STUDENT ADMISSION INFORMATION
FOR 2018

MASTER’S PROGRAMS
in
MEDICAL SCIENCES
DISABILITY SCIENCES
HEALTH SCIENCES
SCHOOL OF PUBLIC HEALTH

<table>
<thead>
<tr>
<th>Application period</th>
<th>① June 8 (Thu), 2017 – June 15 (Thu), 2017</th>
<th>② July 14(Fri), 2017 – July 28(Fri), 2017</th>
<th>prescreening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance examination</td>
<td></td>
<td></td>
<td>August 24(Thu), 2017</td>
</tr>
<tr>
<td>Announcement of successful applicants</td>
<td></td>
<td></td>
<td>September 7(Thu), 2017</td>
</tr>
<tr>
<td>Registration for admission</td>
<td></td>
<td></td>
<td>April 1, 2018</td>
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</tbody>
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TOHOKU UNIVERSITY
GRADUATE SCHOOL OF MEDICINE

May 2017
The Tohoku University Graduate School of Medicine is seeking students for the Master’s Program according to the following guidelines:

1. Number of Openings for Students

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>NUMBER OF OPENINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Medical Sciences</td>
<td>30</td>
</tr>
<tr>
<td>II Disability Sciences</td>
<td>28</td>
</tr>
<tr>
<td>III Health Sciences</td>
<td>24</td>
</tr>
<tr>
<td>(1) Nursing</td>
<td></td>
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<tr>
<td>(2) Radiological Technology</td>
<td></td>
</tr>
<tr>
<td>(3) Medical Technology</td>
<td></td>
</tr>
<tr>
<td>III School of Public Health</td>
<td>10</td>
</tr>
</tbody>
</table>

*We plan to revise the admission capacity of Department of Disability Science and Department of Health Sciences after 2018.

2. COURSE

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Medical Sciences</td>
<td>(1) General Course</td>
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<tr>
<td></td>
<td>(2) International Course of “Public Health Science for Human Security”</td>
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<td></td>
<td>(3) Molecular Imaging</td>
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<td></td>
<td>(4) Medical Physicists Training Course</td>
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<td></td>
<td>(5) Basic Medicine (the course by English for students studying abroad)</td>
</tr>
<tr>
<td>II Disability Sciences</td>
<td>General Course</td>
</tr>
<tr>
<td>III Health Sciences</td>
<td>(1) Nursing</td>
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<tr>
<td></td>
<td>(2) Radiological Technology</td>
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<tr>
<td></td>
<td>(3) Medical Technology</td>
</tr>
<tr>
<td>IV School of Public Health</td>
<td>(1) General Course</td>
</tr>
<tr>
<td></td>
<td>(2) Course to Train High-Level Clinical Research Administrators</td>
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<tr>
<td></td>
<td>(3) Course in Public Health and Genetic Counseling</td>
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<td></td>
<td>(4) One-Year Course to train Physicians and Dentists for Clinical Research</td>
</tr>
<tr>
<td></td>
<td>(5) International Course of “Public Health Science for Human Security”</td>
</tr>
</tbody>
</table>
3. ADMISSION REQUIREMENTS

Applicants for the master's programs must satisfy one of the following conditions:

(1) Those who have graduated from a university (including those who are expected to graduate by March 2018)
(2) Those who have been conferred a baccalaureate degree (including those who are expected to be conferred the degree by March 2018) as stipulated by Article 104, Paragraph 4 of the School Education Act (Act No. 26 of 1947, hereafter referred to as “the Law”)
(3) Those who have completed 16 years of education in a foreign country (including those who are expected to complete this education by March 2018)
(4) Those who have completed 16 years of education in a foreign country through correspondence courses provided in Japan by a foreign school of said country or who are expected to have completed said courses by March 2018
(5) Those who have completed or are expected to complete a program in an educational facility in Japan designated separately by the Ministry of Education, Culture, Sports, Science and Technology that provides courses from a foreign university within the school system of a foreign country by March 2018 (this applies solely to those who have completed 16 years of education in said foreign country)
(6) Students who have been conferred a degree equivalent to a bachelor's degree upon completion of a curriculum that has a course term of three years or longer at a university or other school (limited to schools whose overall educational and research activities have been evaluated by the relevant country's government or a government-approved individual, or are designated separately as having met this requirement by the Minister of Education) in a foreign country (including cases in which the student completed the curriculum by taking subjects conducted by said school via distance learning while the student resided in Japan, and cases in which the student has completed a curriculum at an educational facility that is positioned within that country's educational system as per the previous item)(including those who are expected to acquire a Bachelor degree by March 2018)
(7) Those who have successfully completed or, by the date designated by the Ministry of Education, Culture, Sports, Science and Technology, are expected to complete a specialized course specifically designated by the Ministry of Education, Culture, Sports, Science and Technology at a vocational school (whose minimum period required for graduation is four years or longer and that also satisfies other conditions specified by the Ministry of Education, Culture, Sports, Science and Technology) by March 2018
(8) Those designated by the Ministry of Education, Culture, Sports, Science and Technology (refer to Public Notice of the Ministry of Education No. 5 of 1953)
(9) Those who have been enrolled in a university for at least 3 years, those who have completed 15 years of formal education in countries other than Japan, those who have completed 15 years of education in a foreign country through correspondence courses provided in Japan by a foreign school of the said country, or those who have completed a program in an educational facility in Japan designated by the Ministry of Education, Culture, Sports, Science and Technology to provide courses from a foreign university within the school system of a foreign country (this applies solely to those who have completed 15 years of education in said foreign country), and those who have been recognized by this graduate school as having acquired the specified credits with outstanding performance by March 2018
(10) Those who entered another graduate school in compliance with the provisions of Article 102, Paragraph 2 of the Law and who are recognized by this graduate school as having academic ability appropriate for receiving postgraduate education
(11) Those who will be at least 22 years old by March 2018 and whom this graduate school has authorized, through individual screening of entrance qualifications, as having abilities that are at least equivalent to those of a university graduate

(EXPLANATORY REMARKS)
Before application, prospective students should first find a prospective supervisor. Find one professor in the field of your interest, contact and then obtain consent of acceptance to the laboratory.

Applicants eligible for “One-Year Course to train Physicians and Dentists for Clinical Research” in School of Public Health are either medical doctor or dental doctor in Japan who finished their clinical training authorized by Japan Government.

A university mentioned in item (1), (9) and (11) refers to a 4-year university in Japan.

Applicants who satisfy the conditions for items (6), (9), (10) or (11), must pass the preliminary screening for admissions.

   a. Application Period for preliminary screening

      June 8 (Thu), 2017 — June 15 (Thu), 2017

   b. Those who are interested in taking the preliminary screening should contact the Registrar’s Office Graduate School of Medicine Academic Affairs Section before applying.

* Refer the Tohoku University Graduate School of Medicine website "Concerning the Application for Examination of Qualifications for Admission".

4. APPLICATION PROCEDURE

Applicants shall submit the documentation specified in the following Section (3) to the admission office within the application period.

They shall sufficiently understand the contents of studies in the “prospective department,” directly contact the prospective professors about their examination applications prior to submission of the application forms (by visiting the prospective professors for interview), and receive approval.

(1) Application period is from July 14 (Fri), 2017 to July 28 (Fri), 2017
(application must reach the office due NLT 17:00(Japanese Standard Time), July 28 (Fri), 2017). Please use the prescribed application envelope and send by registered and express delivery.

Some application forms may reach the admission office on July 31 (Mon), 2017 or later. In this case, those postmarked on and before July 28 (Fri), 2017 shall be regarded as valid.

(2) Applications should be addressed to:

Graduate Academic Affairs Section, Academic Affairs Office
Tohoku University Graduate School of Medicine
2-1 Seiryo-machi, Aoba-ku, Sendai
980-8575 Japan
Tel: (+81) 22-717-8010

(3) APPLICATION DOCUMENTS

<table>
<thead>
<tr>
<th>DOCUMENTS</th>
<th>PARTICULARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICATION FORM/RESUME</td>
<td>A Graduate School prescribed application form, with a recently taken photo affixed. Contact prospective Professor and obtain consent of acceptance to the laboratory, and tick the box of 「了承を得た」</td>
</tr>
<tr>
<td>ASPIRATIONS, MOTIVES, REASONS AND AMBITIONS</td>
<td>On a Graduate School prescribed application form (approximately 500 words long)</td>
</tr>
<tr>
<td>EXAM ADMISSION TICKET, PHOTO ID TICKET</td>
<td>Affix a photo to each of the prescribed application form and the photo ID ticket2.</td>
</tr>
<tr>
<td>ENVELOPE FOR MAILING EXAM ADMISSION TICKET</td>
<td>Enclose the prescribed, return-addressed stamped envelope. The office will send the admission ticket in this envelope so it should clearly bear your name, return address and postal code.</td>
</tr>
</tbody>
</table>
TRANSCRIPT OF ACADEMIC RECORDS
Submit an official transcript of academic records issued by the president (dean) of your graduating university (graduate school) with the appropriate official seal (not required for graduates of Tohoku University School of Medicine).

English score record.
*< Your foreign language (English) proficiency is evaluated on TOEIC TOEFL or IELTS. >

We don't return your score sheets submitted in principle. Please submit the official document(s) verifying that the result(s) of your TOEIC, TOEFL iBT or IELTS test were achieved from a test taken within two years of Tohoku university entrance exam. Result from non-public tests will not be accepted (ex: TOEFL ITP, TOEIC IP)

In the case of TOEIC, please submit the original copy of your official score certificate. In case of IELTS, please submit the original copy of your official result transcript.

*TOEFL, TOEFL iBT, TOEFL ITP and TOEIC are registered trademarks of Educational Testing Service (ETS).

APPLICATION FEE, ¥30,000
The application fee is ¥30,000. Please send it by postal remittance (do not fill in the space for the recipient).

FEE PAYMENT SLIP
1. Applicant’s name should be entered on the slip (in two places).
2. MEXT Scholarship students are not required to submit the fee payment slip.

CERTIFICATE OF COMPLETION (EXPECTED COMPLETION), ETC.
Certificate of the completion (expected completion) of a bachelor degree or a certificate of the conferral (expected conferral) of a bachelor degree. (Graduates of Tohoku University School of Medicine are not required to submit this form.)

A COPY OF RESIDENT’S CARD (ONLY STUDENT STUDYING ABROAD)
Candidates who stay in Japan (whose stay is over 90 days) must submit your copy of resident’s card (both front and back) at the application.

RETURN ENVELOPE FOR RECEIVING PASS/FAIL NOTICE AND ADMISSION DOCUMENTS
Enclose the prescribed, return-addressed stamped envelope for receiving the pass/fail notice. Also enclose the prescribed, return-addressed envelope for receiving admission procedure documents. The return address should be the address as of around early March, 2018 (postage is not necessary).

(4) IMPORTANT

1. Any blank spaces or irregularities found in applications may result in rejection of the application so applicants should exercise great care when filling out the application form.
2. If any of the information in an application is found to be false, it may result in cancellation of admission if the applicant is initially accepted.
3. The application fee is non-refundable under any circumstances.
4. Applicants who have satisfied the conditions for entry through preliminary screening should enclose a copy of their acceptance notification.
5. The University does not accept the application withdrawal after the reception and the modification of contents of applications.

5. SCREENING

(1) Applicants will be evaluated based on the following criteria,
1. The result of your TOEIC, TOEFL, or IELTS official score certificate
2. Essay score
3. Interview score

(2) ENTRANCE EXAMINATION DATE/TIME & SUBJECTS

<table>
<thead>
<tr>
<th>DATE</th>
<th>TYPE OF TEST</th>
<th>TIME</th>
<th>SUBJECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 24</td>
<td>Written examination</td>
<td>from 10:00 to</td>
<td>Short essay (on life science/ medical science, disability</td>
</tr>
<tr>
<td>(Thu), 2017</td>
<td></td>
<td>11:30</td>
<td>science and public health)</td>
</tr>
<tr>
<td></td>
<td>Interview</td>
<td>from 13:00</td>
<td></td>
</tr>
</tbody>
</table>

4
(3) EVALUATION OF FOREIGN LANGUAGE (ENGLISH)
Your score of TOEIC, TOEFL or IELTS submitted at the application is converted into the normal score. If several score records are provided, the higher record is used for evaluation after the conversation.

(4) Department Assignment
Although there is no limit set on the quota to each department, we must limit the number of students we accept in the event of too many applicants applying for one department. They may not receive their first choice of department. They may, however, receive their second, third or fourth choice of department.

You can fill up the prospective laboratory from first choice to third choice in different course, but forth choice has to be different course from your first choice.

6. LOCATION OF EXAMINATION
Tohoku University Graduate School of Medicine
Further information will be provided with the examination admission ticket.

7. ANNOUNCEMENT OF SUCCESSFUL APPLICANTS & PROCEDURE FOR ADMISSION
(1) The identification numbers of the successful applicants will be posted at the entrance lobby of Bldg. No. 1 of the School of Medicine at 10:00 on September 7 (Thu), 2017, and also published on the website. For the results of examination, please check the “Notification” which will be mailed later. We cannot answer the examination result on the phone or via email.

(2) Admission documents will be mailed to successful applicants by the beginning of March 2018.

(3) Fees for admission are as follows:
- Admission fee: ¥282,000 (expected)
First semester tuition: ¥267,900 (annual tuition: ¥535,800) (expected)

(Explanatory Remarks)

1. The amounts mentioned above may change if the fees are revised at school entry or during the period of the applicant’s enrollment, in which case the new payment system will be applicable.
2. Information on exemptions from payment of admission or tuition fees or deferment of fees will be provided in the admission procedure document packet.

(4) Applicants who are employed at the time of admission must submit a letter of consent from their employer.
(5) The date of registration for admission is April 1, 2018.

8. OTHER INFORMATION

(1) Handling of personal information
1) Personal information collected during the admission procedure is used only for the following purposes: admission-screening procedure, admission procedure as well as, after the entrance, scholarship/student welfare, and study guidance. Personal information will be used for no other purpose.
2) Individual information collected during the admission procedure is strictly handled, based on the “Personal Information Protection Regulations of Tohoku University”. Personal information will not be disclosed or offered to a third party without specific prior written approval.
3) Applicants to the Tohoku University Graduate School of Medicine are understood to be in agreement with the content of the statement above.

(2) Applicants requiring special care during the examination procedures and subsequent schooling should request advice in advance by contacting the Registrar’s Office Graduate School of Medicine Academic Affairs Section. Please submit your “special care” requirement with prescribed form to Academic Affairs Section before June 15, 2017.

May 2017

TOHOKU UNIVERSITY GRADUATE SCHOOL OF MEDICINE

Graduate Academic Affairs Section
2-1 Seiryo-machi, Aoba-ku, Sendai
980-8575 Japan
Tel: (+81) 22-717-8010
Email Address: m-daigakuin@grp.tohoku.ac.jp

This application information can be viewed at the following website:

http://www.med.tohoku.ac.jp/english/admissions/admissions/apply/
DESCRIPTION OF GRADUATE SCHOOL PROGRAM

1. OBJECTIVE AND MISSION
   I Master’s Program in Medical Sciences
   Aims at cultivating researchers and educators in medical sciences, and human resources with expertise in medical sciences who can respond to industrial needs in the field of medical sciences.
   II Master’s Program in Disability Sciences
   For students who graduated in an area other than medical-related such as physical education, liberal arts and engineering, aims at cultivating human resources including researchers, teachers, and administrative officials who can make international contributions.
   For medical specialists such as physical therapists, occupational therapists, and speech therapists, aims at cultivating of leaders such as teachers who can take charge of graduate school education for medical related occupations or who can perform specialized medical rehabilitation.
   III Master’s Program in Health Sciences
   While forming the research and educational base at a global level on health science, aims at contributing to the maintenance and improvement of health as a right of human beings in an advanced welfare society. Accordingly aims at cultivating researchers and educators in health sciences, and advanced medical professionals.
   IV Master’s Program in School of Public Health
   Aims at formulating the education-research center of public health at the world’s best standard, and aims at contributing to an advancement of health and welfare for people in Japan as well as all over the world.
   Aims at training researchers, professionals and leaders, who have a broad background of public health and a high standard of job specialty and ethics.

2. COURSE OF STUDY AND CURRICULUM
   In order to complete the master's programs and receive a degree, students must enroll in the program for two years or longer, and take a predetermined course of studies to acquire 30 credits or more, and have the necessary research supervision, complete a master's thesis and pass the final examination.

   I Master’s Program in Medical Sciences
   Master’s degree (Medical Sciences)
   II Master’s Program in Disability Sciences
   Master’s degree (Disability Sciences)
   III Master’s Program in Health Sciences
   Course of Nursing Master’s degree (Nursing)
   Course of Radiological Technology Master’s degree (Health sciences)
   Course of Medical Technology Master’s degree (Health sciences)
   IV Master’s Program in School of Public Health
   Master’s degree (School of Public Health)
3. RESEARCH SUPERVISION
All students who are admitted into the graduate program will be given research guidance in accordance with the research themes of the departments the students belong to.
Please refer to the Tohoku University Graduate School of Medicine website “Laboratory Introduction 2017”.

(Explanatory Note)
Research themes indicated with “a※” have not been finalized so please contact the following for any inquiries:

Graduate Academic Affairs Section, Educational Affairs Division
Tohoku University Graduate School of Medicine
2-1 Seiryo-machi, Aoba-ku, Sendai
980-8575 Japan
Tel: (+81) 22-717-8010
Email Address: m-daigakuin@grp.tohoku.ac.jp

4. ENTRANCE FEE/TUITION EXEMPTIONS
(1) Exemption of Admission Fee
Students recognized as being in severe financial difficulties are eligible to apply for exemption from payment of the admission fee (complete exemption or 50% exemption).

(2) Exemption of Tuition
Students recognized as being in severe financial difficulties are eligible to apply for tuition exemption (complete, 50%, or 1/3 exemption) if they have an excellent academic record.

*Please refer to the Tohoku University website “The application for admission fee waiver” and “The application for tuition fee waiver”.
http://www2.he.tohoku.ac.jp/menjo/
5. INTRODUCTION OF THE PROGRAMS

I  Introduction Medical Sciences Master's Programs

Goals and distinctive features

The goals are to raise educators and researchers who can contribute to the development of medicine and medical fields in Japan and international society, and to foster advanced medical professionals who will help realize safe and healthy society, where people can live in relief even when they are sick. To achieve the goals, we address bringing up people who have wide knowledge, flexible ideas, advanced information processing ability, a noble-minded sense of ethics, and practical techniques, unifying basic and clinical medicine education. Especially, the curriculum is composed so that even if the student is a graduate from other than faculty of medicine or related to medicine, he or she can harness the accumulated knowledge and skills, and develop it in the medicine and medical fields.

(1) General Course Features

Contents of Education
The curriculum is designed so that students can have a diverse and organic knowledge and practical techniques on basic and clinical medicine, and can determine their way after graduation according to their ability and direction. The students can broadly choose their carrier options.

The curriculum is divided into the following three subjects.

Career Plans after Graduation
・Entrance into the Graduate School of Medicine, Department of Medical Sciences (Doctoral Program).
・Employment at medical treatment and pharmaceutical institutions, and food-related and medical equipment development companies, and public offices (especially medical-related), etc.
・By occupation, they are a medicine researcher, biostatistician, clinical research coordinator, people responsible for medical information, clinical psychologist, psycho oncology specialist, etc.

(2) International Course of “Public Health Science for Human Security”

Course Features
After the cold was ceased in the early 1990’s, the concept of “Human Security” has become the primary common concern of international society. The new concept addresses the issues of security of “people”, instead of “nations”, such as illnesses, disasters, poverty, conflicts and so forth. Particularly in developing countries such as some nations in Asia, people’s lives and dignity have been threatened by diseases and injuries which are basically not curable because of poverty, natural disasters, poor environmental hygiene, malnutrition and so on. In addition, epidemics and environmental pollution jeopardize human security by crossing border perspectives based on interdisciplinary views and scientific knowledge.

The International Course of “Public Health Science for Human Security” is designed to develop students’ comprehension of the closely related factors which affect peoples’ lives and also their ability to produce solutions, by integrating the latest knowledge of
medical science and international health with the method of the humanities and social sciences. The course further aims to nurture researchers and public health leaders in international society who will contribute to the realization of human security by taking leadership in solving security problems in public health. This course is based on the “International Post-Graduate in Human Security,” and is conducted in collaboration with three other graduate schools (Agricultural Science, International Cultural Studies and Environmental Studies), from among which students may select elective courses. All elective and obligatory courses are lectured in English.

Contents of Education
Special Lectures on Human Security A,B, etc.

Career Plans after Graduation
Entrance into the Graduate School of Medicine, Department of Medical Sciences (Doctoral Program).
public offices (especially medical-related), etc

(3)Molecular Imaging
Course Features
Molecular imaging examines the molecular mechanisms of integrated systems in vivo using molecular probes. Many imaging technologies have been and are being developed to achieve these goals, such as optic imaging, magnetic resonance imaging (MRI), positron emission tomography (PET) and so on. Each has unique applications, advantages and limitations. Biomedical engineering, medicine, biology, dentistry and pharmaceutical sciences are joining to build technologies and molecular probes that measure and image molecular biological functions for organ systems. Biologists will benefit from easier movement from isolated molecular, cellular and tissue settings to an in vivo, where functions are directed and constrained by the requirements of organ systems and whole organisms. Patient care will profit from more direct links in the areas of molecular diagnostics and molecular therapeutics.

The special course of “molecular imaging” is designed to develop students’ comprehension of the closely related disciplines on “molecular imaging”, and also the ability to make a possible breakthrough in molecular imaging by integrating the latest knowledge of medical engineering, medicine, biology, density and pharmaceutical sciences. This special course “molecular imaging” mainly focuses on PET, but many issues also apply to other technologies. In addition, the courses focuses on integrative mammalian biology ranging from mice to humans, as well as the transformation of in vivo molecular assays to in vivo imaging. This course in conducted in collaboration with the Graduate Schools of Medicine, Engineering, Pharmaceutical Sciences and Dentistry and the National Institute of Radiological Sciences (NIRS).

Contents of Education

Career Plans after Graduation
Entrance into the Graduate School of Medicine, Department of Medical Sciences (Doctoral Program).
Employment at medical treatment and pharmaceutical institutions, and food-related and
medical equipment development companies, etc.

(4) Medical Physicists Training Course

**Course Features**

Advanced large medical machines are used in areas of diagnostic radiology and radiation therapy. Medical physicists are involved in the development of new instrumentation and technology for use in such fields and in the accurate measurement of the radiation output from radiation sources employed in cancer therapy to contribute clinical and scientific advice and resources to solve the numerous and diverse problems that arise continually in many specialized medical areas. Medical physicists are required to get credits in medicine, physics and clinical experience. Graduates of the Department of Radiation Technology in the Health Science Course and those of the Physical or Engineering Faculty are entered into this course. Medical physicists trained in research, education and medical treatment as team members with other medical specialists are trained.

**Contents of Education**

**Career Plans after Graduation**

(5) Basic Medicine （the course by English for students studying abroad）

**Course Features**

The purpose of this course is instructions of fundamental knowledge and skills of medicine and medical sciences.

Education including every lecture and direction of thesis is conducted in English. Many lecturers belong to Graduate School of Medicine. Their professional territories cover all aspect of medical research. They instruct students how to learn problem solution approaches through the position of medicine, as well as to expand what students have learned to medical field. Two professors are assigned for thesis advisers for developing diversified mindset.

**Contents of Education**

Education of this course is comprised of two parts, lectures (including classroom lectures and practical training) and writing a thesis. At classroom, students learn basic medical knowledge and technique. At practical training, students are able to visit different laboratories to learn more about method for medical research. There are chances to present research results at the midpoint to take advises.

**Career Plans after Graduation**

- Advancement to doctoral course
- Company related to medical service, drug discovery, food. Public office, especially related to medicine.
- Researchers about medicine or pharmacology. Developers or person in charge of quality control at pharmaceutical company, food company etc.
II Introduction Disability Sciences Master's Programs

Course Features

As technology advances and develops, current healthcare enables life prolongation of patients with refractory diseases. However, the number of people with physical/cognitive dysfunctions is rapidly increasing, and such patients suffer from complicated/multiple disabilities. In this situation, rehabilitation is required to cope with a large variety of diseases, and its methods and roles are changing. Rehabilitation needs new ideas from different viewpoints. Aiming to increase and develop human resources with higher levels of knowledge and rich humanity who can respond to complicated/multiple disabilities, we need to establish an interdisciplinary scientific field incorporating conventional rehabilitation medicine. In this department, we make efforts to respond to social needs so that those with disabilities can achieve functional recovery, reduced need of nursing care, social rehabilitation and resettlement. We also attempt to explore new treatment, rehabilitation and nursing care techniques and establish new healthcare systems including analysis, assessment and prevention of various disabilities. In order to attain these goals, we introduce medicine & science in sports & exercise, physical engineering, neuroscience, neuropsychology, epileptology, behavioral medicine, musical acoustic medicine, and biomechatronics into conventional rehabilitation medicine, in order to unify the basic and clinical fields. In this manner, we promote a wider range of educational/research activities.

Contents of Education

The educational distinction is to give graduate school education on "disability sciences" to the following students:

- those who graduate from specialized areas other than medical fields such as gymnastics, pharmacology, life science, agricultural science, health science, nursing, nutritional science, psychology, education, liberal arts, engineering, music etc.
- those who work as healthcare professionals such as physiotherapists, occupational therapists, speech therapists, clinical laboratory technicians and nurses, and music therapists.

Since its establishment in 1994, this department has been positioned as the only department of disability sciences among the medical research courses of graduate schools in Japan. In this department, researchers have been consistently engaged in various scientific programs focusing on the identification of causes of physical/cognitive dysfunctions, prevention of disabilities and rehabilitation. We aim to develop human resources that can continue to promote research activities independently and contribute to international society by learning new disability sciences, receiving rehabilitation education, and accumulating the ability needed for the provision of healthcare. In this department, we promote research activities aimed at developing the confidence of researchers/instructors/administrators who are familiar with these fields and senior instructors who can provide professional rehabilitation.

Introduction and training of Medicine and Science in Sports and Exercise, Behavioral Medicine, Physical Medicine and Rehabilitation, Restorative Neuromuscular Rehabilitation, Epileptology, Internal Medicine and Rehabilitation Science, Behavioral Neurology and Cognitive Neuroscience, Musical Acoustic Medicine, Biomedical Engineering, etc.
Career Plans after Graduation

The employment opportunities for the graduates are satisfactory because our globally unique research activities focusing on disability sciences perfectly match current social needs. Many seniors have already been engaged in various professional fields and have played important roles in universities and research institutes in Japan and foreign countries.

(1) Researcher of disability sciences
(2) Educator/leader of disability sciences
(3) Researchers of neuroscience and medical science
(4) 4-year university teaching staff for medical related occupations (physical therapist, occupational therapist, nurse, etc.)
(5) Administrative official who has professional expertise in disability sciences
(6) Pharmaceutical companies, general companies, public servants
III  Introduction Health Sciences Master's Programs

The students aim to be advanced professionals, and educators and researchers. We accept students from other fields as well as graduates from the health sciences fields.

There are many students from the workforce entering this Department, and we support them with such as long-term learning, lectures at night and seminars. There is a way to qualify to take the entrance examination by the preliminary review prior to the graduate school examination for those who graduate from a medical junior college and have work experience.

The Department of Health Sciences is divided into three courses by the curriculum. For completion, the student must obtain 30 credits in core and elective subjects in lectures and master's thesis preparation (thesis research).

In each course, the student must acquire more than two credits from the common elective subjects including the subjects specified in each course. Thesis research is ten credits. Select the field to major in and the instructor for the thesis. The remaining credits are acquired from the special subjects in each field.

Students of the nursing course need to acquire more than eight credits and those of the radiological technology course and the medical technology course need to acquire more than ten credits.

(1)Nursing Course:
①General 
Course Features

The General Nursing Course is divided into the two domains of Advanced Nursing Practice and Health Development Nursing, and Family Nursing, which are then subdivided into the 13 specialties of Science of Nursing Practice, Nursing Education and Administration, Gerontological Nursing, Nursing Science of Community Health Care System, Community Health, International Nursing Management, Adult Health Nursing, Oncology Nursing, Palliative Nursing, Child Health Nursing, Psychiatric Nursing, Maternal Nursing, and Women's Health Nursing. Advanced Nursing Practice and Health Development Nursing is the domain for research and education on development and assessment of nursing skills, construction of nursing theory needed for promoting public health and supporting independent life, management of nursing education, the establishment of nursing ethics, promotion of the individual, group and community health.

Family Nursing is the domain for research and education on the methods for retaining, improving and supporting the family function on the basis of the family unit as the target of nursing and the properties and life events of the family unit. Access our website, etc. for the research detailed research in each field. Students who have nurse licenses and aim to be certified nurse specialists, can study through the curriculums of oncology nursing and pediatric nursing.

Career Plans after Graduation
・Enter the Doctoral Program of Graduate School of Medicine, or other Department or doctoral programs in other university 
・Teachers at universities
・Health nurse, birth attendant, nurse, clinical radiologist, clinical laboratory technologist at a university hospital or public hospital
Course of Public Health Nurse Training

Course Features
The qualifications and skills required for a public health nurse working in local communities change with each generation. In the present day where health issues are becoming increasingly complex as our lifestyles and values are more diversified, public health nurses need to have even more advanced practical and research skills to analyze the factors of these issues from their relation with society and the environment, and endeavor to resolve and improve them with the cooperation of local residents and professional groups. Also required is the capability to work as a high-level professional demonstrating leadership in carrying out support activities for disaster-affected areas of the Tohoku coastal region. From April 2014, Tohoku University is offering a Public Health Nurse Training Course in the Graduate School Doctor of Health Sciences Course (first term two-year program) for people aiming to become public health nurses or who want to improve their skills as public health nurses.

Contents of Education
Health nurse
Career Plans after Graduation
Health nurse

Radiological Technology Course:

General

Course Features
The Radiological Technology Course is divided into two domains of Fundamental Radiological Science and Clinical Radiological Science, which are subdivided into seven specialties of Noninvasive Diagnostic Imaging, Radiological Imaging and Informatics, Clinical Radiological Science, Diagnostic Image Processing, Diagnostic Image Analysis, Radiological Examination and Technology, and Therapeutic Radiology. Fundamental Radiological Science promotes the basic and applied research required to develop diagnostic imaging device, medical treatment equipment, and their applied technologies. Clinical Radiological Science is the domain to research and educate on broad diagnostic technologies used for various clinical diagnostic imaging, nuclear medicine technologies as functional diagnosis, quality control and assurance in radiodiagnosis and radiotherapy, and medical physics of a radiotherapy planning system, oncology, and radiobiology. Refer to the Website, etc. for detailed research in each field. Students aim to be a medical physicist, can learn by the curriculum centering on therapeutic radiology.

Contents of Education
Career Plans after Graduation
• Enter the Doctoral Program of Graduate School of Medicine, or other Department or doctoral programs in other university
• Teachers at universities
• Clinical radiologist, at a university hospital or public hospital
• Engineer at a local public body or pharmaceutical company
② Medical Physicists Training Course

Course Features
Advanced large medical machines are used in areas of diagnostic radiology and radiation therapy. Medical physicists are involved in the development of new instrumentation and technology for use in such fields and in the accurate measurement of the radiation output from radiation sources employed in cancer therapy to contribute clinical and scientific advice and resources to solve the numerous and diverse problems that arise continually in many specialized medical areas. Medical physicists are required to get credits in medicine, physics and clinical experience. Graduates of the Department of Radiation Technology in the Health Science Course and those of the Physical or Engineering Faculty are entered into this course. Medical physicists trained in research, education and medical treatment as team members with other medical specialists are trained.

Contents of Education

Career Plans after Graduation
- Clinical radiologist, at a university hospital or public hospital

(3) Medical Technology Course:

Course Features
The Medical Technology Course is divided into two domains of Laboratory Medicine and Science, and Laboratory Medicine and Clinical Science, which are subdivided into seven specialties of Molecular and Functional Dynamics, Medical Microbiology, Mycology and Immunology, Endocrinology and Applied Medical Science, Pathology and Histotechnology, Clinical Physiology, Molecular Hematology, and Pathophysiology. Laboratory Medicine and Science is the domain for fundamental research and education for laboratory medicine and science including basic research in the areas of molecular biology, molecular genetics, analytical chemistry, infection and immunity, endocrinology and metabolism, and applied research that lays emphasis on basic research. Laboratory Medicine and Clinical Science is the domain especially for advanced research and education aiming at clinical applications in areas that meet more clinical settings such as pathology and histotechnology, clinical physiology, pathophysiology. Refer to the website, etc. for detailed research in each field.

Curriculum
After graduation
- Enter the Doctoral Program of Graduate School of Medicine, or other Department or doctoral programs in other university
- Teachers at universities
- Clinical laboratory technologist at a university hospital or public hospital
- Engineer at a local public body or pharmaceutical company
Introduction to the School of Public Health Master's Program

Course Features

(1) General

Course Features

Contents of Education

Career Plans after Graduation

(2) Course to Train High-Level Clinical Research Administrators

Course Features

In Japan, recognition of necessity of infrastructure for medical research of clinical trial and transformer rational research has risen since the latter half of the 90's. But it has been insufficient yet and we have to promote talents who support these very fast. In this course, we promote specialists who support medical research, such as a clinical research coordinator (CRC), a data manager, a drugs' cosmetics and medical instrument specialist, an IT specialist, at the departments of Epidemiology, Biostatistics, and Medical Informatics while we cooperate with the Clinical Research, Innovation, and Education Center (CRIETO), TAMRIC, the Tohoku University Hospital.

You can take not only systematic lectures on medicine but a practice (training) for your specialties from the early stages of the course, so that you can take advantage of contents learnt in the lectures. We attempt to promote ‘Advanced Medical Research Supporter’ who make the best use of individual specialty and can well cooperate with other medical researchers.

Contents of Education

Career Plans after Graduation

- Entrance into the Graduate School of Medicine, Department of Medical Sciences (Doctoral Program).
- Employment at medical treatment and pharmaceutical institutions, and food-related and medical equipment development companies, and public offices (especially medical-related), etc.
- By occupation, they are a medicine researcher, biostatistician, clinical research coordinator, people responsible for medical information, clinical psychologist, psycho oncology specialist, etc.

(3) Course in Public Health and Genetic Counseling

Course Features

This course is for training students to become Certified Genetic Counselors (CGC, Academic Board Certification). It is designed to cultivate genetic counselors as high-level medical professionals that can work together with patients and families with an understanding of their position, and who have excellent communication skills and the latest knowledge on genomes to provide genetic counseling. Lectures are conducted in partnership with genetic medicine and various clinical departments, as well as hospitals and other research departments. Our program has been accredited for its professional development program by the Japanese Board of Genetic Counseling (jointly established by the Japan Society of Human Genetics and the Japanese Society for Genetic Counseling). This course is designed mainly for Japanese students, and are taught only in Japanese.

Contents of Education

Career Plans after Graduation

Genetic Counselors

(4) One-Year Course to train Physicians and Dentists for Clinical Research

This course is designed mainly for Japanese students, and are taught only in
(5) International Course of “Public Health Science for Human Security”

Course Features

After the cold was ceased in the early 1990’s, the concept of “Human Security” has become the primary common concern of international society. The new concept addresses the issues of security of “people”, instead of “nations”, such as illnesses, disasters, poverty, conflicts and so forth. Particularly in developing countries such as some nations in Asia, people’s lives and dignity have been threatened by diseases and injuries which are basically not curable because of poverty, natural disasters, poor environmental hygiene, malnutrition and so on. In addition, epidemics and environmental pollution jeopardize human security by crossing border perspectives based on interdisciplinary views and scientific knowledge.

The International Course of “Public Health Science for Human Security” is designed to develop students’ comprehension of the closely related factors which affect peoples’ lives and also their ability to produce solutions, by integrating the latest knowledge of medical science and international health with the method of the humanities and social sciences. The course further aims to nurture researchers and public health leaders in international society who will contribute to the realization of human security by taking leadership in solving security problems in public health.

This course is based on the “International Post-Graduate in Human Security,” and is conducted in collaboration with three other graduate schools (Agricultural Science, International Cultural Studies and Environmental Studies), from among which students may select elective courses. All elective and obligatory courses are lectured in English.

Contents of Education

Special Lectures on Human Security A,B, etc.

Career Plans after Graduation

Entrance into the Graduate School of Medicine, Department of Medical Sciences (Doctoral Program).

public offices (especially medical-related), etc