Tokyo Medical and Dental University

International Biomedical Science Ph. D. (Master and Doctor) Program

Admission Guide 2013
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1. Introduction

Dear Applicant:

Thank you for considering Tokyo Medical and Dental University for your graduate study. Our master’s and doctor’s programs are highly ranked and are comprised of a full spectrum of biomedical study for both academic and professional carriers. In 2007 Tokyo Medical and Dental University has started a new International Graduate Programs for Biomedical Science to offer more opportunities for international students to study in this area. From 2012, this program will be a part of the graduate school of Medicine and Dentistry due to the reform of the graduate schools. In the Program all courses are lectured in English. Tokyo Medical and Dental University gratefully accepts motivated applicants and promotes the diversity of the graduate school.

We offer you our best wishes for your successful application to the Program.

Caution:

This admission guide is solely for international students with private fund. When you are allowed to enter our university after the test results under the framework described in this guide, you must pay the entire tuition, fee, etc.

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.
### List of Faculty Members Capable of Accepting Students

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Field</th>
<th>Contact Address</th>
<th>Research Projects</th>
<th>Acceptance Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fumito Maruyama</td>
<td>Microbial Genomics and Ecology</td>
<td><a href="mailto:fumito-m.bar@tmd.ac.jp">fumito-m.bar@tmd.ac.jp</a></td>
<td>1) Roles of microbe for human homeostasis using metagenomic data of microbiome. 2) Association study of human health and microbiome. 3) Comparative (meta) genomic analysis and experimental validation for understanding bacterial evolution and diversification.</td>
<td>Applicants must cover tuition and living expenses by themselves or by obtaining fellowship.</td>
</tr>
<tr>
<td>Yuji Miyahara</td>
<td>Bioelectronics</td>
<td><a href="mailto:miyahara.bs@tmd.ac.jp">miyahara.bs@tmd.ac.jp</a></td>
<td>1) Electrochemical analyses for cell functional analyses 2) Biochips and Biosensors for biomarkers 3) Development of a self-regulated insulin delivery system based on smart gel</td>
<td></td>
</tr>
<tr>
<td>Hiroyuki Kagechika</td>
<td>Organic and Medicinal Chemistry</td>
<td><a href="mailto:kage.chem@tmd.ac.jp">kage.chem@tmd.ac.jp</a></td>
<td>1) Development of Novel Nuclear Receptor Ligands 2) Development of Novel Functional Fluorescent Molecules for Elucidation of Intracellular Signal Transduction Pathways 3) Development of Aromatic Molecules with Unique Stereochemical and Functional Properties</td>
<td>Applicants must cover tuition and living expenses by themselves or by obtaining fellowship.</td>
</tr>
<tr>
<td>Wataru Nomura</td>
<td>Molecular Biomedicine</td>
<td><a href="mailto:nomura.mr@tmd.ac.jp">nomura.mr@tmd.ac.jp</a></td>
<td>1) Development of small molecular/peptide-based ligands for chemokine receptor CXCR4 against HIV-1 infection and cancer cell migration. 2) Design and development of DNA modification enzymes for gene therapy and synthetic biology. 3) Development of fluorescent probes for molecular imaging and chemical screening.</td>
<td>Applicants must cover tuition and living expenses by themselves or by obtaining fellowship.</td>
</tr>
<tr>
<td>Miho Nakamura</td>
<td>Inorganic Biomaterials</td>
<td><a href="mailto:miho.bcm@tmd.ac.jp">miho.bcm@tmd.ac.jp</a></td>
<td>Interaction of cells and biomaterials Development of cell-stimulative biomaterials</td>
<td>Applicants must cover tuition and living expenses by themselves or by obtaining fellowship.</td>
</tr>
<tr>
<td>Takeshi Tsubata</td>
<td>Immunology</td>
<td><a href="mailto:tsubata.imm@mri.tmd.ac.jp">tsubata.imm@mri.tmd.ac.jp</a></td>
<td>B lymphocyte signaling, Immune response to glycans including bacterial antigens, Immunological tolerance and autoimmunity to nuclear antigens</td>
<td></td>
</tr>
<tr>
<td>Nobutoshi Ito</td>
<td>Structural Biology</td>
<td><a href="mailto:ito.str@tmd.ac.jp">ito.str@tmd.ac.jp</a></td>
<td>X-ray crystallography of disease-related proteins Biophysical analyses of protein-ligand interactions</td>
<td>Applicants must cover tuition and living expenses by themselves or by obtaining fellowship.</td>
</tr>
<tr>
<td>Name</td>
<td>Department</td>
<td>Email Address</td>
<td>Research Topics</td>
<td>Tuition and Living Expenses</td>
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</tbody>
</table>
| Hidenori Aizawa     | Neuroscience                      | haizawa.aud@mri.tmd.ac.jp             | 1) Role of glutamate transporters in the pathogenesis of major mental illness  
2) Role of glutamate transporters in the pathogenesis of glaucoma  
3) Left-right asymmetry of the brain | Applicants must cover tuition and living expenses by themselves or by obtaining fellowship. |
| Junko Kurokawa      | Bio-informational Pharmacology    | junkokuro.bi@mri.tmd.ac.jp            | 1) Molecular mechanisms for gender difference in cardiovascular diseases  
2) Use of iPS cells for cardiovascular toxicology and pharmacology  
3) Pathogenesis of cardiac arrhythmias and sudden cardiac death | Applicants must cover tuition and living expenses by themselves or by obtaining fellowship. |
| Noriko Sato         | Epigenetic Epidemiology           | nsato.epi@mri.tmd.ac.jp               | 1) Genomic and epigenomic epidemiology of common disease  
2) Analyses of animal model for fetal origin of metabolic disease  
3) Genome literacy | Applicants must cover tuition and living expenses by themselves or by obtaining fellowship. |
| Yujiro Tanaka       | Genome Structure and Regulation   | ytanaka.bgen@mri.tmd.ac.jp            | 1) histone methyltransferase  
2) chromatin regulation  
3) facioscapulofumeral muscular dystrophy | Applicants must cover tuition and living expenses by themselves or by obtaining fellowship. |

3. Graduate Admission

**Master’s Program**

- **Admission Requirements**
  Applicants must have a Bachelor's degree and have a minimum school education of 15 years or an academic capability equivalent to Bachelor's degree holders 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 obtain consent of at least one faculty member as a prospective supervisor before submitting application documents.

- **Application Filing Period**
  February 14, 2013 to May 10, 2013

- **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 of the United States of America, People's Republic of China, Taiwan, or Republic of Korea may submit a 30,000 Japanese Yen application fee.
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 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 obtain consent of at least one faculty member as a prospective supervisor before submitting application documents.

- Application Filing Period
  February 14, 2013 to May 10, 2013

- 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:

  nyushi.adm@cmn.tmd.ac.jp

- Acceptance of Admission
  The decision will be posted to all applicants on July 16, 2013.

4. Application Documents

The applicant should first, obtain approval of a course of study from the supervisor of the laboratory you wish to belong to. The faculty members capable of accepting students are listed on page 3.

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 2013 For International Students with Private Funds
2) Field of Study and Study Program
2. Financial statement (prescribed form in English)
3. 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 faculty member who consents to be your prospective supervisor.)
4. 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 faculty member who consents to be your prospective supervisor.)
5. Official academic transcript for undergraduate courses (in English)
5’ Official academic transcript for master courses (in English) (for applicants to Doctor’s Program only)
6. Certificate of graduation or expected graduation from university (in English)
7. Degree certificate or certificate of expected degree to be awarded (in English)
8. 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)
9. Two copies of photo which are taken within the past 6 months (4.5x3.5cm)
10. 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
Admission Section
1-5-45, Yushima, Bunkyo-ku
Tokyo 113-8510, Japan
TEL +81-3-5803-4924

5. Selection

Successful applicants will be selected based on their application documents and the interview (direct or over the Internet) with our professors. Applicants need to take contact with the supervisor of the laboratory you wish to belong to before sending application documents.

The faculty members capable of accepting students are listed on page 3.

For reference: http://www.tmd.ac.jp/english/faculties/graduate_school/

6. Enrollment Term

October 1, 2013

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.)

8. Contacting the Application Processing Service

If you have questions about your application, please ask by e-mail.

E-mail: nyushi.adm@cmn.tmd.ac.jp

Tokyo Medical and Dental University
Admission Section
1-5-45, Yushima, Bunkyo-ku
Tokyo 113-8510, Japan
TEL +81-3-5803-4924
http://www.tmd.ac.jp/english/admissions/index.html

9. Additional Information

Special selection for admission and TMDU scholarship was done in association with the TMDU International Summer Program (ISP) 2012. Those who are interested in this program of this year (ISP2013) should obtain information from the web site (http://www.tmd.ac.jp/TMDU-e/ise/isp.html) once it is uploaded and/or prospective supervisors.