

# STUDENT ADMISSION INFORMATION FOR OCTOBER, 2019



## MASTER'S PROGRAMS

in

MEDICAL SCIENCES

DISABILITY SCIENCES

Application period	① June 3 (Mon), 2019– June 17 (Mon), 2019	prescreening
	② July 16(Tue), 2019– July 25(Thu), 2019	
Entrance examination	August 22(Thu), 2019	
Announcement of successful applicants	September 5(Thu), 2019	
Registration for admission	October 1, 2019	

TOHOKU UNIVERSITY

GRADUATE SCHOOL OF MEDICINE

May 2019

This is an informal translation edited for reference. The official document you should refer to is the original one in Japanese, “令和元年10月入学生募集要項（医科学専攻修士課程，障害科学専攻博士課程前期2年の課程）”。

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

MAJOR	NUMBER OF OPENINGS
I Medical Sciences	a few
II Disability Sciences	a few

\*Health Sciences and School of Public Health are not opening for student recruitment this time.

### 2. COURSE

MAJOR	COURSE
I Medical Sciences	(1) General Course
	(2) International Course of "Public Health Science for Human Security" (the course by English for students studying abroad)
	(3) Molecular Imaging
	(4) Basic Medicine (the course by English for students studying abroad)
II Disability Sciences	General Course

\*For offered fields (education and research field), please refer to the Tohoku University Graduate School of Medicine website.

[http://www.med.tohoku.ac.jp/english/about/laboratory/areas\\_index.html](http://www.med.tohoku.ac.jp/english/about/laboratory/areas_index.html)

\* Medical Physicists Training course is not opening for student recruitment this time.

### 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 September 2019)
- (2) Those who have been conferred a baccalaureate degree (including those who are expected to be conferred the degree by September 2019) 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 September 2019)
- (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 September 2019
- (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 September 2019 (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 September 2019)

(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 September 2019

(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 September 2019

(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 September 2019 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.

In the case of a foreigner, please confirm the entrance qualification to the Graduate School of Medicine of Registry before submitting the application form.

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 3 (Mon), 2019— June 17 (Mon), 2019

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".

<http://www.med.tohoku.ac.jp/english/admissions/admissions/apply/index.html>

## 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 16 (Tue), 2019 to July 25 (Thu), 2019 (application must reach the office due NLT 17:00(Japanese Standard Time), July 25 (Thu), 2019). Please use the prescribed application envelope and send by registered and express delivery.

Some application forms may reach the admission office on July 26 (Fri), 2019 or later. In this case, those postmarked on and before July 25 (Thu), 2019 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 Seiryomachi, Aoba-ku, Sendai  
 980-8575 Japan  
 Tel: (+81) 22-717-8010

### (3) APPLICATION DOCUMENTS

DOCUMENTS	PARTICULARS
APPLICATION FORM/ RESUME	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」
ASPIRATIONS, MOTIVES, REASONS AND AMBITIONS	On a Graduate School prescribed application form (approximately 500 words long)
EXAM ADMISSION TICKET. PHOTO ID TICKET	Affix a photo to each of the prescribed application form and the photo ID ticket2.
ENVELOPE FOR MAILING EXAM ADMISSION TICKET	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.
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	①The application fee is ¥30,000. Please Send it by postal remittance (do not fill in the space for the recipient). ② MEXT Scholarship students are not required to pay the application fee.
FEE PAYMENT SLIP	①Applicant's name should be entered on the slip (in two places). ②MEXT 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 September, 2019 (postage is not necessary). Both are returned to you through the prospective laboratory you choose.

#### (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.
- ⑥ Application documents etc. will not be returned at all under any circumstances.

### 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
- ④ Application documents.

(2) ENTRANCE EXAMINATION DATE/TIME & SUBJECTS

DATE	TYPE OF TEST	TIME	SUBJECTS
<b>August 22 (Thu), 2019</b>	Written examination	from 10:00 to 11:30	Short essay (on life science/ medical science, disability science and public health)
	Interview	from 13:00	

(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 fourth 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 5 (Thu), 2019, 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 September 2019.
- (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 October 1, 2019.

## 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 17, 2019.

May 2019

### TOHOKU UNIVERSITY GRADUATE SCHOOL OF MEDICINE

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

【\* This course not opening for student recruitment this time.】

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

【\* This course not opening for student recruitment this time.】

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.

(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 Seiryomachi, 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

【\* This course not opening for student recruitment this time.】

#### 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**

【\* This course not opening for student recruitment this time.】

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:

##### ① General

##### 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 12 specialties of Science of Nursing Practice, Nursing Education and Administration, Gerontological and Home Healthcare Nursing, Nursing Science of Community Health Care System, Community Health, Public Health Nursing, Adult Health Nursing, Oncology Nursing, Palliative Nursing, Child Health Nursing, Psychiatric Nursing, Department of Women's Health Nursing & Midwifery. 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 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.

##### 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
- Health nurse, birth attendant, nurse, clinical radiologist, clinical laboratory technologist at a university hospital or public hospital

##### ② 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

#### (2) Radiological Technology Course:

##### ① 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

## **IV Introduction to the School of Public Health Master's Program**

【\* This course not opening for student recruitment this time.】

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

This course is designed mainly for Japanese students, and are taught only in Japanese.

### (4) 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

##### Genetic Counselors

#### Career Plans after Graduation

##### Genetic Counselors

### (5) Leadership Training Course in Medical Ethics and Public Health

#### Course Features

The purpose of this course is to train leadership in medical ethics and public health and develop capable educator-researchers who can support diverse ethics-related activities in various areas including healthcare institutions and research facilities. This course is designed to educate undergraduate graduates who want to learn biomedical ethics and public health ethics in postgraduate level. The course is also offered to healthcare professionals and individuals who are expected to support ethics-related activities including ethics committee and ethics consultation in their own workplaces. Students belong to the Department of Medical Ethics and learn philosophical basis of biomedical ethics, its history, major problems in biomedical ethics, research ethics and public health ethics, as well as research methods in this field. They are also expected to join research ethics committees and ethics consultations as an observer. This course is designed mainly for Japanese students, and are taught only in Japanese.

#### Contents of Education

- Research Ethics and Ethics Committee: This course provides comprehensive educational program concerning research ethics with humans. Students observe research ethics reviews in Tohoku University Graduate School of Medicine and Tohoku University Hospital.
- Clinical Ethics and Case study : This course provides students with comprehensive educational regarding practical clinical ethics. Students also participate in clinical ethics consultation held in Tohoku University Hospital and other healthcare institutions
- Introduction to Ethics and Bioethics : This course examines major fundamental theories, principles, concepts, and controversies in ethics and bioethics. The course is intended to serve as a basis of all other courses.
- Descriptive Ethics and Empirical Study : This course is intended to serve as an opportunity to read various types of empirical research papers in the field of biomedical ethics in major international journals. The course focuses on detailed methodologies applied in these published studies.

- Public Health Ethics : This course examines major ethical issues in public ethics as well as national healthcare system
- Medical Humanities (Medical Ethics 2): This course presents students commercial films as case involving ethical dilemmas and the students discuss identified moral problems in a small group from the medical humanities' standpoint of view.
- Students will also learn the basics of medicine, life science, and public health through essential and elective courses.

#### Career Plans after Graduation

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

Researchers of biomedical ethics at academic institutions

Ethics committee members in healthcare institutions

Biomedical ethics educators in healthcare institutions

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

##### Course Features

After the cold war 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

Exercise 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

# 【List of Division and Department】

## I Medical Sciences Master's Program

\* When applying, contact the relevant instructor and obtain permission.  
 \* ※: No application invited this time.  
 \* For offered fields (education and research field), please refer to the Tohoku University Graduate School of Medicine website.

General: General Course  
 Molecular: Molecular Imaging  
 HS: International Course of "Public Health Science for Human Security"  
 Medical Physicists: Medical Physicists Training Course  
 BM: Basic Medicine Course

Division	Department	Professor	Acceptance				
			General	Molecular	HS	Medical Physicists	BM
Cell Biology	Radiation Biology	Prof. HOSOI Yoshio	○		○		○
	Organ Anatomy	Prof. OWADA Yuji	○				○
	Stem Cell Biology and Histology	Prof. DEZAWA Mari	○				○
	Molecular Physiology and Metabolism	Prof. SAKAI Juro	○				○
	Biochemistry	Prof. IGARASHI Kazuhiko	○				○
Physiological Sciences	Medical Biochemistry	Prof. YAMAMOTO Masayuki	○				○
	Neurophysiology	Prof. MUSHIAKE Hajime	※				
	Cell Physiology	Prof. MUSHIAKE Hajime	※				
	Systems Neuroscience	Prof. MUSHIAKE Hajime	○				○
	Molecular Pharmacology	Prof. YANAI Kazuhiko	※				※
	Pharmacology	Prof. YANAI Kazuhiko	○	○			○
Pathology	Histopathology	Prof. FURUKAWA Toru	○				○
	Anatomic Pathology	Prof. SASANO Hironobu	○				○
	Virology	Prof. OSHITANI Hitoshi	○		○		○
	Microbiology and Immunology	Prof. ISHII Naoto	○				○
	Laboratory Animal Medicine	Prof. MIYOSHI Ichiro	○				○
	Antibody Drug Development	Prof. KATO Yukinari	○				○
Internal Medicine	Nephrology Endocrinology and Vascular Medicine	Prof. HARIGAE Hideo	○				○
	Hematology and Rheumatology	Prof. HARIGAE Hideo	○				○
	Infection Control and Laboratory Diagnostics	Prof. HARIGAE Hideo	○				○
	Diagnostic Radiology	Prof. TAKASE Kei	○				○
	Radiation Oncology	Prof. JINGU Keiichi	○			○	○
	Gastroenterology	Prof. MASAMUNE Atsushi	○				○
	Cardiovascular Medicine	Prof. SHIMOKAWA Hiroaki	○				○
	Comprehensive Infection	Prof. ICHINOSE Masakazu	※				※
	Respiratory Medicine	Prof. ICHINOSE Masakazu	○				○
	Comprehensive Medicine	Prof. ISHII Tadashi	○				○
Reproductive and Developmental Medicine	Pediatric Surgery	Prof. NIO Masaki	○				○
	Gynecology	Prof. YAEGASHI Nobuo	○				○
	Obstetrics and Reproductive Medicine	Prof. YAEGASHI Nobuo	※				※

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Division	Department	Professor	Acceptance					
			General	Molecular	HS	Medical Physicists	BM	
Surgery	Gastrointestinal Surgery	Prof. UNNO Michiaki Prof. KAMEI Takashi	○				○	
	Breast and Endocrine Surgery	Prof. ISHIDA Takanori	○				○	
	Orthopaedic Surgery	Prof. ITOI Eiji	○				○	
	Cardiovascular Surgery	Prof. SAIKI Yoshikatsu	○				○	
	Urology	Prof. ITO Akihiro	○				○	
	Anesthesiology and Perioperative Medicine	Prof. YAMAUCHI Masanori	○				○	
	Palliative Medicine	Prof. INOUE Akira	○				○	
	Emergency and Critical Care Medicine Plastic and Reconstructive Surgery	Prof. KUSHIMOTO Shigeki Prof. TACHI Masahiro	○ ○				○ ○	
Neuroscience and Sensory Organs	Neurology	Prof. AOKI Masashi	○				○	
	Neurosurgery	Prof. TOMINAGA Teiji	○				○	
	Neurosurgical Engineering and Translational Neuroscience	Prof. NIIZUMA Kuniyasu	○				○	
	Psychiatry	Prof. TOMITA Hiroaki	○				○	
	Dermatology	Prof. AIBA Setsuya	○				○	
	Ophthalmology	Prof. NAKAZAWA Toru	○				○	
	Otolaryngology-Head and Neck Surgery	Prof. KATORI Yukio	○				○	
Health Informatics and Public Health	Epidemiology	Prof. TSUJI Ichiro	○					
	Biostatistics	Prof. YAMAGUCHI Takuhiro	○					
	Medical Informatics	Prof. NAKAYAMA Masaharu	○					
	Medical Genetics	Prof. AOKI Yoko	○					
Health Administration and Public Health	Health Administration and Policy	Prof. FUJIMORI Kenji	○					
	Environmental Health Sciences and Molecular Toxicology	Prof. AKAIKE Takaaki	○		○		○	
	Forensic Medicine	Prof. FUNAYAMA Masato	○					
	Medical Ethics	Prof. ASAI Atsushi	○				○	
United Centers for Advanced Research and Translational Medicine	Center for Cancer Medicine	Cell Proliferation	Prof. NAKAYAMA Keiko	○				○
	Center for Neuroscience	Developmental Neuroscience	Prof. OSUMI Noriko	○				○
	Center for Drug Discovery and Exploratory Clinical study	Molecular Medicine and Therapy	Prof. MIYATA Toshio	※				※
	Center for Trans-lational and Advanced Research on Human Disease	Transplantation and Regenerative Medicine	Prof. GOTO Masafumi	○				○
		Clinical Cell Therapy	Prof. ABE Toshiaki	○				○
		Gene Therapy	Prof. OSUMI Noriko	※				※
	Center for Prion Diseases	Neurochemistry	Prof. DOH-URA Katsumi	○				○
Neurological Science		Prof. KITAMOTO Tetsuyuki	○				○	

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Division	Department	Professor	Acceptance					
			General	Molecular	HS	Medical Physicists	BM	
Environment and Genome Research Center	Informative Genetics	Prof. ARIMA Tkahiro	○				○	
	Molecular Epidemiology	Prof. KURIYAMA Shinichi	○				○	
	Development and Environmental Medicine	Prof. NAKAI Kunihiko	※				※	
Institute of Development, Aging and Cancer	Aging Control	Gene Expression Regulation	Prof. MOTOHASHI Hozumi	○				○
		Experimental Immunology	Prof. TAKAI Toshiyuki	○				○
		Immunobiology	Prof. OGASAWARA Koetsu	○				○
		Molecular and Cellular Biology	Prof. HORIUCHI Hisanori	○				○
	Cancer Control	Molecular Oncology	Prof. TANAKA Kozo	○				○
		Cancer Biology	Prof. CHIBA Natsuko	○				○
	Brain Sciences	Developmental Neurobiology	Prof. OGURA Toshihiko	○				○
		Functional Brain Imaging	Prof. KAWASHIMA Ryuta	○				○
		Functional Brain Imaging	Prof. SUGIURA Motoaki	○				○
		Nuclear Medicine and Radiology	Prof. TAKI Yasuyuki	○				○
		Geriatrics and Gerontology	Prof. ARAI Hiroyuki	○				
Attached research facilities		Prof. MATSUI Yasuhisa	○				○	
Pre Clinical Research Center	Medical Engineering and Cardiology	Prof. YAMBE Tomoyuki	○				○	
Cyclotron and Radioisotope Center	Cyclotron Nuclear Medicine	Cyclotron Nuclear Medicine	Prof. TASHIRO Manabu	○	○			○
Biomedical Engineering	Audiology	Prof. KAWASE Tetsuaki	○					○
	Surgical and Molecular Pathophysiology	Prof. FUKUSHIMA Kouhei	○					○
	Clinical Biology and Hormonal Regulation	Prof. ABE Takaaki	○					○
International Research Institute of Disaster Science	Disaster Medical Science Division	Disaster-related Infectious Disease	Prof. KODAMA Eiichi	○				○
		International Cooperation for Disaster Medicine	Prof. EGAWA Shinichi	○		○		○
		Disaster Psychiatry	Prof. TOMITA Hiroaki	○				○
		Disaster Obstetrics and Gynecology	Prof. ITO Kiyoshi	○				○
		Disaster Public Health	Prof. KURIYAMA Shinichi	○				○
		Disaster Medical Informatics	Prof. NAKAYAMA Masaharu	○				

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Division		Department	Professor	Acceptance				
				General	Molecular	HS	Medical Physicists	BM
Tohoku Medical Megabank Organization	Community Medical Supports	Feto-Maternal Medical Science	Prof. SUGAWARA Junichi	○				○
		Medical Neuroimage Analysis	Prof. TAKI Yasuyuki	※				※
		脳画像疫学分野	Prof. FUSE Nobuo	※				※
		Oral Health Science	Prof. TSUBOI Akito	○				○
	Personalized Prevention and Epidemiology	Personalized Prevention and Epidemiology	Prof. HOZAWA Atsushi	○				○
		小児発達学分野	Prof. KURE Shigeo	※				※
	Department of Biobank	Biobank Life Science	Prof. MINEGISHI Naoko	○				○
	Department of Integrative Genomics	Biomarker Investigation	Prof. FUSE Nobuo	○				
		Statistical Genomics & Genetics	Prof. TAMIYA Gen	○				○
	Department of Health Record Informatics	Informatics for Genomic Medicine	Prof. OGISHIMA Soichi	○				○
Collaborative Chairs	Clinical Pharmaceutical Science	Prof. MANO Nariyasu	○				○	
	Neuroendocrinology	Prof. ITOI Keiichi	※				※	
	Biomedical Imaging	Prof. SAIJO Yoshifumi	○				○	
	Occupational Health	Prof. KUROSAWA Hajime	○				○	
	Super-network Brain Physiology	Prof. MATSUI Ko	○				○	

\* When applying, contact the relevant instructor and obtain permission.  
 \* ※: No application invited this time.  
 \* For offered fields (education and research field), please refer to the Tohoku University Graduate School of Medicine website.

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Division	Department	Professor	Acceptance				
			General	Molecular	HS	Medical Physicists	BM
Collaborative Chairs Molecular Neuroimaging	National Institutes for Quantum and Radiological Science and Technology (NIRS)	Prof. SUHARA Tetsuya Prof. HIGUCHI Makoto		○			
Collaborative Chairs Cancer Medical Science	Miyagi Cancer Center Research Institute	Cancer Molecular Biology(Miyagi Cancer Center)	Prof. SHIMA Hiroshi Prof. YASUDA Jun	○			○
		Cancer Immunobiology	Prof. TANAKA Nobuyuki	○			○
		Cancer Stem Cell Research(Miyagi Cancer Center)	Prof. TAMAI Keiichi	○			○
		Cancer pathology	Prof. SATOH Ikuro	○			○
		Cancer Epidemiology and Prevention	Prof. KANEMURA Seiki	○			○
		Oncovirology	Prof. YAMAGUCHI Kazunori	○			○
Collaborative Chairs Advanced Fetal and Develop- mental Medicine	Miyagi Children's Hospital	Obstetrics	Prof. MUROTSUKI Jun	○			○
		Pediatric Neurosurgery	Prof. SHIRANE Reizo	○			○
		Pediatric Hematology and Oncology(Miyagi Children's Hospital)	Prof. IMAIZUMI Masue	○			○
		Pediatric Rehabilitation Medicine	Prof. HAGINOYA Kazuhiro	○			○
Collaborative Chairs Cancer Bioscience	The Cancer Institute of Japanese Founda- tion for Cancer Research	Cellular and Molecular Imaging of Cancer	Prof. HIROTA Toru	○			○
		Screening for Molecular Target of Cancer	Prof. NODA Tetsuo	○			○
Collaborative Chairs Community Psychiatry	Miyagi Psychiatric Center	Undecided	※				
Collaborative Chairs Department of Innovative Cardiology	National Cerebral and Cardiovascular Center	Innovative Cardiovascular Surgery	Prof. KOBAYASHI Junjiro	○			○
		Preventive Cardiology and Epidemiology	Prof. MIYAMOTO Yoshihiro	○			○
Collaborative Chairs Department of Clinical Respirology and Infectious Diseases	Kurihara Central Hospital		Prof. HIRAKATA Yoichi	※			※
			Prof. USAMI Osamu	○			○

## II Disability Sciences Master's Programs

\* When applying, contact the relevant instructor and obtain permission.

\* ※: No application invited this time.

\* For offered fields (education and research field), please refer to the Tohoku University Graduate School of Medicine website.

Division		Department	Professor	Acceptance
				General
Functional Medical Science		Medicine and Science in Sports and Exercise	Prof. NAGATOMI Ryoichi	○
		Behavioral Medicine	Prof. FUKUDO Shin	○
		Physical Medicine and Rehabilitation	Prof. IZUMI Shin-ichi	○
		Epileptology	Prof. NAKASATO Nobukazu	○
		Internal Medicine and Rehabilitation Science	Prof. KOHZUKI Masahiro	○
		Behavioral Neurology and Cognitive Neuroscience	Prof. SUZUKI Kyoko	○
		Music and Acoustical Medicine	Prof. ICHIE Masayoshi	※
		Advanced Interdisciplinary Biomedical Engineering	Prof. NAKASATO Nobukazu	※
Collaborative Chairs	Medical Sciences	Orthopaedic Surgery	Prof. ITOI Eiji	○
		Urology	Prof. ITO Akihiro	○
		Anesthesiology and Perioperative Medicine	Prof. YAMAUCHI Masanori	○
		Psychiatry	Prof. TOMITA Hiroaki	○
		Ophthalmology	Prof. NAKAZAWA Toru	○
		Otolaryngology-Head and Neck Surgery	Prof. KATORI Yukio	○
	Graduate School of Education	Rehabilitation Psychology	Prof. UENO Takashi	※
Collaborative Chairs Advanced Fetal and Developmental Medicine	Miyagi Children's Hospital	Pediatric Rehabilitation Medicine	Prof. HAGINOYA Kazuhiro	○
Collaborative Chairs Cognitive and motor dysfunction in aging	Sendai Nishitaga Hospital		Prof. TAKEDA Atsushi	○



# Endowed Departments

Students can receive research instruction from a professor of the endowed chair below.

(They cannot belong to following laboratories)

Division	Professor
Department of Electromagnetic Neurophysiology (RICOH)	Prof. NAKASATO Nobukazu
Department of Kanpo and Integrative Medicine	Prof. ISHII Tadashi Prof. TAKAYAMA Makoto
Department of Antibody Drug Development	Prof. KATO Yukinari
Innovative Cardiovascular Medicine	Prof. SAIKI Yoshikatsu Prof. SHIMOKAWA Hiroaki
Evidence-based Cardiovascular Medicine	Prof. NAKAYAMA Masaharu Prof. SHIMOKAWA Hiroaki
Advanced Preventive Medicine for Infectious Disease	Prof. YAMAYA Mutsuo
Advanced Ophthalmic Medicine	Prof. NAKAZAWA Toru
Research Division of Sciences for Aortic Disease	Prof. SAIKI Yoshikatsu
Reconstruction in Sports activity and motor function	Prof. ITOI Eiji
Preventive Psychiatry	Prof. IGARASHI Kazuhiko
Retinal Disease Control, Ophthalmology	Prof. NAKAZAWA Toru
Clinical Hypertension, Endocrinology and Metabolism	Prof. SATO Fumitoshi
Ophthalmic Imaging and Information Analytics	Prof. NAKAZAWA Toru
Advanced Respiratory Management	Prof. ICHINOSE Masakazu
General Practitioner Development	Prof. ISHII Tadashi
Institute of Development, Aging and Cancer: Research Division for Development of Anti-Infective Agents	Prof. WATANABE Akira
Institute of Development, Aging and Cancer: Division of Developmental Cognitive Neuroscience	Prof. KAWASHIMA Ryuta
Institute of Development, Aging and Cancer: Division of Geriatric Pharmacotherapy	Prof. KAWASHIMA Ryuta
Cyclotron and Radioisotope Center: Geriatric Behavioral Neurology	Prof. MEGURO Kenichi