



**Hirosaki University
Graduate School of Health Sciences**

Master's Course

**Radiological Health Science Course
(Special Category for Foreign Student Admission)**

**Application Guidelines
for the Entrance Examination**

Spring 2018 Admission

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I. Special Selection of Foreign Students

I-1. Recruited Students

A few students will be recruited to the Radiological Health Science Course in the four fields listed in Table 1.

Table 1

	Field	Degree	Recruited students	
			1 st Recruitment Period	2 nd Recruitment Period
Health Sciences (Master's Program)	Nursing Science	Radiological Health Science Course	Master's (Nursing Science)	A few students
	Radiation Science		Master's (Health Sciences)	
	Bioscience and Laboratory Medicine			
	Comprehensive Rehabilitation Science			

I-2. Academic Requirements for Application

Those without Japanese citizenship who meet all the following basic requirements and any of the appropriate academic requirements can apply. Those with Japanese language proficiency sufficient for everyday conversation are preferred.

Basic Requirements

- A. Foreign individuals who would have difficulty visiting Japan to take an entrance examination
- B. Those with certified abilities and academic achievements supported by a letter of recommendation from a Graduate School faculty member who the applicant wishes to have as their research supervisor after admission
- C. Those with a status of residence in Japan that does not interfere with admission to the Graduate School according to Japanese immigration law and the Immigration Control and Refugee Recognition Act or those who expect to acquire such a status of residence

Appropriate Requirements

- (1) Those who have completed 16 years of formal education overseas, or those who expect to complete their formal education by March 2018
- (2) Those who will have completed 15 years of formal education overseas by March 2018 and are recognized as having acquired the predetermined number of academic units in this Graduate School with excellent grades
- (3) Those recognized as having equal or superior academic ability to someone who has graduated university, by means of an individual entrance examination for this Graduate School, and who will reach 22 years of age by March 31, 2018

The qualifications of those who wish to apply on the basis of Appropriate Requirements (2) or (3) are reviewed prior to application.

I-3. Preliminary Consultation

- Interested applicants are asked to contact the faculty member who they wish to have as their supervisor by phone, e-mail or other means prior to application, and to make sure to seek advice and guidance regarding post-admission course content, requirements, research and other matters in addition to

obtaining the faculty member's letter of recommendation and consent to act as supervisor.

- For a list of faculty members, please refer to Table 5 - (1) to (4) "Supervising faculty in each field and research topics" on pages 8 to 12.
- For information on the Radiological Health Science Course, please see section "II-4. The Radiological Health Science Course."
- If you have any questions, please contact the office below:

Academic Affairs Group, Hirosaki University Graduate School of Health Sciences, Tel: 0172-39-5911

I-4. Formal Review of Qualifications for Application

Those who wish to apply on the basis of Appropriate Requirements (2) or (3) are asked to undergo an individual formal review of their qualifications for application in advance.

1. Documents to be Submitted

Those who wish to apply on the basis of Appropriate Requirement (2) are asked to submit the documents listed in Table 2.

Table 2

(1) Application for Recognition of Academic Requirements	Please fill out and submit the necessary information on Foreign Students – Form A
(2) Academic Transcript	Created and placed in a sealed envelope by the president or other administrative head of the graduating university
(3) Graduation Certificate	Created by the president or other administrative head of the graduating university
(4) Letter of Recommendation	Created by the president or other administrative head of the graduating university

Those who wish to apply on the basis of Appropriate Requirement (3) are asked to submit the documents listed in Table 3.

Table 3

(1) Application for Recognition of Academic Requirements	Please fill out and submit the necessary information on Foreign Students – Form A
(2) Academic Transcript from the last school attended	Created and placed in a sealed envelope by the president or other administrative head of the graduating school
(3) Graduation Certificate from the last school attended	Created by the president or other administrative head of the graduating school
(4) Official Regulations etc. of the graduating school	Document describing the requirements for graduation (period of attendance, course subjects, number of units), syllabus of course subjects necessary for graduation etc. (document describing course content)
(5) Certificate of Tenure etc.	Certificate created by the immediate supervisor at the applicant's place of employment regarding tenure and job role (optional form)

2. Application Period

1st Recruitment Period: From July 18th (Tue) to (no later than) July 21st (Fri), 2017

2nd Recruitment Period: From November 20th (Mon) to (no later than) November 24th (Fri), 2017

3. Send Submissions To:

Academic Affairs Group, Hirosaki University Graduate School of Health Sciences, 66-1 Hon-cho, Hirosaki-shi, 036-8564, Japan

4. Notification of Recognition Results

Applicants will be notified of the results of their review by e-mail by either of the following dates.

1st Recruitment Period: July 28th (Fri), 2017

2nd Recruitment Period: December 1st (Fri), 2017

I-5. Application Procedures

1. Application Period

1st Recruitment Period: From August 7th (Mon) to (no later than) August 10th (Thu), 2017, 5:00 PM

2nd Recruitment Period: From December 18th (Mon) to (no later than) December 22nd (Fri), 2017, 5:00 PM

2. Application Method

Applicants are asked to assemble the following application documents and make sure to send them by registered mail, such as Express Mail Service (EMS), where a tracking number is provided. Please write the following in red on the front of the envelope: "Enclosed are Application Documents for Special Selection of Foreign Students, Master's Course, Graduate School of Health Sciences." Before mailing the application documents, please also pay the entrance examination fee by bank transfer.

Submit to: 66-1 Hon-cho, Hirosaki-shi 036-8564, Japan

Academic Affairs Group, Hirosaki University Graduate School of Health Sciences,

Tel: 0172-39-5911, FAX: 0172-39-5912

3. Precautions for Application

- Incomplete application documents will not be accepted.
- The contents of documents cannot be changed after application. However, in the event of a change of name, address or telephone number, please contact the Academic Affairs Group of Hirosaki University Graduate School of Health Sciences.
- Paid examination fees will not be refunded for any reason, except in the following cases:
 - (1) The examination fee was paid, but the application documents were not submitted
 - (2) The examination fee was paid, but the application documents were not accepted
 - (3) The examination fee was paid twice in error
- In the event of false information in the application documents, admission may be revoked even after admission is complete.

4. Examination Fee Payment Methods

Please remit the examination fee of 30,000 yen from an overseas financial institution according to the following procedure. Applicants are encouraged to carry out this procedure as soon as possible since transfers take time. Please make sure that the transfer arrives into the specified account by the following date.

1st Recruitment Period: By August 10th (Thu), 2017

2nd Recruitment Period: By December 22nd (Fri), 2017

Transfer details

Type:	Wire transfer
Payment Method:	Advise and pay
Paying Bank Charge:	Sender

Transfer Amount: 30,000 yen
 Purpose of Transfer: Examination fee

Recipient account information

Bank Name: Aomori Bank
 Branch Name: Hirosaki branch
 Account Type: Ordinary
 Bank Address: 19 Oyakatamachi, Hirosaki, Aomori 036-8191, Japan
 Swift Code: AOMBJPJT
 Account Number: 201-1228599
 Account Holder's Name: KEI SATO, PRESIDENT OF HIROSAKI UNIVERSITY,
 NATIONAL UNIVERSITY CORPORATION
 Account Holder's Address: 1 Bunkyo-cho, Hirosaki, Aomori 036-8560, Japan
 Account Holder's Telephone Number: +81-(0)172-36-2111

- * The sender of the transfer is asked to give the name of the applicant in the transfer details.
- * If the money is to be transferred from outside of Japan, an additional “transfer fee” and “Japanese bank transaction fee” will need to be paid for the transfer. This transfer fee and Japanese bank transaction fee are to be paid by the sender.
- * For the Japanese bank transaction fee, please make sure to notify the bank teller that it will be “paid by sender”. If this is not specified, Aomori Bank will deduct the transaction fee from the transfer amount, making the payment to Hirosaki University insufficient. In such cases, the entrance examination fees will not be considered paid, so please be cautious of this.
- * After making the transfer, please submit the Entrance Examination Fee Remittance Confirmation Form (Foreign Students - Form 3) along with the other application documents.

I-6. Application Documents

Table 4: Special Selection of Foreign Students, List of Application Documents

* English versions of the application documents (forms 1–7, A) can be downloaded from the Graduate School of Health Sciences Website. URL: <http://www.hs.hirosaki-u.ac.jp/kouhou/hg/web/entrance.html>

* Documents indicated by ⊙ must be submitted, while documents indicated by ○ are only to be submitted by relevant applicants.

	Description	Special Selection of Foreign Students
(1) Special Selection of Foreign Students Admission Application Form	Please fill out the necessary items on Foreign Students – Form 1 and submit this form with a photograph of yourself attached. The photograph (4 cm tall × 3 cm wide) must be one of you taken within 3 months before application, and must show you (including your upper body) facing forward without wearing a hat and without a background. The photograph should be affixed in the specified column of the application form.	⊙
(2) Curriculum Vitae (Resume)	Please fill out the necessary items on Foreign Students – Form 2 and submit this form.	⊙
(3) Academic Transcripts	(a) Created and placed in a sealed envelope by the president or other administrative head of your graduating university (b) Not needed for those applying according to Appropriate Requirements (2) or (3)	○
(4) Examination Fee and Entrance Examination Fee Remittance Confirmation Forms	Please remit the entrance examination fee of 30,000 yen to the specified transfer account. Please also fill out the necessary items on the Entrance Examination Fee Remittance Confirmation Form (Foreign Students – Form 3) and submit this form.	⊙

(5) Graduation (Expected) Certificates	(a) Created by the president or other administrative head of your graduating university (b) Those applying according to Application Requirements (2) or (3) must submit their Entrance Examination Pass Results (copy)	○
(6) Research History or Performance Report for Specialized Training and English Language Proficiency Report	Please fill out the research topics studied during university enrollment or after graduation, or your record of participation in specialized, expertise-related training on Foreign Students – Form 4 and submit this form. (Note 1) Please affix separate prints or copies of your books, academic papers, etc. (Note 2) Please list the results of your English language proficiency test (TOEIC, TOEFL or IELTS) and submit a copy of the official score card for your test. If the applicant's mother tongue or national language is English, there is no need to submit a copy of an official score card for an English language proficiency test (TOEIC, TOEFL or IELTS).	◎
(7) Research Plan	Please fill out the necessary items on Foreign Students – Form 5 and submit this. (No more than 2,000 Japanese characters or 500 English words.)	◎
(8) Letter of Recommendation	Those working as supervisors etc. at their graduating (expected) university or employed by a government office or company must submit a letter of recommendation created by their immediate supervisor or equivalent person (optional form)	◎
(9) Letter of Acceptance and Recommendation from a Graduate School Faculty Member	Applicants are asked to contact their desired supervisor (accepting faculty member) from the Graduate School of Health Sciences, and seek guidance regarding their research plan and other matters in addition to obtaining their consent for providing supervision and a letter of recommendation. The desired supervisor (accepting faculty member) must fill out the necessary items on Foreign Students – Form 6 and sign this form, which must be submitted together with documents showing the correspondence history (copies of correspondence including letters, e-mails, etc.) between the desired supervisor (accepting faculty member) and the applicant.	◎
(10) Copy of your passport, or an excerpt from your family register, or a certificate of citizenship, etc.	Please submit either a copy of your passport, an excerpt from your family register, or a certificate of citizenship.	◎
(11) Address Labels	The address labels (Foreign Students – Form 7) will be used when sending your Notification of Examination Pass, admission procedure documents and other correspondence. Applicants are therefore asked to accurately fill out their postal code, address and name throughout this entire form and submit it together with the other application documents. In the event of a change of address or other details after application, please inform the Academic Affairs Group of this fact promptly.	◎

* Please follow the following steps for **Form 6** of the application documents.

- Please choose a desired supervisor from among the faculty members of the Graduate School of Health Sciences. Applicants are asked to contact the Academic Affairs Group of the Graduate School of Health Sciences by e-mail in addition to directly contacting their desired supervisor.
- Applicants are asked to make close contact with their desired supervisor to seek guidance and advice regarding their research plan and to ensure they obtain the desired supervisor's consent prior to application.
- **Form 6** is submitted by the desired supervisor, so applicants are asked to confirm with their desired supervisor that submission has taken place.

I-7. Method of Selecting Students for Admission

Selection of students for admission will be made following comprehensive review of submitted application documents.

II. Announcement of Examination Pass Results and Related Procedures

II-1. Announcement of Examination Pass Results

1st Recruitment Period: September 15th (Fri), 2017, 10:00 AM (planned)
2nd Recruitment Period: February 9th (Fri), 2018, 10:00 AM (planned)

- Successful applicants will be sent a Notification of Examination Pass by mail.
- The number of successful applicants will also be listed on the Website of the Graduate School of Health Sciences.
URL: <http://www.hs.hirosaki-u.ac.jp/kouhou/hg/web/entrance.html>
- We will not respond to any inquiries about examination results by phone or other means.

II-2. Admission Procedures

A summary of the admission procedure is given below. Details will be sent to successful applicants separately.

Successful applicants for special selection of foreign students are asked to mail (by EMS) or submit in person the necessary documents in addition to paying the admission fee by bank transfer within the admission period.

1. Period and Place of Admission

- Please directly visit the Graduate School to carry out admission procedures. (Mail-in allowed, to arrive no later than March 3rd)
Admission period: March 1st (Thu)/ March 2nd (Fri), 2017
Admission place: 66-1 Hon-cho, Hirosaki-shi, 036-8564, Japan
Academic Affairs Group, Hirosaki University Graduate School of Health Sciences,
Tel: 0172-39-5911
- If admission procedures are not completed within the above-mentioned period, admission will be treated as declined.

2. Costs Required for Admission (planned)

- Admission fee: 282,000 yen
- Tuition fees: 267,900 yen per semester (535,800 yen per academic year)
Note 1: Paid admission fees cannot be refunded for any reason.
Note 2: Tuition fees for the second semester can be paid together with tuition fees for the first semester.
Note 3: If revisions are made to the admission fee and tuition fees by the time of admission, the revised fees shall apply.
Note 4: If any applicants who have completed admission procedures decline their admission by March 30th (Fri), 2018, the paid tuition fees will be refunded at the request of the payer.

II-3. Protection of Personal Information

Addresses, names, dates of birth and other personal information will only be used for selection of students for admission, announcements of examination pass results, admission procedures and related matters, and for management of student ID numbers and grades in academic affairs following admission. The acquired personal information will be managed appropriately and not used for any purpose other than its intended use.

II-4. The Radiological Health Science Course

The academic objectives for training human resources for the Radiological Health Science Course are listed below.

Those who have completed the Radiological Health Science Course will be granted the title of Radiological Health Scientist.

Furthermore, the Radiological Health Science Course does not have any provisions regarding staff quotas or restrictions.

However, the topics of Master's theses for the Radiological Health Science Course must be related to radiation.

Objectives

To train high-level specialists and leaders in emergency radiological medicine as human resources capable of preparing for emergency accidents related to radiation, as well as educators and researchers capable of contributing to the development of academics in this field.

Academic objectives

- (1) To master specialist knowledge and skills relating to emergency radiological medicine.
- (2) To master leadership capabilities required in the field of emergency radiological medicine.
- (3) To master training and research capabilities relating to emergency radiological medicine.

II-5. Other Matters

Applicants with physical disabilities are asked to contact the following number prior to application considering their potential need for special considerations with respect to examinations and learning.

If any other questions or uncertainties arise during application, please contact the office below.

Academic Affairs Group, Hirosaki University Graduate School of Health Sciences, Tel: 0172-39-5911

List of Advisors

Table 5-a Nursing Science

Advisors	Research Themes
Seiko Kudo, Professor Tel: +81-172-39-5929 seikoku@hirosaki-u.ac.jp	<input type="radio"/> Activities of daily living of people <input type="radio"/> Self-care and improvement in quality of life for people with disabilities
Tomohiro Osanai, Professor Tel: +81-172-39-5930 osanait@hirosaki-u.ac.jp	<input type="radio"/> Analysis for pathogenesis of cardiovascular disease <input type="radio"/> Identification of mechanisms for the aging process <input type="radio"/> Study of salt, reactive oxygen species, and bone mineral density
Ruriko Kidachi, Professor Tel: +81-172-39-5922 kidachi@hirosaki-u.ac.jp	<input type="radio"/> Continuing nursing care <input type="radio"/> Visiting nursing
Toru Takahashi, Professor Tel: +81-172-39-5947 ttaka@hirosaki-u.ac.jp	<input type="radio"/> Transition from pediatric to adult health care for patients with childhood-onset heart disease <input type="radio"/> Prenatal diagnosis and management of heart disease <input type="radio"/> Neurohumoral factors in pediatric patients with heart disease
Tsuyoshi Higuchi, Professor Tel: +81-172-39-5949 higuchi@hirosaki-u.ac.jp	<input type="radio"/> Bone metabolism related to pregnancy, delivery, and lactation
Yuka Noto, Professor Tel: +81-172-39-5923 noto@hirosaki-u.ac.jp	<input type="radio"/> Palliative care in cancer patients <input type="radio"/> Attitudes toward radiation emergency medicine
Chieko Itaki, Professor Tel: +81-172-39-5974 itakichi@hirosaki-u.ac.jp	<input type="radio"/> Effects of physical activity on biological reactions and emotions <input type="radio"/> Nursing care for adverse events of radiation therapy <input type="radio"/> Radiation emergency medicine for nursing education
Chiaki Kitamiya, Professor Tel: +81-172-39-5945 chiaki@hirosaki-u.ac.jp	<input type="radio"/> Support for families of chronically ill children <input type="radio"/> Role of public health nurses in a nuclear disaster
Setsuko Igarashi, Associate Professor Tel: +81-172-39-5993 s123@hirosaki-u.ac.jp	<input type="radio"/> Life events of women <input type="radio"/> Reproductive medicine nursing for women
Naoko Misaki, Associate Professor Tel: +81-172-39-5997 naokom@hirosaki-u.ac.jp	<input type="radio"/> Maternity care provided by midwives <input type="radio"/> Evidence for care skills in midwives <input type="radio"/> Breastfeeding
Akemi Fujita, Associate Professor Tel: +81-172-39-5948 a_fujita@hirosaki-u.ac.jp	<input type="radio"/> Rehabilitation and QOL of cancer patients and their families <input type="radio"/> Patient education <input type="radio"/> Improvement of the daily lives of persons with health problems
Noriko Ogura, Associate Professor Tel: +81-172-39-5907 ogu1224@hirosaki-u.ac.jp	<input type="radio"/> Career development and/or continuation education for nurses <input type="radio"/> Job satisfaction and/or workplace environment of nurses <input type="radio"/> Patient education by nurses
Haruka Otsu, Associate Professor Tel: +81-172-39-5996 h_otsu@hirosaki-u.ac.jp	<input type="radio"/> Nursing for demented elderly people with healthcare problems <input type="radio"/> Behavioral and psychological symptoms of dementia <input type="radio"/> Disease management of elderly people with chronic disease <input type="radio"/> Prevention of dementia in the general elderly population
Toshiko Tomisawa, Associate Professor Tel: +81-172-39-5933 tmtott@hirosaki-u.ac.jp	<input type="radio"/> Self-management for diabetes <input type="radio"/> Critical thinking and nursing diagnosis <input type="radio"/> Education using simulation <input type="radio"/> Anti-oxidants, arteriosclerosis

Kazuya Norikane , Lecturer Tel: +81-172-39-5984 norikane@hirosaki-u.ac.jp	<input type="radio"/> Therapeutic nursing for people with mental disorders <input type="radio"/> Nursing based on cognitive behavioral therapy
Mayumi Urushizaka, Lecturer Tel: +81-172-39-5944 urushima@hirosaki-u.ac.jp	<input type="radio"/> Experiences and support for patients with chronic illness <input type="radio"/> Nursing on radiation emergency medicine

Table 5-b Radiation Science

Advisors	Research Themes
Ikuo Kashiwakura, Professor Tel: +81-172-39-5938 ikashi@hirosaki-u.ac.jp	<input type="radio"/> Evaluation of the effect of radiation on hematopoietic and immune function <input type="radio"/> Development of pharmacotherapy for individuals exposed to radiation <input type="radio"/> Investigation of novel compounds possessing radiomitigative effects
Kouichi Nakagawa, Professor Tel: +81-172-39-5921 nakagawa@hirosaki-u.ac.jp	<input type="radio"/> Characterization of skin structures using electron spin resonance (ESR) and ESR imaging <input type="radio"/> Investigation of free radicals produced by various irradiations using ESR imaging <input type="radio"/> Investigation of reactions among antioxidants and reactive oxygen species
Yoichiro Hosokawa, Professor Tel: +81-172-39-5957 hosokawa@hirosaki-u.ac.jp	<input type="radio"/> Signal transduction of apoptosis produced by X-ray radiation <input type="radio"/> Radiation distribution and adverse events induced by radiotherapy
Yoko Saito, Professor Tel: +81-172-39-5939 yokosait@hirosaki-u.ac.jp	<input type="radio"/> Clinical usefulness and improvement of diagnostic accuracy of imaging modalities, especially in CT and MRI <input type="radio"/> Current status of medical exposure, especially in CT
Shinji Tokonami, Professor Tel: +81-172-39-5404 tokonami@hirosaki-u.ac.jp	<input type="radio"/> Advanced technology and standardization of radiation measurement and dose assessment <input type="radio"/> Evaluation and analysis of behavior of radioactive materials and radiation in the environment <input type="radio"/> Risk analysis for construction of a radiation protection system including risk communication and epidemiology
Eichi Tsuruga, Professor Tel: +81-172-39-5954 tsuru@hirosaki-u.ac.jp	<input type="radio"/> Regulation of alveolar elastic fibers <input type="radio"/> Mechanism of skin dermis elastic system fiber formation <input type="radio"/> Remodeling of the ciliary zonule
Yasuyuki Takahashi, Professor Tel: +81-172-39-5917 ytaka3@hirosaki-u.ac.jp	<input type="radio"/> Studies on tracer kinetics and bioanalysis <input type="radio"/> Studies on improvement of SPECT and PET image quality <input type="radio"/> Studies on reduction of medical exposure <input type="radio"/> Research related to the law of radiological technologist
Junichi Hirota, Associate Professor Tel: +81-172-39-5960 jhirota@hirosaki-u.ac.jp	<input type="radio"/> Radiation power generation, transforming radiation energy into electric power using nuclear waste <input type="radio"/> Innovation of medical-engineering collaboration technology <input type="radio"/> Technology of heavy charged particle therapy
Kohsei Kudo, Associate Professor Tel: +81-172-39-5958 kohsei@hirosaki-u.ac.jp	<input type="radio"/> Reduction in radiation exposure by performance evaluation of digital image equipment for X-ray <input type="radio"/> Resolution enhancement technology of digital image equipment for X-ray <input type="radio"/> Development of an X-ray image transfer system to contribute to regional healthcare
Masahiro Hosoda, Lecturer Tel: +81-172-39-5956 m_hosoda@hirosaki-u.ac.jp	<input type="radio"/> Measurement, environmental dynamics and dose estimation of environmental radiation and radionuclides <input type="radio"/> Advancement of radiation measurement methods and dose evaluation in radiation emergency medicine
Satoru Monzen, Lecturer Tel: +81-172-39-5959 monzens@hirosaki-u.ac.jp	<input type="radio"/> Investigation of the mechanism in the pathogenesis of bone marrow failure induced by high/low dose rate ionizing radiation <input type="radio"/> Search for a novel biomarker that is available for use with a radiation biodosimeter

Table 5-c Bioscience and Laboratory Medicine

Advisors	Research Themes
Hideki Takami, Professor Tel: +81-172-39-5053 takami@hirosaki-u.ac.jp	○Molecular markers of blood coagulation factors and platelets in patients with thrombotic tendency
Mitsuaki Yoshida, Professor Tel: +81-172-39-5931 myoshida@hirosaki-u.ac.jp	○Radiation sensitivity in the general human population using chromosome aberration ○Development and improvement of cytogenetic biodosimetry methods in radiation emergency medicine ○Molecular cytogenetic and genetic analyses of radiation-induced malignant tumors ○Development of chemicals for radiation protection with chromosome aberration as a biological indicator ○Roles of chromosome abnormality in the development and progression of solid tumors
Toshiya Nakamura, Professor Tel: +81-172-39-5969 toshiyan@hirosaki-u.ac.jp	○Regulation of the activity of hyaluronan synthases ○Function and property of proteoglycans and glycosaminoglycans ○Effect of radiation on extracellular matrix components
Jun Watanabe, Professor Tel: +81-172-39-5967 watajun@hirosaki-u.ac.jp	○Analysis of the mechanism of action of sex steroid hormones in endometrial carcinoma cells ○Analysis of the prognostic and predictive factors of endometrial cancer ○Analysis of the mechanism of uterine cervical cancer carcinogenesis ○Molecular pathologic and digital image analysis of histological and cytological specimens
Koichi Ito, Professor Tel: +81-172-39-5925 kohito@hirosaki-u.ac.jp	○Immune reconstitution by murine umbilical cord blood transplantation ○Molecular mechanisms involved in the differentiation and maturation of hematopoietic stem cells ○Intestinal immune regulation by nucleotides
Yusuke Tando, Professor Tel: +81-172-39-5992 ytando@hirosaki-u.ac.jp	○Identification of therapeutic targets and treatments for diabetes mellitus, obesity and other nutritional diseases (biomarkers, assessment tools and measuring devices)
Teruko Takeo, Associate Professor TEL 0172-39-5928 ttakeo@hirosaki-u.ac.jp	○Influence of bioactive substances on the intracellular signal transduction mechanism
Tomisato Miura, Associate Professor Tel: +81-172-39-5966 tomisato@hirosaki-u.ac.jp	○Development of novel cytogenetic parameters for the estimation of radiation dose absorption ○Analysis of background factors that affect chromosomal abnormalities ○Effects of apple procyanidins on the prevention of lifestyle-related disease ○Biological effects of radiation exposure
Takashi Ishikawa, Lecturer Tel: +81-172-39-5936 ti3054@hirosaki-u.ac.jp	○Functions of sulfated glycosaminoglycan ○Urinary enzyme activity as a marker for the influence of radiation exposure
Miyuki Fujioka, Lecturer Tel: +81-172-39-5970 mfujioka@hirosaki-u.ac.jp	○Scientific elucidation of the infection course in food-mediated infectious disease ○Development study of a novel simple test method in various pathogenic bacteria
Naoki Nanashima, Lecturer Tel: +81-172-39-5968 nnaoki@hirosaki-u.ac.jp	○Function of hair keratin in the mammary gland ○Development of an exosome biomarker in breast cancer ○New health functions of blackcurrant
Mitsuru Chiba, Lecturer Tel: +81-172-39-5965 mchiba32@hirosaki-u.ac.jp	○Study on the function of extracellular vesicles ○Cancer and functional RNA ○Cancer invasion and metastasis ○Identification of a biomarker for early diagnosis

Haruhiko Yoshioka, Assistant Professor Tel: +81-172-39-5972 yoshioka@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Pathological, histological and cytological analysis of cancer cells using ultraviolet-visible microspectroscopy ○Morphological analysis for the early detection of cancer ○Feature extraction of cancer cells using pathological imaging analysis ○Precision control of pathological, histological and cytological tests and improving testing technologies
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Table 5-d Comprehensive Rehabilitation Science

Advisors	Research Themes
Saichi Wakayama, Professor Tel: +81-172-39-5982 swaka@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Physical therapy education, particularly the clinical reasoning process, clinical practice and lifelong education ○Physical therapy evaluation and treatment in nervous system disorders ○Rehabilitation after radiation exposure
Akira Ishikawa, Professor Tel: +81-172-39-5978 a_ishi@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Cardiorespiratory response and autonomic nerve activity during low to moderate intensity exercise ○Physical disability evaluation in patients with cardiopulmonary disease, renal disease and muscular dystrophy ○Prevention of occupational low back pain in nursing care workers
Junko Yamada, Professor Tel: +81-172-39-5985 jyamada@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Neurophysiological analysis of sex differences in the brain and the mind ○Development of a new rehabilitation program based on neuroplasticity ○Role of GABAA receptor-mediated signaling in physiology and pathology ○Effect of radiation exposure on the brain
Atsushi Oda, Professor Tel: +81-172-39-5979 atusioda@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Relationship between foot function and athletic capability ○Practical research of insole therapy for foot and lower extremity impairments ○Physical evaluation and therapy for dysfunctions resulting from sports injuries ○Clinical research of kinetic chain in posture change
Kazumaru Wada, Professor Tel: +81-172-39-5986 kw@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Clinical and psychosocial aspects of schizophrenia and other psychotic disorders ○Clinical course and prognosis of patients with epilepsy
Takao Osanai, Professor Tel: +81-172-39-5989 osanai@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○QOL improvement for mental patients ○Promotion of social participation for mental patients ○Depression of patients after stroke ○Community life support for elderly persons with cognitive disorder
Takuhiko Kato, Associate Professor Tel: +81-172-39-5937 takuhiko@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Social psychiatric aspects of persons with mental disorder ○Ability of persons with mental disorder to perform tasks ○Social skills of persons with mental disorder
Akiyoshi Takami, Associate Professor Tel: +81-172-39-5976 a-takami@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Gait assessment after stroke and research on gait therapy for stroke ○Risk management of stroke ○Stroke assessment scale ○General clinical assessment scale
Eiki Tsushima, Associate Professor Tel: +81-172-39-5980 pteiki@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Motion analysis of patients with musculoskeletal disorders ○Electromyography analysis of motion ○Epidemiology and biostatistics for physical therapy research
Hideki Yoshida, Associate Professor Tel: +81-172-39-5975 ptyoshi@hirosaki-u.ac.jp	<ul style="list-style-type: none"> ○Use of physiological and kinesiological indicators to provide evidence for the effectiveness of electrophysical and isothermal agents (EPAs) and therapeutic exercise ○Effectiveness of combined or simultaneous use of EPAs and therapeutic exercise ○Application of EPAs to psychosomatic health promotion ○Physical therapy (evaluation and treatment) for the elderly and patients with central nervous system disorders such as stroke

<p>Yuichi Hirakawa, Lecturer Tel: +81-172-39-5988 yhira@hirosaki-u.ac.jp</p>	<ul style="list-style-type: none"> ○ Motion analysis of activities of daily living, and research of occupational therapy using motion analysis ○ Development of assistive technology ○ Epidemiological research on health promotion and preventive long-term care for community residents
<p>Hidefumi Kamitani, Lecturer Tel: +81-172-39-5987 kamihide@hirosaki-u.ac.jp</p>	<ul style="list-style-type: none"> ○ Analysis of activities of daily living for physical disabilities ○ Development of assistive technology ○ Epidemiological research on preventive care for community residents
<p>Shuhei Koeda, Lecturer Tel: +81-172-39-5990 ot_koeda@hirosaki-u.ac.jp</p>	<ul style="list-style-type: none"> ○ Hand and gross motor dysfunction of children with developmental disorders ○ Clinical research of neuropsychiatry for elderly persons ○ Clinical research of occupational therapy for orthopedics disease patients