Admission in Spring (April) 2024

Graduate School of Medicine (Doctoral Program)

Student Application Guidelines

(Second Call for Applications)

National University Corporation

Shiga University of Medical Science

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Admission Policy, etc.

The Admission Policies

○ Students that we want

In accordance with the University's philosophy, we welcome individuals who have the knowledge, ability, and skills necessary to become excellent medical researchers and medical professionals, and who will work diligently and enthusiastically to acquire advanced medical research capabilities, as described below.

1. Those who are motivated to contribute to the progress and development of medicine and health care through scientific exploration in the fields of medicine, health care, life science, and medicine-related interdisciplinary fields.
2. Those who have international perspectives and a passion to play an active role in the world.
3. Those who have respect for life and high ethical standards.
4. Those who are motivated to play an active role as a leader to overcome diseases in a wide range of fields in industry-academia-government.

○ Student Selection

・Advanced Medical Science Course, Advanced Medicine for Clinicians Course and Interdisciplinary Medical Science and Innovation Course

1. The Graduate School conducts a General Medicine and Life Science exam that separately tests students' fundamental understanding and thinking abilities in the following areas: medicine, health care and life science, and medicine-related interdisciplinary fields.
2. We also conduct a foreign language examination (English) to measure students' global sense and their ability to express themselves.
3. In addition to the two abovementioned examinations, candidate students must undergo an interview that confirms their passion for research, cooperative abilities, and high ethical standards.

・NCD Epidemiology Leader's Course

1. We conduct an essay examination to test applicants' basic knowledge about reducing the incidence of Non-Communicable Diseases (NCD).
2. We conduct a foreign language examination (English) to measure students' global sense and their ability to express themselves.
3. In addition to the two abovementioned examinations, candidate students must undergo an interview that confirms their passion for research, cooperative abilities, high ethical standards, and language ability.
4. We evaluate candidates by their submissions to confirm their passion for reducing the incidence of NCD in the world, doing research, and developing their language abilities.

The Curriculum Policies

To allow students to acquire advanced knowledge, skills, and ability stated in the Degree Policies, the curriculum is organized as follows.

1. Course Organization

The Graduate School provides common subjects (or core area subjects) so that students can acquire the specialized knowledge and research skills necessary for medical research, as well as sufficient knowledge and a robust understanding of ethics, including medical ethics, bioethics, and research ethics. In elective subjects, the School allows student to acquire cutting-edge knowledge and research skills through lectures, exercises, and practical trainings in each specialized area, and to develop the ability to carry out research independently.

2. Education Methods

(1) By establishing four courses, the Graduate School provides students with an organically systematized education as well as research opportunities offered by our entire faculty. In addition, multiple faculty members shall be responsible for each student.

(2) The Graduate School stipulates several common and elective subjects.

The contents of the common subjects are as follows:

①The Advanced General Medicine and Technical Seminar cultivates the expertise and research skills required to become a medical researcher.

②Introduction to Ethics in Medicine and Life Science familiarizes students with knowledge and standards in the fields of medical ethics, bioethics, and research ethics.

③Introduction to Epidemiology and Medical Statistics fosters the knowledge of epidemiology and statistics that is necessary to conduct medical research.

④A seminar on the Integration of Fundamental Knowledge and Clinical Research encourages students to learn knowledge and methodological approaches beyond the scope of conventional basic and clinical studies. Elective Subjects foster students' ability to independently conduct research by utilizing the most advanced knowledge in their areas of specialization, and their research skills.

(3) Each course provides its own characteristic subjects as indicated below:

① The Advanced Medical Science Course fosters students' ability to conduct independent research by providing them with opportunities to participate in advanced and unique research projects that involve fundamental research ethics and the most advanced research techniques.

②Advanced Medicine for Clinicians Course develops students' ability to play leading roles in medical settings by educating them on medical-related ethical and legal issues with a focus on clinical research. Additionally, the course supports students in their training to qualify as specialized physicians by providing the medical techniques that are necessary to serve as experts.

③The Interdisciplinary Medical Science and Innovation Course fosters students' ability to play important roles in areas of the industry-academia collaboration by providing not only medical but also interdisciplinary knowledge, including engineering and physics, as well as practical research skills.

④The NCD Epidemiology Leader's Course covers epidemiology, clinical epidemiology, and public health, and fosters leaders in areas of the industry-academia-government collaboration

to play active roles in reducing the incidence of NCD. The course includes practical training with internships conducted outside the university.

3. Assessment of Learning Outcomes

Students' achievement of the learning objectives stated in the syllabus will be assessed objectively through multifaceted evaluation including examinations, reports, etc. In the third year, the progress of students' research will be evaluated in the Qualifying Examination (QE) based on their poster presentation, and the research advisory plan will be checked. Dissertation defense will be public for rigor and transparency, and examine candidates' knowledge, ability, and developmental potential.

The Diploma Policies

To produce medical professionals as stated in the Purpose of Education, the Graduate School of Medicine awards a Doctor of Philosophy (Medicine) degree to those who have attended the school for the prescribed period of time, completed the course requirements, passed the examinations, and acquired the following professional knowledge and skills.

1. Students must have the necessary expertise and research skills as medical researchers.
2. Students must possess the excellent knowledge and ethics in the fields of medical ethics, bioethics, and research ethics.
3. Students must have the ability to conduct research independently and disseminate research results to the world.
4. Students must have the ability to contribute to the society through research and promotion of medical science.
5. In addition to the above, students shall acquire the following abilities and knowledge for each of the Courses listed below:
   (1) For the Advanced Medical Science Course, highly advanced knowledge and the ability to exert leadership in government, industry, and academic settings, including in international contexts.
   (2) For the Advanced Medicine for Clinicians Course, knowledge and medical skills required to serve as a specialist, and the ability to exert leadership in medical fields.
   (3) For the Interdisciplinary Medical Science and Innovation Course, interdisciplinary knowledge and research skills to integrate medical fields with other areas.
   (4) For the NCD Epidemic Leader's Course, capability in researching about epidemiology and clinical epidemiology and being leaders in the world of industry-academia-government who play an active role in reducing the incidence of NCD.

Student Application Guidelines

Admission Quota

About 10 students in Medical Science
(including working students)

-Advanced Medical Science Course
-Advanced Medicine for Clinicians Course
(* Including the Oncology Specialist Training Course and Forensic Generalist, Forensic Specialist Training Course)
-Interdisciplinary Medical Science and Innovation Course
- NCD Epidemiology Leader's Course

*1 For the details of "the Oncology Specialist Training Course" and "Forensic Generalist, Forensic Specialist Training Course," please refer to the attached application guidelines.

(Note) For applicants who are willing to enroll while maintaining their job, "Special Exception of Education Method" according to Article 14 of Graduate Schools Establishment Standards shall apply, and we may provide education through appropriate means, which may include conducting classes or research guidance in the evening or other defined hours and periods.

Eligibility for Applicants

1. Those who have graduated or are expected to graduate from a school of medicine or dentistry of a university, or a six-year program of pharmacy or veterinary medicine by March 2024.
2. Those who have completed or are expected to complete 18 years of school education (must include medicine, dentistry, pharmacy, or veterinary medicine in the curriculum) by March 2024.
3. Those who have completed or are expected to complete 18 years of school education in a foreign country (must include medicine, dentistry, pharmacy, or veterinary medicine in the curriculum), by taking courses in correspondence education while in Japan provided by a school in a foreign country by March 2024.
4. Those who have completed a curriculum (an applicant must complete 18 years of school education in a foreign country (must include medicine, dentistry, pharmacy or veterinary medicine in the curriculum)) in an educational institution in Japan that is deemed to have courses offered by an overseas college according to the educational system of that country and have also been designated by the Ministry of Education, Culture, Sports, Science and Technology.
5. Those who have academic ability equivalent or superior to those who have completed a master's program or have earned a master's degree, and have also been designated by the Minister of Education, Culture, Sports, Science and Technology according to Notification No. 39 dated April 8, 1955, from the Ministry of Education and Notification No. 118 dated September 1, 1989, from the Ministry of Education, including those who are recognized to have an academic ability equivalent or superior to those who have graduated from a school of medicine, dentistry, or veterinary medicine.
6. Those who stayed in a six-year college for four years or more without graduating from it (a curriculum must include medicine, dentistry, pharmacy, or veterinary medicine) and are recognized by our school that they have earned a designated number of credits with excellent grades.
7. Those who have completed 16 years of school education in a foreign country (a curriculum must include medicine, dentistry, pharmacy, or veterinary medicine); those who have completed 16 years of school education in a foreign country (must include medicine, dentistry, pharmacy, or veterinary medicine in the curriculum), by taking courses in correspondence education provided by a school in a foreign country; or

those who have completed a curriculum (an applicant must complete 16 years of school education in a foreign country (must include medicine, dentistry, pharmacy, or veterinary medicine in the curriculum)) in an educational institution in Japan that is deemed to have courses offered by an overseas college according to the educational system of that country and have also been designated by the Minister of Education, Culture, Sports, Science and Technology, while being recognized by our school to have earned a designated number of credits with excellent grades.

8. Those who are recognized to have academic ability equivalent or superior to those who have graduated from a college (a curriculum must include medicine, dentistry, pharmacy, or veterinary medicine) through individual screening of requirements for admission and who will be 24 years old before or on March 31, 2024.

(Notes) 1. Applicants for working students must apply to one of the above criteria, already work at the point of application, and obtain approval from their supervisor for enrollment while maintaining their job.

2. If you apply, following any of the above criteria 5-8, please refer to "Screening of Eligibility for Application" on page 10.

Application Procedure

1. Period of Application

Monday, February 5 to Friday, February 9, 2024

(as indicated by the postmark on the envelope)

2. Address to Submit Application Documents and Inquiry

Admissions Division, Entrance Examination Section

Shiga University of Medical Science

Seta Tukinowa-cho, Otsu City, Shiga 520-2192, Japan

Tel: +81-77-548-2071 (direct)

3. Application Documents (Please use the designated forms for the documents marked with an asterisk*.)

	Required Document	Note
1	Application for Admission *	
2	Academic Transcript (Japanese or English)	Prepared and sealed by the President (Dean) of the school attended. Not required for those who have graduated/will graduate from our university. If you have completed/will complete a master's program, please also submit an academic transcript prepared and sealed by the President (Dean) of the graduate school attended.
3	Certificate of Graduation or Certificate of Expected Graduation (Japanese or English)	Prepared by the President (Dean) of the school attended. Not required for those who have graduated/will graduate from our university. If you have completed/will complete a master's program, please submit only a certificate of completion (or a certificate of expected completion) prepared by the President of the graduate school attended.
4	Payment verification form (included at the end of this booklet) *	After paying the **30,000 yen** entrance examination fee using the deposit request form (designated by the university and included at the end of this booklet) between Monday, January 22 and Friday, February 9, 2024, at a bank, **attach the "Certificate of Payment" with stamp of receipt in its designated spot.**
5	Examination Admission Card/ Photo Card *	Attach your photo (upper front body, no hats, taken within the past three months, 4 cm high × 3 cm wide) on the designated column.
6	Envelope for sending an Examination Admission Card *	**On the front of the envelope, write your name/address and attach postage stamps equivalent to 344 yen.**
7	Address Card *	Fill in the address where you would like to receive a letter of acceptance. Please do not remove the sticker mount.
8	Letter of Permission for Examination from a Supervisor	Submit only if you are currently enrolled in another graduate school (unless expected to graduate by March 2024) or work in a government, medical institution, company, etc. (It is not required if you currently attend our university.) (Refer to the attached format example)
9	Personal Statement *	Form A In English (Only for applicants to the NCD Course)
10	Certification of English Proficiency *	Form B In English (Only for applicants to the NCD Course)
11	Recommendation letter *	Form C Prepared and sealed by a supervisor of the school or institute attended (Only for applicants to the NCD Course)

(Notes) 1. Applicants for the NCD Epidemiology Leader's Course should download Forms A-C from the following webpage. https://www.shiga-med.ac.jp/admission/graduate/requirements
Documents 1-8 are the same for all courses.

2. Any change in the description will not be accepted after submitting your application. Regardless of reasons, application documents will not be returned once they are submitted.
3. The documents submitted for eligibility screening also can be used for this application procedure. You do not need to submit the same documents twice.
4. If false information is found in the application documents, admission may be canceled even after enrollment.

4. Application Methods

(1) Send by Postal mail

Prepare application documents and send them in a designated envelop enclosed with this guideline by "registered express mail."

(2) Submit at School

Bring application documents to "2. Address to Submit Application Documents and Inquiry" on page 5. They will be accepted between 9:00 am and 5:00 pm. (except Saturdays and Sundays)

5. Consultation with our Faculty before the Submission of Application (Mandatory)

To determine a course you would like to apply for, please do not fail to consult with the faculty member whom you wish to receive guidance (refer to pages 22-30) before the submission of your application (or before Screening of Eligibility for Application if you take it.)

In that case, call our main phone number (077-548-2111) or contact the faculty member directly.

6. Considerations

(1) An Examination Admission Card will be sent to an applicant by Wednesday, February 28. If you do not receive it by Friday, March 1, promptly contact "2. Address to Submit Application Documents and Inquiry" listed on page 5.

(2) If you have any special considerations for taking the entrance examination or attending our school, such as a handicap, please inform us of "2. Address to Submit Application Documents and Inquiry" listed on page 5 prior to your application.

(3) Refund procedure for those who are eligible to receive an examination fee refund:

If you correspond with one of the following conditions, your examination fee can be refunded. If not, the fee will not be refunded for whatever reason. If you apply for a refund, contact "2. Address to Submit Application Documents and Inquiry" listed on page 5 by Friday, March 15, 2024.

① Those who do not submit an application after paying the examination fee (application documents were neither submitted nor accepted)

② Those who paid the examination fee twice by mistake

Selection Method, etc.

1. Selection Method

Written examination, interview, and application documents will be evaluated. Working applicants are not specially selected separately from other applicants. The same selection process will be used for working applicants.

2. Examination schedule

Date	Hours	Course name, examination type and point allocation			
		-Advanced Medical Science Course -Advanced Medicine for Clinicians Course -Interdisciplinary Medical Science and Innovation Course		-NCD Epidemiology Leader's Course	
Tuesday, March 5	10:00 – 11:30	English competence exam	120 points	English competence exam	50 points
	12:30 – 13:30	-Written exam on general medicine and life science	120 points	-Essay	50 points
	14:00 –	Interview (individual)	*1	Interview (individual)	*2 *3

*1. In the interviews for Advanced Medical Science Course, Advanced Medicine for Clinicians Course, and Interdisciplinary Medical Science and Innovation Course, a scale is used to assess the qualities and aptitude to become an medical educator and/or researcher, and the results are taken into account in the overall evaluation.

*2. For NCD Epidemiology Leader's Course applicants, an individual interview will be conducted in English to determine if the applicants are suitable for our program in terms of qualifications and academic ability.

*3. For NCD Epidemiology Leader's Course applicants, the total points allotted for the interview and application documents (English essay, English proficiency, and recommendation letter) will be 140 points.

(Note) 1. Only graphite pencils (including mechanical pencils), pencil sharpeners (not electronic), erasers, glasses, watches (with clock function only) , eye drops, tissues, and handkerchief are allowed to use during the examination. Please take tissues out from their package.

2. During the "English competence exam," it is permitted to bring in paper dictionaries (electronic dictionary are not allowed.). However, medical dictionaries are not allowed in this exam.

3. Please be sure to refer to the attachment for information on the scope of the examination for General medicine and life science.

4. Applicants for Advanced Medical Science Course, Advanced Medicine for Clinicians Course, or Interdisciplinary Medical Science and Innovation Course who have eligibility No.6 will take the essay exam instead of the exam on General medicine and life science.

3. Location

Shiga University of Medical Science (Please refer to the "Campus Map" on page 12.)

Details will be sent together with the Examination Admission Card.

Result Announcement

10:00 am, Thursday , March 14, 2024 (as scheduled)

Successful applicants' numbers will be announced on our homepage (https://www.shiga-med.ac.jp/), while "a letter of acceptance" will be sent to successful applicants.

We do not answer any inquiries regarding results by phone.

Enrollment Registration

1. Date and Time

   ・**At school**
   From 9:00 am to 5:00 pm on Friday, March 22, 2024

   ・**By postal mail**
   Due by 5:00 pm, Friday, March 22, 2024
   If you send documents via postal mail, please call the phone number given in item 2 below no later than 5:00 pm, Thursday, March 21, 2024.

2. Place of registration (postal address) and contact

   Admissions Division, Entrance Examination Section
   Shiga University of Medical Science
   Seta Tukinowa-cho, Otsu City, Shiga 520-2192, Japan
   Tel: +81-77-548-2071 (direct)

3. Payment

   (1) Entrance fee: 282,000 yen

   (2) Tuition fee: to be determined
   (For reference, the amount for AY2023 is ¥267,900 for the first half and ¥535,800 for the year.)

   ① Successful applicants will be notified of information regarding tuition fees, including the amounts and payment details, which are yet to be determined.

   ② The tuition fee for the first half must be paid using the payment slip provided by SUMS before the end of May, 2024.

   ③ The tuition fee may be paid for the entire year at once.

   ④ When the tuition fee is revised during enrollment, the new fee shall be applied from the date the revision takes effect.

4. Exemption of Payment

   Exemption and deferred payment of entrance fee and tuition may be applicable, and procedures for these

will be announced separately to successful applicants. However, due to budgetary constraints, there may be cases where exemptions are not possible, so please carefully consider your payment plan for entrance and tuition fees.

5. Documents to Be Submitted

Documents and other information required for the registration will be announced with the letter of acceptance.

6. Considerations

(1) An Examination Admission Card will be necessary for the registration, so please be careful not to lose it.

(2) If you do not complete the registration by the above date, it will be considered as a withdrawal of enrollment.

Screening of Eligibility for Application

If you apply based on any of the criteria 5-8 listed in Eligibility for Applicants, you must undergo the following screening procedures to be certified as eligible to apply.

1. Application Documents for Screening

(1) If you apply under criteria 5, submit following items from ① to ④.

(2) If you apply under criteria 6 or 7, submit following items from ① to ⑥.

(3) If you apply under criteria 8, submit following items from ① to ④ and ⑦.

① Request for Screening of Eligibility for Application (designated form available)

② Future research theme and research plan (about 700-800 words on an A4-size sheet)

③ Academic Transcript (Prepared and sealed by the President (Dean) of the school attended.(Japanese or English) If you have completed/will complete a master's program, please also submit an academic transcript prepared and sealed by the President (Dean) of the graduate school.)

④ Envelope for sending a screening result: Please write your name/address, and attach postage stamps equivalent to 344 yen on the front of a "Nagagata No. 3" size envelope (120 × 235 mm)

⑤ Letter of recommendation (Prepared by the President (Dean) of the school attended. However, if you apply for NCD Course, please use the Form C.)

⑥ Curriculum (copy) and syllabus (copy) of the school currently attended

⑦ Letter of recommendation (Prepared by the supervisor of a research/medical institution, etc. However, if you apply for NCD Course, please use the Form C.)

2. Period of Application

Tuesday, January 9 to Monday, January 15, 2024 (must arrive by 5:00 pm)

3. Place to Submit the Application Documents

The place and address for submission are the same as "2. Address to Submit Application Documents and Inquiry" on page 5.

If you send them by postal mail, send via "simplified registered mail" and write **"Enclosed with the request for Screening of Eligibility for Application for Doctoral Program"** in red ink on the front of the envelope. If you submit them at school, please bring it to the Admissions Division between 9:00 am and 5:00 pm.

4. Eligibility Screening

Eligibility screening is conducted based on documents you will submit. However, an interview may be required, and in that case, the applicant will be notified.

5. Screening Results

Screening results will be sent to the applicants by **Thursday, January 25, 2024**.

If you are eligible, please follow the application procedure stated in this guideline (refer to page 5.)

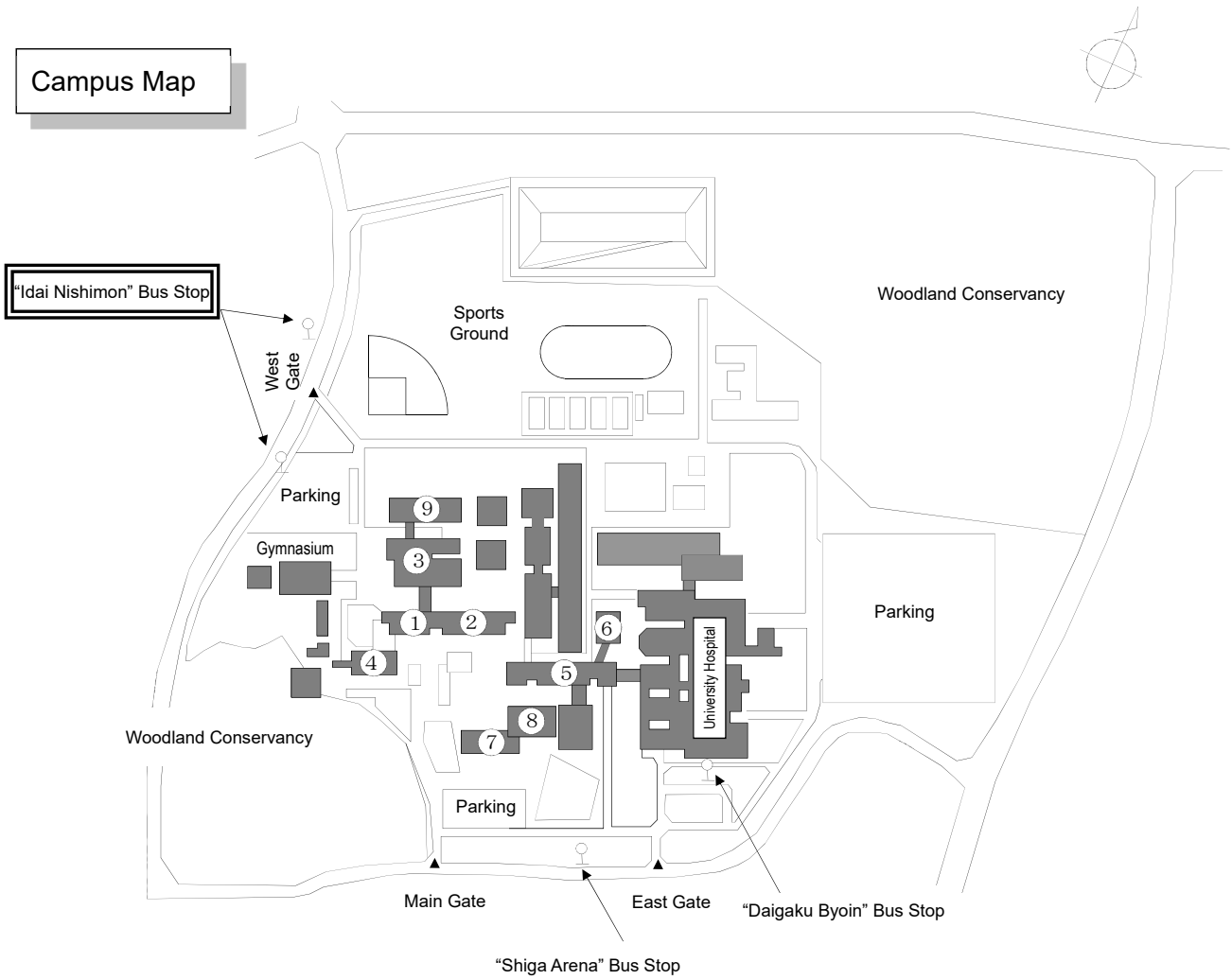
Please note that documents submitted for the Screening of Eligibility can be used for the subsequent application procedure, so there is no need to submit them in duplicate.

Handling of Private Information

Please be advised that private information obtained by the school during the admission process will be handled in accordance with the following conditions.

1. Private information will be handled in accordance with the "Act on the Protection of Personal Information" and "Protection of Personal Information Regulations Held by the National University Corporation, Shiga University of Medical Science (as translated)."
2. Name, address, and other private information on submitted application documents, etc., will be used for (1) applicant selection (application processing and selection), (2) notification of successful applicants, and (3) registration for enrollment.
3. Examination results obtained through applicant selection will be used to develop materials for future applicant selection.
4. Enrolling students' private information provided in application documents, etc. will be used for (1) teaching (student registration, study guidance, etc.), (2) support for students (health management, application for scholarship, etc.), and (3) administration regarding tuition payment.

Campus Map



(1) General Education and Research Building

(2) **Medical Science Research Building**

(3) Basic Medicine Laboratories and Lecture Halls

(4) Student Center

(5) Clinical Medicine Education and Research Building

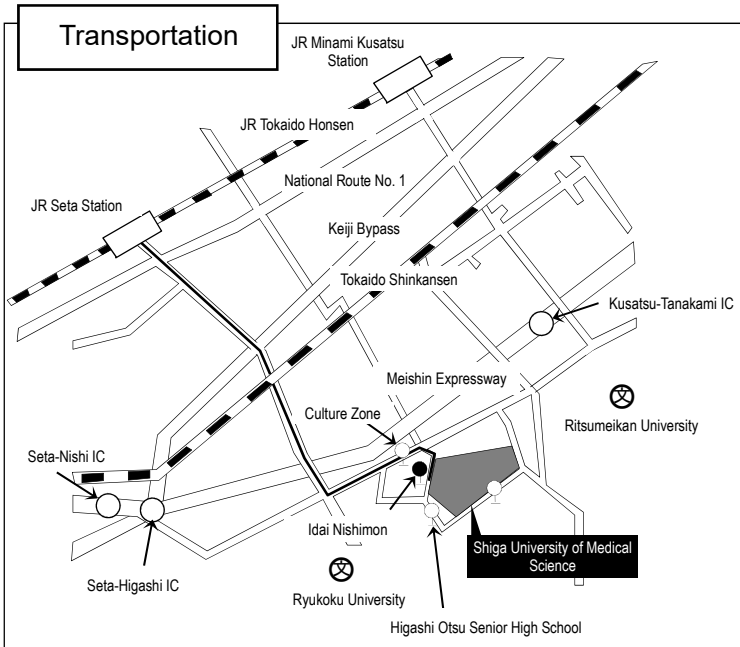
(6) Clinical Lecture Halls

(7) Administration Building and Health Management Center

(8) Library and Multimedia Center

(9) School of Nursing Building

Transportation



Take a route bus heading for "Shiga Idai" in front of Seta Station of JR Tokaido Honsen (Biwako Line) and get off at "Idai Nishimon" (takes about 15 min)

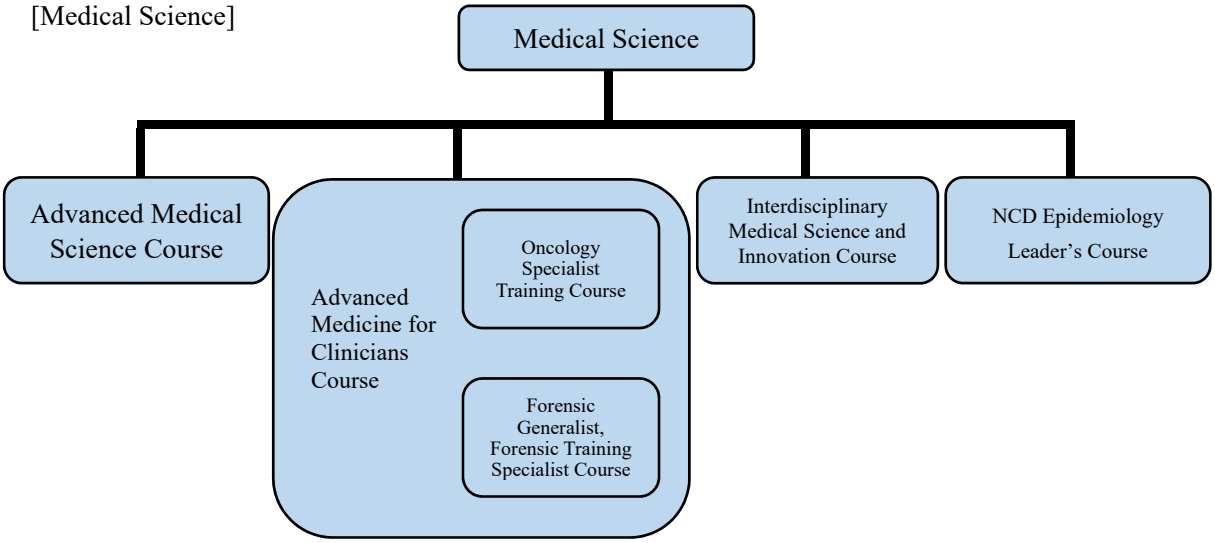
Purpose

The purpose of this Graduate School of Medicine (Doctoral Program) is to grow excellent researchers who have advanced research ability required to be independently engaged in creative research activities, high academic expertise that serves as a foundation for the former ability, and a sense of humanity; and our mission is to dedicate ourselves to the advancement of medical science and improvements in social welfare.

Structure

- Four courses are available under one major.
- The “Oncology Specialist Training Course” and “Forensic Generalist, Forensic Specialist Training Course” has been established within Advanced Medicine for Clinicians Course.

[Medical Science]



Four courses are offered to grow (1) medical researchers and advanced clinicians who can perform unique and leading-edge research based on high academic expertise and broad knowledge in general medicine; (2) people with interdisciplinary knowledge and research abilities, for example, on medicine and engineering or medicine and biotechnology; and (3) physicians and medical researchers with high expertise, a sense of humanity, and high ethical standards.

[Advanced Medical Science Course]

: Students engage in medical research from basic medicine to clinical medicine and develop a doctoral dissertation to obtain the degree.

(1) Development of excellent researchers who have the advanced research abilities needed to be independently engaged in creative research activities, high expertise that serves as a foundation for the former abilities, high ethical standards, and a sense of humanity.

(2) Development of highly motivated people who have an enthusiastic and inquisitive mind with creativity and who try to solve a variety of medical issues ranging from basic medicine to clinical medicine.

(3) Development of physicians/medical researchers who have the latest knowledge and research abilities sufficient to play an active role in the international arena.

[Advanced Medicine for Clinicians Course]

: Students engage mainly in clinical research while working to be qualified as a specialist and develop a doctoral dissertation to obtain their degree.

(1) Development of advanced clinicians who have excellent research abilities, advanced clinical skills, high ethical standards, and a sense of humanity.
(2) Development of medical research to develop new diagnostic and therapeutic methods with the aim of adopting research outcomes in clinical medicine from clinical sites.
(3) Study on medical ethics and legal theories with a focus on clinical research and the development of people who can be successful leaders in clinical sites.

[Interdisciplinary Medical Science and Innovation Course]

: Students study about the creation of a new academic discipline and medical innovation through the integration of medicine and other fields of study and develop a doctoral dissertation to obtain their degree. Classes are considered for those who have graduated from a department other than a medical school.

(1) Development of researchers who have interdisciplinary knowledge and high research skills that transcend conventional academic disciplines, such as medicine, engineering, and biotechnology, combined with high ethical standards and a sense of humanity as clinicians.
(2) Development of people who lead innovations in medical science and practice with interdisciplinary knowledge and high research ability.
(3) Development of researchers who have not only broad knowledge on basic and clinical medicines but also interdisciplinary perspectives and research abilities to become successful in research institutions of college, private companies, and other organizations.

[NCD Epidemiology Leader's Course]

: Students research about NCD(Non-Communicable Disease) and develop a doctoral dissertation to obtain the degree.

(1) Development of well-balanced NCD leaders who possess medical knowledge concerning NCD, expertise in epidemiological methodology and biostatistics, as well as the ability to formulate novel solutions for improving public health in Asia.
(2) Development of global leaders who are internationally minded, proficient in English, and capable of engaging in logical discussion.
(3) Development of academic leaders with first-rate research skills based on extensive experience in large-scale epidemiologic research studies and international collaborative research.
(4) Development of dynamic leaders capable of playing an active role at the front line of health-related industries and government agencies focused on public health issues.

List of Classes and Number of Credits

Refer to Appendix 1.

For Oncology Specialist Training Course and Forensic Generalist, Forensic Specialist Training Course please refer to “Student Application for Oncology Specialist Training Course” and “Forensic Generalist, Forensic Specialist Training Course,” respectively.

Major Study Themes of Faculty

Refer to Appendix 2.

Study Guide

[Advanced Medical Science Course, Advanced Medicine for Clinicians Course, Interdisciplinary Medical Science and Innovation Course]

1. Over the first, second, and third years, students must earn at least 30 credits in total, including 14 credits from compulsory subjects; and credits from compulsory subjects among the course subjects; and 12 or more credits from practice subjects.
2. In the third and fourth years, students should dedicate themselves in voluntary research activities, while receiving research guidance suitable for their research themes from their academic advisors, to nurture the advanced research abilities needed to be independently engaged in creative research activities and expertise that serves as foundations for the former abilities. In the Oncology Specialist Training Course, advanced research abilities and specialized clinical skills are fostered. In the Project for Reducing the Burden of Non-Communicable Disease (NCD) in the Asian Pacific Region, need something quality to become a global leader who can work actively as the bridge among the industry, government, and academia.
3. For the Oncology Specialist Training Course and the Forensic Generalist, Forensic Specialist Training Course, please refer to the “Student Application for Oncology Specialist Training Course” and “Student Application for Forensic Generalist, Forensic Specialist Training Course,” respectively.

[NCD Epidemiology Leader’s Course]

1. During the four years of the program, students are required to earn 18 credits in the required subjects and two credits in the elective subjects in a core area; two credits in the elective subjects in a supplemental area; and eight credits in the required subjects and two credits in the elective of practicum.
2. Starting in the second year, students will engage in their own research under the guidance of an academic advisor. They will participate in a training program at another institution in order to gain practical knowledge in association with their research subject. Through these experiences, students will acquire advanced research skills and become capable of conducting research independently and creatively.

Special Exception of Education Methods

In our Graduate School of Medicine (Doctoral Program), the “Special Exception of Education Method” has been adopted according to Article 14 of Graduate Schools Establishment Standards. We provide classes and research guidance not only during the daytime, but also in the evening and other special hours or periods so that workers can complete a program and receive education and research guidance while maintaining their job. (It does not apply to the Project for Reducing the Burden of Non-Communicable Disease (NCD) in the Asian Pacific Region.)

Grant of Academic Degree

1. The standard term of study is four years.
2. A doctoral degree (medicine) is granted.
3. The degree is granted to those who have stayed in this graduate school for four years or more, earned 30 credits or more in accordance with the above Study Guide, and passed a Qualifying Examination, furthermore passed a dissertation review and a final examination after receiving the necessary research guidance. However, those who have stayed in this graduate school for three years or more, achieved extraordinary research results, and fulfilled certain requirements may be granted a degree even if they stayed in the school for less than four years.

Advanced Medical Science Course, Advanced Medicine for Clinicians Course, Interdisciplinary Medical Science and Innovation Course
List of Classes and Number of Credits

Subject classification		Class title	Grade	Credits			Note
				Lecture	Exercise	Practice	
Common subjects	Foundational education	Basic Science Fundamentals & Multidisciplinary SeminarsI	1-2	3			Compulsory
		Basic Science Fundamentals & Multidisciplinary SeminarsII	1-2	3			
		Technical Seminar	1-2		2		
		Bioethics and Medical Ethics	1-2	1			
		Fundamentals of Epidemiology and Medical Statistics	1-2	1			
		Integrated Basic and Clinical SeminarI	1-2	2			
		Integrated Basic and Clinical SeminarII	1-2	2			
Course subjects	Advanced Medical Science Course	Pioneer Seminar	1-2		2		Compulsory
		Frontier Medical Research Method	1-2			2	
	Advanced Medicine for Clinicians Course	Clinical Research	1-2	2			Compulsory
		Skills for Epidemiology and Medical Statistics	1-2			1	
		Medical Ethics and Law	1-2	1			
	Interdisciplinary Medical Science and Innovation Course	Biomedicine	1-2	1			Compulsory
		Genome Science	1-2	1			
		Bioinformatics	1-2	1			
		Infectious Diseases	1-2	1			
Practice subjects	Common	Practice in Cellular PhysiologyA	1-3			2	Elective
		Practice in Cellular PhysiologyB	1-3			2	
		Practice in Developmental and Functional AnatomyA	1-3			2	
		Practice in Developmental and Functional AnatomyB	1-3			2	
		Practice in Stem Cell BiologyA	1-3			2	
		Practice in Stem Cell BiologyB	1-3			2	
		Practice in Regulation of Gene ExpressionA	1-3			2	
		Practice in Regulation of Gene ExpressionB	1-3			2	
		Practice in Molecular Cell BiologyA	1-3			2	
		Practice in Molecular Cell BiologyB	1-3			2	
		Practice in Molecular NeuroanatomyA	1-3			2	
		Practice in Molecular NeuroanatomyB	1-3			2	
		Practice in Diagnostic PathologyA	1-3			2	
		Practice in Diagnostic PathologyB	1-3			2	

Subject classification		Class title	Grade	Credits			Note
				Lecture	Exercise	Practice	
Practice subjects	Common	Practice in Pathology and ImmunologyA	1-3			2	Elective
		Practice in Pathology and ImmunologyB	1-3			2	
		Practice in Molecular PharmacologyA	1-3			2	
		Practice in Molecular PharmacologyB	1-3			2	
		Practice in Occupational HealthA	1-3			2	
		Practice in Occupational HealthB	1-3			2	
		Practice in Legal MedicineA	1-3			2	
		Practice in Legal MedicineB	1-3			2	
		Practice in CardiologyA	1-3			2	
		Practice in CardiologyB	1-3			2	
		Practice in Respiratory MedicineA	1-3			2	
		Practice in Respiratory MedicineB	1-3			2	
		Practice in GastroenterologyA	1-3			2	
		Practice in GastroenterologyB	1-3			2	
		Practice in HematologyA	1-3			2	
		Practice in HematologyB	1-3			2	
		Practice in Endocrinology, Metabolism & NephrologyA	1-3			2	
		Practice in Endocrinology, Metabolism & NephrologyB	1-3			2	
		Practice in NeurologyA	1-3			2	
		Practice in NeurologyB	1-3			2	
		Practice in PediatricsA	1-3			2	
		Practice in PediatricsB	1-3			2	
		Practice in PsychiatryA	1-3			2	
		Practice in PsychiatryB	1-3			2	
		Practice in DermatologyA	1-3			2	
		Practice in DermatologyB	1-3			2	
		Practice in Gastrointestinal Surgery, and Breast, Pediatric and General SurgeryA	1-3			2	
		Practice in Gastrointestinal Surgery, and Breast, Pediatric and General SurgeryB	1-3			2	
		Practice in Cardiovascular SurgeryA	1-3			2	
		Practice in Cardiovascular SurgeryB	1-3			2	
		Practice in General Thoracic SurgeryA	1-3			2	
		Practice in General Thoracic SurgeryB	1-3			2	
		Practice in Orthopaedic SurgeryA	1-3			2	
		Practice in Orthopaedic SurgeryB	1-3			2	
		Practice in Hands-on Educational Program in NeurosurgeryA	1-3			2	
		Practice in Hands-on Educational Program in NeurosurgeryB	1-3			2	

Subject classification		Class title	Grade	Credits			Note
				Lecture	Exercise	Practice	
Practice subjects	Common	Practice in Otorhinolaryngology-Head and Neck SurgeryA	1-3			2	Elective
		Practice in Otorhinolaryngology-Head and Neck SurgeryB	1-3			2	
		Practice in Obstetrics and GynecologyA	1-3			2	
		Practice in Obstetrics and GynecologyB	1-3			2	
		Practice in UrologyA	1-3			2	
		Practice in UrologyB	1-3			2	
		Practice in OphthalmologyA	1-3			2	
		Practice in OphthalmologyB	1-3			2	
		Practice in AnesthesiologyA	1-3			2	
		Practice in AnesthesiologyB	1-3			2	
		Practice in RadiologyA	1-3			2	
		Practice in RadiologyB	1-3			2	
		Practice in Oral and Maxillofacial SurgeryA	1-3			2	
		Practice in Oral and Maxillofacial SurgeryB	1-3			2	
		Practice in Clinical Laboratory MedicineA	1-3			2	
		Practice in Clinical Laboratory MedicineB	1-3			2	
		Practice in Critical and Intensive Care MedicineA	1-3			2	
		Practice in Critical and Intensive Care MedicineB	1-3			2	
		Practice in Medical OncologyA	1-3			2	
		Practice in Medical OncologyB	1-3			2	
		Practice in Primary Care MedicineA	1-3			2	
		Practice in Primary Care MedicineB	1-3			2	
		Practice in Plastic & Reconstructive SurgeryA	1-3			2	
		Practice in Plastic & Reconstructive SurgeryB	1-3			2	
		Practice in Clinical Cancer PharmacologyA	1-3			2	
		Practice in Clinical Cancer PharmacologyB	1-3			2	
		Practice in NeuropathobilogyA	1-3			2	
		Practice in NeuropathobilogyB	1-3			2	
		Practice in NeuropharmacologyA	1-3			2	
		Practice in NeuropharmacologyB	1-3			2	
		Practice in NeuroscienceA	1-3			2	
		Practice in NeuroscienceB	1-3			2	

Subject classification		Class title	Grade	Credits			Note
				Lecture	Exercise	Practice	
Practice subjects	Common	Practice in Laboratory Animal ScienceA	1-3			2	Elective
		Practice in Laboratory Animal ScienceB	1-3			2	
		Practice in Epidemiology ResearchA	1-3			2	
		Practice in Epidemiology ResearchB	1-3			2	
		Practice in Biocommunication ResearchA	1-3			2	
		Practice in Biocommunication ResearchB	1-3			2	
		Practice in Regenerative Medicine ResearchA	1-3			2	
		Practice in Regenerative Medicine ResearchB	1-3			2	

NCD Epidemiology Leader's Course
List of Classes and Number of Credits

Area	Cluster	Subject	Grade	Credits			Elective/Required/ semiobligatory subjects
				Lecture	Exersice	Practice	
Core	Public Health	Fundamentals of Public Health	1	2			Required
		Health Administration and Public Health Law	2	2			
	Epidemiology and Medical Statistics	Fundamentals of Epidemiologic Methods	1	2			Required
		Fundamentals of Clinical Trials	1	2			
		Fundamentals of Medical Statistics	1	2			
	Advanced Topic of Epidemiology	Epidemiology of NCDs	1	2			Required
		Social Epidemiology	2	2			Required
	International Communication	Workshop for Discovering Asian Culture and Ethics	1		2		Required
		Presentation and debates	2		2		
Supplemental	Clinical Medicine	Clinical medicine of NCDs	1	2			Elective
	Medical Innovation	Medical innovation from bench to community	2	2			Elective
		Industrial Health	1		2		
Practicum		Thesis preparation	2			4	Required
		Global Research Training	2			2	Elective
		Research and Development in the Health Related Industries	2			2	
		Fieldwork at an Asia-Pacific region	3			2	
		Presentaion at academic conferences	3			4	Required

Appendix 2

Major Study Themes of Faculty

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Fundamental Biosciences	Division of Physics	Professor	MERA Yutaka	1. Study on nanomaterials, nanostructures and surfaces 2. Development of nano-spectroscopy 3. Medical application of nanotechnology
		Associate Professor	NARUSE Nobuyasu	1. Research for optical properties of nano-,bio-materials 2. Research for material science using diffraction, microscopy, and spectroscopy 3. Physics research contributing to environmental science, agriculture, disaster prevention, and medical science 4. Research for science education
	Division of Chemistry	Professor	FURUSHO Yoshio	1. Development of medical materials based on supramolecular chemistry 2. Construction of soft materials utilizing formation of organic salt bridges driven by hydrogen bonding 3. Construction of molecular assembly through hierarchical organization of biomolecules
	Division of Biology	Professor	HIRATA Takako	1. Molecular basis of immune cell trafficking 2. Control of lymphocyte migration to the skin and mucosa 3. Immune regulation by cytoskeleton-associated proteins
		Associate Professor	SATOOKA Hiroki	1. Immunometabolism and redox signaling in autoimmunity 2. The mechanism of CD8+ regulatory T cell differentiation and the application of CD8+ regulatory T cell for autoimmune disease treatment. 3. Non-lymphoid tissue-specific immune regulation
	Division of Mathematics	Associate Professor	KAWAKITA Motoko	1. Algebraic curves with many rational points
Department of Culture and Medicine	Division of Philosophy and Ethics	Professor	OKITA Taketoshi	1. research on bioethics (clinical ethics, research ethics, public health ethics) 2. research on the concept of care and responsibility 3. research on ethical issues related to HIV infection and other infectious diseases
	Division of Psychology	Associate Professor	KOJIMA Takatsugu	1. Spatial cognition and language understanding 2. Affective information processing 3. Non-verbal cognition
	Division of English	Professor	KATO Yutaka	1. International comparative research on bioethics 2. Research on medical and nursing English education
	Division of Cultural Anthropology	Professor	KANESHIGE Tsutomu	1. Anthropological studies on ethnic minorities of P.R.China 2. Anthropological studies on Fengshui 3. Anthropological studies on merit and merit-making
Department of Anatomy	Division of Anatomy and Cell Biology	Professor	UDAGAWA Jun	1. Analysis of the function of the brain phospholipid to the behavior 2. Analysis of the pathogenesis of nonalcoholic fatty liver disease related to in utero environment 3. Study on the relationship between hand structure and grasping function
		Special Contract Associate Professor	UCHIMURA Yasuhiro	1. Elucidation of the molecular mechanisms underpinning DOHaD (developmental origins of health and disease) hypothesis 2. Elucidation of the function of the genes involved in the onset of sarcopenia
	Division of Neuroanatomy	Professor	KATSUYAMA Yu	1. Analysis of brain morphogenesis 2. Analysis of mechanisms of maintenance and differentiation of the stem cells 3. Analysis of model animals of psychiatric diseases.
		Associate Professor	KANEDA Hayato	1. Stem cell aging and tissue homeostasis 2. Search for biomarkers of age-related diseases 3. Brain morphogenesis
Department of Physiology	Division of Integrative Physiology	Professor	HITOSHI Seiji	1. Analysis of the generation,maintenance,and differentiation of neural stem cells 2. Development of regenerative therapy strategy for the damaged central nervous system 3. Understanding the pathogenesis of psychiatry diseases
	Division of Systems Physiology	Professor	OGAWA Masaaki	1. Neural circuit mechanisms underlying motivation, decision-making, and attention 2. Computational algorithms of neural activities related to motivation, decision-making and attention 3. Translational research that contributes to the understanding, diagnosis, and treatment of psychiatric disorders with impaired motivation, decision-making, and/or attention
Department of Biochemistry and Molecular Biology	Division of Molecular Physiological Chemistry	Professor	AGATA Yasutoshi	1. Epigenetic regulation of gene expression and cancer development 2. Regulation of gene expression and cancer development by chromosome dynamics 3. Regeneration of cancer specific T cells from iPS cells
		Associate Professor	TERADA Koji	1. Molecular mechanism of antigen receptor gene rearrangement in lymphocytes 2. Gene-reglation for lymphocyte development
	Division of Molecular Medical Biochemistry	Professor	OGITA Hisakazu	1. Signal transduction reseach and genetic analysis in the field of cancer biology and cardiovascular diseases 2. Molecular mechanism of cell adhesion

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Biochemistry and Molecular Biology	Division of Molecular Medical Biochemistry	Associate Professor	SATO Akira	1. Signal transduction and cell-cell communication in cancer and inflammatory diseases. 2. Adult diseases triggered by aberrant regulation of Wnt signaling.
Department of Pathology	Division of Human Pathology	Professor	KUSHIMA Ryoji	1. Gastrointestinal pathology 2. Diagnostic pathology
		Associate Professor	NAKAYAMA Takahisa	1. Study on the progression potential of non-invasive cancer of gastrointestinal tract 2. Research on antitumor therapy based on synthetic lethality
	Division of Pathogenesis and Disease Regulation	Professor	ITOH Yasushi	1. Development of vaccines and therapeutic agents against influenza virus 2. Research on genetic diseases and aging using a non-human primate model 3. Analysis of immune responses using cynomolgus macaques
		Associate Professor	ISHIGAKI Hirohito	1. Immunology with using a primate model especially for tumor, transplantation, and infectious disease
	Division of Microbiology and Infectious Diseases	Associate Professor	TANBE Yukihiro	1. Physiological function(s) of cancer-related genes. 2. Search for novel anti-tumor compounds.
Department of Pharmacology	–	Professor	NISHI Eiichiro	1. Molecular mechanism and pathophysiological role of ectodomain shedding 2. Regulatory role of transcriptional coregulator in metabolism 3. Role of metallopeptidases in cardiovascular disease, cancer and inflammatory diseases
		Associate Professor	OHNO Mikiko	1. Molecular mechanism and pathophysiological roles of heart rate control by the multifunctional protease. 2. Usefulness of the novel biomarker for the early detection of ACS 3. Regulatory role of protease in megakaryocyte maturation and platelet production 4. Role of metalloprotease in Alzheimer's disease
Department of Social Medicine	Division of Occupational and Environmental Health	Special Contract Associate Professor	KITAHARA Teruyo	1. Prevention of Work-related Musculoskeletal Disorders 2. Health and Safety of Persons with Disabilities (Prevention of secondary disorders) 3. Support for Balancing Treatment and Work 4. Social Barriers and Health of People with Disabilities or Information Vulnerable Populations
	Division of Legal Medicine	Professor	HITOSUGI Masahito	1. Amalysis of traffic injuries 2. Pathophysiological analysis for sudden death cases due to thrombosis 3. Preventive medicine for deaths of external causes
		Associate Professor	NAKAMURA Mami	1. Forensic Toxicology, clinical toxicology, physiology of abuse drugs 2. Virtopsy, postmortem computed tomography 3. Out-of-hospital death by infectious disease including COVID-19
Department of Internal Medicine	Division of Cardiovascular Medicine	Professor	NAKAGAWA Yoshihisa	1. Coronary reconstruction in ischemic heart disease 2. Primary and secondary prevention for atherosclerosis 3. Optimal antithrombotic therapy
		Associate Professor	OZAWA Tomoya	1. Clinical researches on cardiac electrophysiology 2. Development of novel arrhythmia treatment 3. In silico studies on cardiac electrophysiology
		Associate Professor	SAKAI Hiroshi	1. Elucidation of the pathophysiology of heart failure 2. Research on diagnosis and treatment of pulmonary hypertension 3. Research on diagnosis and treatment of cardiac amyloidosis
	Division of Respiratory Medicine	Professor	NAKANO Yasutaka	1. Structure and function relationship of the lung 2. Structure and function relationship of respiratory diseases
		Associate Professor	YAMAGUCHI Masafumi	1. Research on the pathophysiology of severe asthma 2. Study on the pathophysiology and treatment of chronic intractable cough
	Division of Gastroenterology	Professor	(TBD)	
		Associate Professor	INATOMI Osamu	1. Pancreatic fibrosis in pancreatic cancer and chronic pancreatitis 2. New development of endoscopic device in ERCP
		Associate Professor	NISHIDA Atsushi	1. Mucosal immunity in inflammatory bowel disease 2. The gut microbiota in inflammatory bowel disease 3. Cytokine network in inflammatory bowel diesase
	Division of Hematology	Professor	MURATA Makoto	1. Mechanism of immune response after hematopoietic stem cell transplantation 2. Prognostic factor for hematological diseases 3. Development of novel cellular therapy

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Internal Medicine	Division of Diabetology, Endocrinology and Nephrology	Professor	KUME Shinji	1. Pathogenesis of diabetic nephropathy 2. Pathogenesis of chronic kidney disease 3. Renal energy metabolism
	Division of Neurology	Professor	URUSHITANI Makoto	1. Molecular targeted therapy for amyotrophic lateral sclerosis 2. Cell biological analysis of neurodegenerative diseases 3. Noninvasive diagnosis of neurological diseases 4. Molecular pathology of cerebrovascular diseases 5. Functional brain image analysis of Nerve rehabilitation
		Associate Professor	TERASHIMA Tomoya	1. Engineering the novel molecular therapies with cell and tissue specific targeting 2. Application to the regenerative therapies with reprograming of bone marrow-derived cells 3. Analysis of the relation between bone marrow-derived cells and neurological diseases
		Associate Professor	YAMAKAWA Isamu	1. Electrodiagnosis in clinical neurology 2. Neurorehabilitation and Brain functional image
Department of Pediatrics	–	Professor	MARUO Yoshihiro	1. Molecular genetic analysis of hereditary unconjugated hyperbilirubinemia 2. Polymorphism of UDP-glucuronyltransferase and drug metabolism 3. Genetic analysis of congenital hypothyroidism
		Associate Professor	TAGA Takashi	1. Clinical study for developing therapeutic approach of pediatric leukemia
		Associate Professor	SAWAI Toshihiro	1. Study on diagnosis and treatment of the atypical hemolytic uremic syndrome 2. Elucidation of the disease mechanism of C3 glomerulopathy 3. Research on factors involved in complement dysregulation
		Associate Professor	YANAGI Takahide	1. Genetic back ground of prolonged hyperbilirubinemia in preterm infants 2. Genetic back ground of bilirubin encephalopathy in preterm infants
Department of Psychiatry	–	Professor	OZEKI Yuji	1. Etiology and pathophysiology of schizophrenia 2. Cardiovascular adverse effect by psychotropics
		Special Contract Professor	KADOTANI Hiroshi	1. Clinical research on sleep disorders 2. Epidemiological research on sleep and mental health 3. Development and evaluation of wearable devices to analyze sleep
		Associate Professor	FUJII Kumiko	1. Etiology and pathophysiology of schizophrenia. 2. Mental illness with involuntary movemen. 3. Clinical studies of pregnant women with mental illness
		Associate Professor	YOSHIMURA Atsushi	1. Establishing novel biomarkers for post-operative delirium on elderly patients 2. Investigation for decreased quality of life and social function caused by sleep disorder 3. A retrospective observational study associated with electroconvulsive therapy by multiple facilities
Department of Dermatology	–	Professor	FUJIMOTO Noriki	1. Analysis of regulatory B cells on autoimmune diseases 2. Investigation for the treatment of cutaneous mailgnant tumors 3. Gene editing for treatment of epidermolysis bullosa
		Associate Professor	TAKAHASHI Toshifumi	1. Research for diagnosis and treatment of allergic skin diseases 2. Research for detecting the genomes of pathogens in infectious skin diseases 3. Research for the pathogenesis and treatment of genetic skin diseases
Department of Surgery	Division of Gastrointestinal Surgery, and Breast, Pediatric, and General Surgery	Professor	TANI Masaji	1. Clinical study for the prevention of post operative complications in pancreatectomy 2. Development of immunotherapies for gastrointestinal diseases 3. Study of the pancreatic function 4. Evaluation of mechanisms for the metastasis 5. Study of the intervention for surgical skill 6. Interaction between cancer cells and fibroblasts
		Associate Professor	MIYAKE Tohru	1. Study for Cancer fibrosis. 2. Study for Cancer metastasis. 3. Study for peri operatire management in Colorectal Surgery.
		Associate Professor	ISHIKAWA Hajime	1. Research on improving the safety of hepatectomy 2. Analysis of physiological response to cancer immunotherapy

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Surgery	Division of Gastrointestinal Surgery, and Breast, Pediatric, and General Surgery	Associate Professor	KAIDA Sachiko	1. Study on nutritional status after gastric cancer surgery 2. Research on the usefulness and safety of robot-assisted gastrectomy 3. Research on automatic recognition of the stomach and surrounding blood vesselsusing artificial intelligence (AI)
	Division of Cardiovascular Surgery and Thoracic Surgery	Professor	SUZUKI Tomoaki	1. Long term outcome of total arterial off-pump CABG 2. The outcome of total arch replacement under mild hypothermia 3. Technical aspect or long-term durability of mitral valve repair 4. Type A aortic surgery: optimal procedure or long-term remodeling
		Associate Professor	HANAOKA Jun	1. Minimally invasive surgery with VATS for chest diseases 2. A study of the operation method for lung cancer 3. da Vinch® robotic surgery in general thoracic surgery 4. A study of the identification technique of the interlobar/intersegmental plane 5. Evaluation of pulmonary function before and after lay resection using dynamic X-ray apparatus
		Associate Professor	OSHIO Yasuhiko	1. Uniportal video-assisted thoracoscopic surgery for non-small cell lung cancer 2. Surgical navigation system for non-small cell lung cancer 3. 8K endoscopic system for thoracic surgery 4. New method to detect and repair intraoperative pulmonary air leakage 5. Antitumor immune response and tumor microenvironment
		Associate Professor	TAKASHIMA Noriyuki	1. Study of long-term outcome of thoracic aortic aneurysm 2. Surgical examination and long-term prognosis study for acute aortic dissection 3. Examination of arterial wall extensibility and clinical application 4. Study of surgical procedure and long-term outcome of aortic stenosis
Department of Orthopaedic Surgery	–	Professor	IMAI Shinji	1. Improvement of clinical output in arthroscopic shoulder surgery 2. Improvement of clinical output in shoulder arthroplasty 3. Regenerative medicine for injures of articular cartilage and spinal cord
		Associate Professor	MORI Kanji	1. Research for the ossification of the spinal ligaments 2. Research for the diagnosis and treatment for the disease with spine and spinal cord 3. Research for bone matabolism
		Associate Professor	YAYAMA Takafumi	1. Research for ossification process in patients with ossification of spiual ligament 2. Pathological analysis for hypertrophy of ligament tissue
		Associate Professor	MIMURA Tomohiro	1. Research on femoroacetabular impingement syndrome 2. Research on acetabular dysplasia 3. Research on hip anatomy and plain radiography
		Special Contract Associate Professor	KUMAGAI Kosuke	1. Development of joint degenerative disease diagnostic method and suppressive therapy by comprehensive analysis of cell membrane ion channels. 2. A comparative study of drug use during the acquisition of low disease activity in rheumatoid arthritis patients. 3. Correlation between TKA postoperative satisfaction and patient-based outcome in RA patients.
Department of Neurosurgery	–	Professor	YOSHIDA Kazumichi	1. Molecular pathophysiology and non-invasive diagnostic imaging of atherosclerosis 2. Molecular pathophysiology and non-invasive diagnostic imaging of cerebral aneurysm 3. Development of a novel surgical treatment for cerebrovascular diseases 4. Epidemiology of cerebrovascular disease
		Associate Professor	FUKAMI Tadateru	1. Research for the multidisciplinary treatment for glioma 2. Research for the safety and the risk of awake surgery 3. Research for the therapeutic indications about neuroendoscopic surgery
		Associate Professor	NITTA Naoki	1. Pathophysiology and treatment of mesial temporal lobe epilepsy 2. Analysis of neurophysiological examination 3. Pathophysiology and treatment of brain tumors
Department of Otorhinolaryngology-Head and Neck Surgery	–	Professor	(TBD)	
		Associate Professor	OWAKI Shigehiro	1. Diagnosis and treatment of voice disorder 2. Diagnosis and treatment of headandneck cancer

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Otorhinolaryngology-Head and Neck Surgery	–	Associate Professor	KOHZAKI Hideaki	1. The mechanism and control of epithelial-derived airway allergic diseases 2. The pathophysiological analysis of eosinophilic chronic rhinosinusitis 3. The pathophysiological analysis of Japanese cedar pollen rhinitis
		Associate Professor	TOJIMA Ichiro	1. Study of eosinophilic inflammation in upper airway 2. The pathophysiological research in allergic rhinitis 3. Mucus production and its regulation in airway epithelium
Department of Obstetrics and Gynecology	Female Pelvic Surgery and Reproductive Medicine	Professor	MURAKAMI Takashi	1. Minimally invasive gynecologic surgery (hysteroscopic, laparoscopic, and robotic surgery) 2. Endometriosis and adenomyosis 3. Reproductive endocrinology and infertility
		Associate Professor	AMANO Tsukuru	1. Robotic-Assisted Surgery for Gynecological Tumors 2. Elucidation of resistance to treatment of gynecological tumors using organoids 3. Mechanism of carcinogenesis of endometriosis
	Maternal and Fetal Medicine	Associate Professor	TSUJI Syunichiro	1. Elucidation of pathophysiology and development of treatment and prevention methods for cesarean scar syndrome 2. Elucidation of the pathogenesis and development of treatments for perinatal brain disorders 3. Diagnosis and treatment of cesarean scar syndrome 4. The role of resident microglia to neonatal hypoxic ischemic encephalopathy
		Associate Professor	KASAHARA Kyoko	1. Women's healthcare 2. Osteoporosis in women
Department of Urology	–	Professor	KAGEYAMA Susumu	1. Clinical research in robotic and laparoscopic surgery 2. Development of new anti-cancer drugs for urologic malignancy 3. Proteomics research in urologic oncology
		Associate Professor	JOHNIN Kazuyoshi	1. Surgery in pediatric urology (Reseach for plastic and laparoscopic surgery) 2. Reserch for voiding dysfunction in children 3. Application of MRI imaging in pediatric urology
Department of Ophthalmology	–	Professor	(TBD)	
		Associate Professor	SAISHIN Yoshitsugu	1. Molecular biology of retina 2. Intraocular drug therapy
		Associate Professor	SAWADA Osamu	1. Pharmacokinetics of intravitreal agents 2. Treatment for diabetic macular edema
Department of Anesthesiology	–	Professor	KITAGAWA Hirotoshi	1. Multimodal in vivo monitoring of ischemia reperfusion injury 2. Cardioprotection by anesthetic agents and opioids
		Associate Professor	KOJIMA Akiko	1. Elucidation of molecular basis for the mechanisms underlying cardioprotective effect of anesthetics, focused on Ca2+ transport proteins. 2. Investigation of modulatory effects of anesthetics on cardiac pacemaker function. 3. Electrophysiological and molecular biological analyses for the interaction between anesthetics and ion channels. 4. Investigation of modulatory effects of anesthetics on ionic mechanisms involved in arrhythmogenesis.
		Associate Professor	IWASHITA Narihito	1. Elucidating the brain mechanisms of pain using functional brain imaging 2. Multidisciplinary treatment for chronic pain 3. Development of minimally invasive treatment using pulse radiofrequency method
		Associate Professor	NAKANISHI Miho	1.Elucidation of the intracerebral mechanism of chronic pain using brain MRI for small animals (basic research) 2.Elucidation of the analgesic mechanism of Japanese herbal medicine (basic research) 3.Pathological evaluation and treatment effects of multidisciplinary treatment, drug therapy, in chronic pain patients (Clinical research) 4. Optimal conditions and long-term prognosis of peripheral nerve block using pulsed radiofrequency (Clinical research)
Department of Radiology	–	Professor	WATANABE Yoshiyuki	1. Study for pathophysiology of central nerves system disease and functional imaging using MRI and CT. 2. Artificial intelligence for medical imaging. 3. Human fluid flow imaging using MRI.

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Radiology	–	Associate Professor	SONODA Akinaga	1. Difference in tracheal diameter changes during deep breathing in a supine position between restrictive ventilator impairment patients, obstructive ventilator impairment patients and normal respiratory function patients using dynamic chest radiography 2. Difference in the pixel value change of lung field during deep breathing between restrictive ventilator impairment patients, obstructive ventilator impairment patients and normal pulmonary function patients using dynamic chest radiography 3. The effect of botulinum toxin A injection into the perirenal arterial space to treat hypertension
		Associate Professor	KONO Naoaki	1. Clinical research on radiation therapy for localized prostate cancer 2. A retrospective study of the safety and efficacy of multi-targeted stereotactic radiation for metastatic brain tumors
		Associate Professor	KITAHARA Hitoshi	1. Research on improving the image quality of ultra-high-resolution CT of the lungs using artificial intelligence 2. Efforts to improve the accuracy of diagnostic imaging in the musculoskeletal radiology 3. Efforts to improve the accuracy of diagnostic imaging in the pediatric radiology 4. Efforts to improve the accuracy of diagnostic imaging in the neuroradiology
Department of Oral and Maxillofacial Surgery	–	Associate Professor	YAMORI Masashi	1. Oral Cancer 2. Jaw Defomities and Cleft Palate 3. Anti-resorptive Agents-related Osteonecrosis of theJaw 4. Obstructive Sleep Apnea Syndrome 5. Periodontal Disease 6. Dental Implant
		Associate Professor	KOSHINUMA Shinya	1. Elucidation of the mechanism of exposed bone wound healing and development of new tissue regeneration and repair materials 2. Comprehensive analysis of oral flora 3. Elucidation of the relationship between maxillofacial morphology and sleep apnea syndrome and various diseases
Department of Clinical Laboratory Medicine	–	Associate Professor	CHANO Tokuhiro	1. Clinical application of genetic medicine 2. Analyzing the biological function RBICCI/FIP200 3. Inventing novel strategies for cancer treatment,applied with novel biomarkers 4. Drug development from targeting RAB39A
Diagnostic Pathology	–	Associate Professor	MORITANI Suzuko	1. Diagnostic pathology 2. Pathology of the breast and gynecological organs
Department of Critical and Intensive Care Medicine	–	Professor	SHIOMI Naoto	1. Study on multimodal treatment of severe head injury 2. Clinical research on brain death and resuscitation 3. Construction of pre-hospital emergency medical care system 4. End of life care in the Emergency medical field
		Associate Professor	TSUJITA Yasuyuki	1. Study of cardiac dysfunction and arrhythmia under excessive stress 2. Study of septic organ dysfunction 3. Epidemiological study of cardiovascular shock
		Associate Professor	FUJINO Kazunori	1. Elucidation of the mechanism of multi-organ failure during invasion
Department of Medical Oncology (Cancer Center)	–	Professor	DAIGO Yataro	1. Isolation and functional analysis of cancer-related genes. 2. Elucidation of molecular pathology of cancer by genomics and proteomics analysis. 3. Development of molecular targted drugs (small compounds, antibody, nucleic acid medicine) Development and translational research of cancer vaccine and immunomodulator drugs 4. Development of precision medicine and new cancer biomarkers through translational research. 5. Establishment of biobank and scientific platform of supporting human analysis
		Associate Professor	MURATA Satoshi	1. Analysis of mechanisms and development of treatment for metastasis after surgery for gastrointestinal cancer 2. Control over the perioperative tumor microenvironment in gastrointestinal cancers 3. Development of immune cell therapy for solid cancers 4. Hyperthermic Intraperitoneal Chemotherapy (HIPEC)

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Comprehensive Internal Medicine	–	Professor	SUGIMOTO Toshiro	1. Medical diagnosis Avoiding diagnostic errors 2. Rural medicine 3. Clinical electrolyte acid-base abnormalities electrolyte; acid-base abnormalities 4. Development of continuing professional development using ICT
Department of Comprehensive Internal Medicine	–	Associate Professor	OHNISHI Masato	1. Pathophysiology and therapy of chronic heart failure 2. Diagnosis and therapy of hypertension in primary care 3. Simulation-based instruction in healthcare professionals
		Associate Professor	ITOH Akihiko	1. Percutaneous endoscopic gastrostomy and management of that patient. 2. Indication and complications of enteral nutrition. 3. Nutritional support team management and multi-occupation collaboration.
		Associate Professor	MAENO Yasuhiro	1. Development of effective regional cooperation for medical care of the diabetic patients 2. Development of effective educational techniques for the diabetic or pre-diabetic people
		Associate Professor	WADA Hiroshi	1. Research for the efficacy of regional cooperation in respiratory medicine examination. 2. Clinical examination of obstructive pulmonary disease.
Department of Comprehensive Surgery	–	Professor	MEKATA Eiji	1. Multimodality therapy for colorectal cancer 2. Development of the resin of the surgical instrument 3. Anticancer drug sensitivity test 4. Oncology (disease state, therapy and community cooperation)
		Associate Professor	YAMAGUCHI Tsuyosi	1. Research on efficacy and safety of bariatric and metabolic surgery 2. Research on upper gastrointestinal surgery 3. Research on efficacy and safety of treatment of peptic ulcer
		Associate Professor	AKABORI Hiroya	1. Study of gastrointestinal surgical stress 2. Development of microwave surgical device 3. Clinical study of the operation method for pancreas
		Associate Professor	KITAMURA Naomi	1. Development of new endotoxin measurement method. 2. Postoperative analgesic effect for laparoscopic cholecystectomy.
Department of Plastic and Reconstructive Surgery	–	Special Contract Associate Professor	ARATA Jun	1. Evaluation of percutaneous osteotomy for callus distraction 2. Research of monitoring for tissue transfer 3. Research of survival rate and number of vascular anastomosis for digital replantation
		Associate Professor	OKANO Junko	1. Establishment of a novel scaffold which leads to the regeneration of heterogenous tissues in deep wounds 2. Development of bacteriophage therapy for multi-antibiotic-resistant bacteria
Endoscopy	–	Associate Professor	KIMURA Hidenori	1. Development of minimally invasive treatment for gastrointestinal tumors 2. Research on observation methods to improve the detection rate of gastrointestinal tumors 3. Pathophysiological analysis in the development of gastrointestinal tumors focusing on the gut microbiota
Blood Purification	–	Associate Professor	KANASAKI Masami	1. Blood purification 2. Mechanism of development of diabetic nephropathy
Blood Transfusion and Cell Therapy Center	–	Associate Professor	MINAMIGUCHI Hitoshi	1. Phenotypic analysis of hematopoietic stem cell 2. Phenotypic analysis of leukemic stem cell
Clinical Nutrition	–	Associate Professor	TAKEBAYASHI Katsushi	1.Perioperative nutritional support for esophageal cancer surgery 2. The mechanism leading to postoperative recurrence of gastric and esophageal cancer 3. Multidisciplinary treatment strategy for esophageal cancer
Medical Informatics and Biomedical Engineering	–	Associate Professor	SUGIMOTO Yoshihisa	1. Medical electronics 2. Medical information system 3. Biomedical engineering for cardiology
Department of Pharmacotherapeutics (Pharmacy)	–	Professor	MORITA Shin-ya	1. Research on lipid transporters and lipid metabolism 2. Development of methods for measuring lipids 3. Study of personalized medicine
		Associate Professor	IKEDA Yoshito	1. Research on lipid transporters 2.Research on metal transporters
Medical Safety Section	–	Professor	SHIMIZU Tomoharu	1. Study of surgical stress 2. Development of new endotoxin measurement method 3. Studies of treatment for colorectal cancer and inflammatory bowel diseases

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Medical Safety Section	–	Associate Professor	MANDAI Ryoichi	1. in-hospital emergency system
Rehabilitation Section	–	Associate Professor	KODAMA Narihito	1. A study of bone and soft tissue tumors 2. Microsurgical approach for orthopedics and reconstructive surgery 3. A study of the idiopathic interosseous nerve palsy
Center for Clinical Research and Advanced Medicine	–	Associate Professor	KURATA Mayumi	1. A Recognition Investigation about Living Donor Transplantation. ：Analysis of the free description answer of the citizen by the Internet survey 2. Construction of the study entry applicant support system which utilized the Internet 3. Critical Review of Priority Relative-Offers in Revision of Organ Transplant Law
Clinical Education Center for Physicians	–	Professor	KAWASAKI Taku	1. Hip and knee arthroplasty 2. Epidemillogy of rheuamatoid arthritis 3. Locomotive rehabilitation
		Associate Professor	YAMAHARA Mako	1. Podocyte injury in diabetic kidney disease 2. Mechanism of progression of chronic kidney disease
Molecular Neuroscience Research Center	Basic Neuroscience Research Unit -	Professor	(TBD)	
	Translational Research Unit - Department of Diagnostics and Therapeutics for Brain Diseases	Professor	ISHIGAKI Shinsuke	1. Study of the pathogenesis involved in neurodegenerative disorders and dementia 2. Therapeutics development for neurodegenerative disorders and dementia by antisense modulation 3. Development for novel biomarkers for neurodegenerative disorders and dementia by behavioral test batteries and imaging analysis
		Associate Professor	YANAGISAWA Daijiro	1. Elucidation of Alzheimer's disease pathology for discovering novel therapeutic targets. 2. Development of diagnostic biomarkers for dementia at very early stage. 3. Research on the pathology, diagnosis, and disease-modifying therapy of neurodegenerative diseases.
	Translational Research Unit - Department of	(TBD)		
Research Center for Animal Life Science	–	Professor	EMA Masatsugu	1. The research about primate ES/iPS cells 2. The research about the development of method to create genetically modified monkeys and its application to human disease modeling 3. The research about primate early embryonic and placental development 4. Molecular mechanism about angiogenesis
		Associate Professor	MORIMURA Toshifumi	1. Therapeutic research of anti-ER stress drugs identified by a novel luminous probe. 2. Analysis of cellular pathology of sporadic amyotrophic lateral sclerosis focusing on translation products whose mRNAs are recognized by TDP-43. 3. Early diagnosis and therapeutic research of Alzheimer's disease by using transgenic cynomolgus monkeys bearing amyloid-beta precursor protein with disease associated mutations.
Medical Innovation Research Center	Pioneering Research Division	Special Contract Associate Professor	HASHIMOTO Shoko	1. Elucidation of pathological mechanism of Alzheimer's disease using mouse models 2. Analysis of the effect of oxidative stress on brain homeostasis
	International Joint Research Division	Special Contract Professor	Wan Zurinah Binti Wan Ngah	1. Research theme includes mechanisms in ageing and neurodegenerative diseases such as Alzheimer's Disease and modulation by antioxidants such as palm oil vitamin E tocotrienol. 2. Modulation of the gut microbiome and metabolome and correlation with cognitive function by tocotrienol in an APP/PS1 AD mouse model. 3. Tocotrienol isomers effects on differentiated APP Swedish/PS1 transfected SH-SY5Y cells 4. Systems integration of the transcriptome, proteome and metabolome of the hippocampus of AD APP/PS1 mice treated with tocotrienol (Collaboration with UKM)
Medical Innovation Research Center	Advanced Medical Research and Development Division	Special Contract Associate Professor	YAMADA Atsushi	1．Bending mechanisms for medical devices 2．Flexible medical devices 3．Flexible robot mechanisms 4．Image guided surgeries

Appendix 2

(As of December 2023)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Central Research Laboratory	–	Associate Professor	ASAHINA Kinji	1. Elucidating the mechanism of the activation of hepatic stellate cells in liver fibrosis. 2. Interaction of peritoneal macrophages and mesothelial cells covering the internal organs in the peritoneal cavity. 3. Role of macrophages in pancreatic cancer.
Health Administration Center	–	Associate Professor	OGAWA Emiko	1. Research on the pathogenesis of chronic obstructive pulmonary disease (COPD) 2. Clinical research using COPD cohort data
Information Technology and Management Center	–	Professor	ASHIHARA Takashi	1. Development of new strategy of catheter ablation for refractory arrhythmias. 2. Studies on the mechanism of electrical defibrillation and the development of new defibrillator. 3. Application of human iPS cell-derived cardiomyocytes to the studies on cardiovascular diseases. 4. Studies on cardiovascular diseases by in silico, artificial intelligence, and biomedical engineering.
		Associate Professor	MOTOYAMA Kazutaka	1. studies on star formation process 2. studies on evolution of interstellar medium 3. high performance computing
Education Center for Medicine and Nursing	–	Professor	ITO Toshiyuki	1. Medical education
		Professor	MUKAISHO Kenichi	1. Gastric and esophageal carcinogenesis using various animal models 2. Analyses of extra-esophageal symptoms of GERD using reflux animal models 3. Influence of bile acids on carcinogenesis and cancer progression 4. Morphology of cancer cells using a novel 3D cell culture system
NCD Epidemiology Research Center	Division of Preventive Medicine	Professor	MIURA Katsuyuki	1. Epidemiologic research of cardiovascular diseases 2. Preventive medicine of cardiovascular diseases 3. Nutritional epidemiology
		Associate Professor	KADOTA Aya	1. Epidemiology of Diabetes mellitus and NCDs 2. Epidemiology of Cardiovascular disease and subclinical atherosclerosis 3. MWAS on Dementia
	Division of Advanced Epidemiology	Professor	(TBD)	
	Division of Medical Statistics	Associate Professor	HARADA Akiko	1. Statistical methods for epidemiologic researches 2. Statistical methods for health services research 3. Epidemiologic research of physical activity and aging
Community Healthcare Education and Research Center	–	Associate Professor	UMEDA Tomoko	1. Fibrinolysis factors (uPA etc.) and adhesion factors (CD44 variant etc.) related to the breast cancer invasion and the metastasis. 2. MRI mapping for the intraductal area of breast cancer 3. Tumor infiltrating cells around of the breast cancer, related to the trastuzumab after neoadjuvant chemotherapy
		Associate Professor	KAWAI Hiromichi	(Now writing)
IR Office	–	Associate Professor	MORINO Katsutaro	1. Mechanism of Metabolism and Nutation 2. Mitochondrial biogenesis

検定料振込用紙等

※１　下切り取り以下の用紙により、令和６年１月２２日（月）から２月９日（金）の期間に振り込んでください。

２　右の台紙に「振込金受領証明書」を貼り付けたものを関係書類と共に送付してください。

検定料納付確認書

この枠内に振り込み後の「振込金受領証明書」を貼り付けてください。

C

振込金受領証明書
（大学提出用）

金　額	￥３０，０００－
受取人	滋賀医科大学
（フリガナ） 志願者氏名	

取扱銀行収納印

1

A

振込金（兼手数料）受領書
（本人保存）

依頼日	年　月　日	
金　額	￥３０，０００－	
先方銀行		滋賀銀行・瀬田駅前支店
		関西みらい銀行・草津南支店
		三菱ＵＦＪ銀行・草津支店
受取人	滋賀医科大学	
志願者氏名（フリガナ）		
消費税込手数料	円	

上記の金額正に受取りました。

銀行

支店

取扱銀行収納印

2

印紙

B

電信扱

振込依頼書
（取扱店保存）

手数料ご依頼人負担

科目	

○印を付し必ず電信送金してください。（右記取りまとめ銀行のうち一つを選び）

依頼日	年　月　日	振込指定		電信扱	消費税込手数料	円
先方銀行		預金種目	口座番号	金　額	￥３０，０００－	
	滋賀銀行・瀬田駅前支店	普通	0146970	内訳	現金	
	関西みらい銀行・草津南支店	普通	0514443		当手　枚	
	三菱ＵＦＪ銀行・草津支店	普通	1102147		他手　枚	
受取人	シカ゛イカタ゛イカ゛ク					
	滋賀医科大学					

金種内訳				
10,000	0	000	100	00
5,000		000	50	0
2,000		000	10	0
1,000		000	合　計	
500		00	つり銭	

ご依頼人

志願者氏名（フリガナ）：もれのないよう打電してください。

氏　名（漢字）

住　所　〒

TEL

取扱銀行収納印

3

◎取扱銀行へのお願い
①太線内を必ず打電してください。
②金額の訂正はできません。
③収納印は１・２・３にもれなく正確に押印し、Ａ・Ｃ票は必ず依頼人にお返しください。
④滋賀銀行以外の銀行・信用金庫から振り込まれる場合は手数料が必要です。
⑤本振込依頼書は、令和６年２月１０日以降は取り扱わないでください。

Contact for Admission Selection, etc.

Admissions Division, Entrance Examination Section
Shiga University of Medical Science
Seta Tukinowa-cho, Otsu City, Shiga 520-2192, Japan
TEL　: +81-77-548-2071
E-mail: hqnyushi@belle.shiga-med.ac.jp
https://www.shiga-med.ac.jp/