

Course Number	06015
---------------	-------

2006 「The International Priority Graduate Programs (PGP)」

～Advanced Graduate Courses for International Students～

【1. Profile of the University】

①University Department	Tokyo Medical and Dental University Biomedical Science PhD Program		
②President	SUZUKI Akio		
③Address (Headquarter)	5-45, Yushima 1, Bunkyo ku, Tokyo 113-8510, Japan		
④Contact	Division	International Student Section, Student Affairs Division	
	Contact person's Name	SATO Makiko	e-mail iss.adm@tmd.ac.jp
	TEL/FAX Number	TEL: +81-3-5283-5856 FAX: +81-3-5283-5891	
⑤Web-Address	http://www.tmd.ac.jp/mri/SBS/index_e.html		
⑥Enrollment (only Graduate School)	196 (include MEXT's Scholarship Students: 86)		

【2. Outline of the Course】

①Course	International Ph.D course for Biomedical Sciences
②Degree	Master of Science and Doctor of Philosophy (5 years)
③Graduate Course, Department	Biomedical Science PhD Program Bioinformatics
	(Address)1-5-45 Yushima, Bunkyo-ku, Tokyo
④Collaboration (Universities, Graduate courses, Departments)	Biomedical Science PhD Program Functional Biology
⑤Quota	6 (include MEXT's Scholarship Students: 2) (include Japanese: 0)
⑥Faculties	105 (Full-time(only for this course):16 Full-time(at the department offering this course):11 Part-time: 78)
⑦Representative of the Course	Job Title Professor, School of Biomedical Science
	Name Dean of Biomedical Science PhD Program: Hiroshi Tanaka

【3. Contents of the Course】

○The aim of program

School of Biomedical Science/Biomedical Science PhD Program, which is the graduate school organization without undergraduate faculties, has established on April 2003, based the recognition that it is necessary (1) to integrate clinical sciences for complex disease and leading-edge biomedical sciences into a new interdisciplinary field, (2) to investigate the cause of diseases by the method developed in the post genome research, focusing on high-order biological functions that may cause and regulate the diseases, and (3) to develop human resources such as bio-scientists and computer scientists who can promote “Informational approach to Biomedical Science”. In this program, there are three educational goals:

1. Training of leading researchers who will promote leading-edge biomedical sciences.
2. Promotion of practice-based educations for the students with various backgrounds.
3. Training of talented researchers who launch out the bio-venture and take a core part of it.

Since 2005, International Educational Program of Biomedical Science has been started by the support from “Initiatives for Attractive Education in Graduate Schools”, aiming at the realization of Graduate School Education, which is able to take excellent students of high abilities into Japan from foreign countries including United States and advanced countries in Europe.

○Contents and features

The effort to achieve the above-mentioned goals of this Graduate School education has already been carried out. For instance;

1. The educational and the research activity in our organization are clearly separated for their own purposes.
2. Seminars and lectures on diverse and innovative topics are running on flexible schedules.
3. Cooperation with many leading research institutes is on-going.
4. For mature students, evening courses and short-term intensive lectures are available.
5. An education system especially for fostering research organization abilities is established.
6. Educational assessments by both a supervisor and a student are opened to the public.

Also by the support of “Initiatives for Attractive Education in Graduate Schools”, we started preparation for educational courses in English. English-based entrance examinations, lectures, seminars and review of essay are already available, so that we can provide students, who are non-Japanese speaking students, with lectures of high quality in graduate courses. These are the efforts we have made for this curriculum:

1. Employment of native or fluent English speakers as lecturers or administration office staffs
2. Increase of English-speaking TA/RA staffs of teaching supports in lectures and seminars (for financial support to oversea students)
3. Writing syllabuses in English
4. Taking English based entrance examination and review of dissertation
5. Full fellowship for oversea students
6. FD for the ability development to give lectures and seminars in English (for Japanese staffs)

We encourage that Japanese students attend these English lectures and seminars, and that they debate with oversea students actively to turn out to be “genuine international scientists”. Students in our program can learn enough knowledge and technologies from the curriculums of practical trainings such as those relating to chemical biology, genome/proteome analysis, genetic engineering, cellular histomorphology, and bioinformatics computation. Most of students come from other educational institutes because this Graduate School has no undergraduate faculties. Therefore we take a careful consideration in order that all applicants including people with careers of various backgrounds should have an equal opportunities for passing the entrance examinations, and that they make their choices according to their backgrounds after entering this program.

○The educational and teaching system

School of Biomedical Science has two PhD Programs: “Bioinformatics” (capacity of students: Master

16, PhD 7) and “Functional Biology” (capacity of students: Master 15, PhD 6). Thus it is a particular feature of our course that both highly scientific and practical education at School of Biomedical Science has been achieved not only by full-time lecturers at Biomedical Science but also by lecturers of other research institutes under the affiliation with this program. The following are institutes affiliated with this PhD Program in fiscal 2006: Tokyo Institute of Technology, Riken Genomic Science Center, Riken Research Center for Allergy and Immunology, Riken Brain Science Institute, Computational Biology Research Center of the National Institute of Advanced Industrial Science and Technology, International Medical Center of Japan, National Center of Neurology and Psychiatry, National Center for Child Health and Development, Research Institute of National Cancer Center, Tokyo Metropolitan Institute of Medical Science and Cancer Institute of Japanese Foundation for Cancer Research. Besides, there are 7 foreign lecturers (2 Professors, 1 Assistant Professor and 1 other) with high potential specific knowledge in this program at present. All take lectures in fluent English. Furthermore, two of the full-time lecturers (Japanese) have acquired their degrees in United Kingdom, and also most of all the lecturers have experiences of study abroad.

○Language in use: English

○How to apply, the countries to be admitted and the criteria for selection:

Entrance examinations are completely in English in Biomedical Science PhD program. You can find further information on the entrance requirements at our English web site (<http://www.tmd.ac.jp/mri/SBS/entguide/entAdmE.html>). The countries of applicants are not limited in particular. We would like to admit overseas students of talent corresponding to 20% of all students in the not-too-distant future. At present, we impose selection examinations including a language test, a written test about your special subject and an interview, on the applicants who have Bachelor's degree. In our graduate school, students are not allowed to select the laboratory in which he/she wished to enroll at the first stage of the semester. After they attend short-term intensive lectures or several seminars, they are requested to have a talk with several staff of School of Biomedical Science and also related laboratories and make first drafts of their research. Through the procedure mentioned above, they finally obtain approval of a course of study from his/her academic advisor of the department in which he/she wished to enroll.

In our international educational program of Biomedical Science, we aim to establish a system, in which overseas students can take an entrance examination while they are in their own countries, as most of PhD courses in United States adopt the same system. Namely, applicants from overseas are selected by following points; Educational background information, the outline of the research interest in which he/she goes in for, the score of GRE, the score of TOEFL, online interview. We can accept the application form from December of one year before matriculation.

○Expected career after graduation

We have already achieved the actual solid results from last year. In 2005, 11 out of 23 MA students proceeded to PhD courses and the rest of the students successfully started to work at well-known pharmaceutical companies or the companies related to the field of biology.

○Inspection/Evaluation towards this program:

A questionnaire survey is given annually for both students and teachers. The result of the questionnaire is officially announced. Syllabus is also revised every year based on the results of questionnaire from both students and teachers. Furthermore, an advisory committee consists of selected external well-informed people estimates our faculty about its management and research activities every year. The inspection will be done in the same way in regard to this program.

For these reasons above, it could be thought that our PhD program provides as good education in English as the best known universities in United States and developed countries in Europe do. We would encourage you to submit application to our program.