href="http://www.tmd.ac.jp/mri/SBS/education/eduFacultyE.html">http://www.tmd.ac.jp/mri/SBS/education/eduFacultyE.html</a>.

Applicants must submit the following documents:

- 1. Application form (prescribed form)
  - 1) Tokyo Medical and Dental University Biomedical Science Ph. D. Program Application For Admission 2008 For TMD-RIKEN International School
  - 2) Field of Study and Study Program
- 2. Dean's recommendation letter from the student's home institution (in English) (If it is very difficult to get Dean's recommendation letter, please take contact with the supervisor of the laboratory you wish to belong to.)
- 3. Recommendation to verify the potential of applicant by Department Head, supervisor, etc. (in English) (If it is very difficult to get recommendation letter from Department Head or supervisor, please take contact with the supervisor of the laboratory you wish to belong to.)
- 4. Official academic transcript for undergraduate courses (in English)
- 5. Certificate of graduation or expected graduation from university (in English)
- 6. Degree certificate or certificate of expected degree to be awarded (in English)
- 7. TOEFL (Test of English as a Foreign Language) score within the last three years of application (International applicants whose language of instruction was not English must take the test of TOEFL.)
- 8. Two copies of photo which are taken within the past 6 months (6x4cm)
- 9. One copy of your passport containing the page of your name and photo

All of above should be sent together in a single package to:

Tokyo Medical and Dental University Graduate School Section Biomedical Science 1-5-45 Yushima, Bunkyo-ku Tokyo 113-8510, Japan TEL 81-3-5803-4534

#### 5. Selection

Successful applicants will be selected based on their application documents and the interview (direct or over the Internet) with our professors. <u>Applicants need to take contact with the supervisor of the RIKEN laboratory you wish to belong to so that you are able to establish your own research plan.</u>

The list of professors is included in the following web page:

http://www.tmd.ac.jp/mri/SBS/education/eduFacultyE.html

### 6. Enrollment Term

October 1, 2008

#### 7. Tuition and Fees

549,900 Japanese Yen for the first semester (fall) including one-term admission fee of 282,000 Japanese Yen

Tuition fee for next semester (spring): 267,900 Japanese Yen

(The admission and tuition fees might be changed in future, in which case applicants will be informed.)

# 8. Contacting the Application Processing Service

If you have questions about your application, you may call for assistance. We are unable to accept collect calls.

- <u>Telephone #</u> 81-3-5803-4534 (Please call between 10:00 am and 5:00 pm, Monday through Friday)
- E-mail: grad.bio.adm@cmn.tmd.ac.jp

**Tokyo Medical and Dental University** 

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