

Spring 2018

Doctoral Program in the Graduate School of Medicine
Student Application Guidelines

Program for Leading Graduate Schools

**“Project for Reducing the Burden of
Non-Communicable Disease (NCD)
in the Asian Pacific Region”**

**(General Entrance Exam and
Special Entrance Exam for Students of Designated Universities)**

National University Corporation

Shiga University of Medical Science

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About Our Program

The Program for Leading Graduate Schools

The Program for Leading Graduate Schools is an initiative of the Ministry of Education, Culture, Science, Sports and Technology of Japan (MEXT). It is designed to promote and enhance graduate school education in Japan providing students with a world-class education through the development and implementation of Ph.D. degree program. The Program aims to train creative leaders with a broad perspective for industry, government, and academia on a global scale. Transcending disciplinary borders, prominent teachers and students both within and outside of the country and leading experts in industry, government, and academia will be invited to participate in the Program. Shiga University of Medical Science (SUMS) is among the selected Japanese University that participate in the Program for Leading Graduate Schools in 2013.

The Program for Leading Graduate Schools categorized into three types.

1. “All-round”
2. “Complex”
3. “Only-one”.

“Reducing the burden of non-communicable disease (NCD) in the Asian Pacific Region” by SUMS was selected as an “Only-one” program.

The ultimate goal of the Program for Leading Graduate Schools is to educate leaders with the following qualities.

【Skills required in leaders who can take initiative in industry, government, and academia on a global scale】

1. To develop an ability to take action on global scale in collaboration with others, with courage and conviction.
2. To develop an ability to discover problems, construct hypotheses, and create innovative solutions by capitalizing on one’s own knowledge and skills.
3. To develop insight into the true nature of things based on a broad perspective and a deep knowledge base, as well as a high level of expertise and global consciousness.

Graduate Program for Reducing the Burden of NCD in the Asian Pacific Region

The NCD Program intends to foster leaders with the following qualities through education that makes the best use of a solid base for epidemiologic research in lifestyle-related diseases offered by the Center for Epidemiologic Research in Asia and other organizations at SUMS:

- 1) 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) Global leaders who are internationally minded, proficient in English, and capable of engaging in logical discussion;
- 3) Academic leaders with first-rate research skills based on extensive experience in large-scale epidemiologic research studies and international collaborative research;
- 4) Dynamic leaders capable of playing an active role at the front line of health-related industries and government agencies focused on public health issues;
- 5) Leaders with a professional network across industry, government, and academia.

Admission Policy

The Graduate Program for Reducing the Burden of NCD in the Asian Pacific Region is a doctoral program selected as the only one of its type by the Program for Leading Graduate Schools by MEXT in 2013. The prevalence of NCD, including cancer, cerebrovascular disease, and cardiovascular disease, as well as their associated risk factors such as diabetes, hypertension, and dyslipidemia (deemed lifestyle-related diseases) has become a particularly serious concern in emerging Asian countries. The Graduate Program for Reducing the Burden of NCD in the Asian Pacific Region aims to train future global leaders who will initiate the development of measures to combat NCD and extend healthy life expectancy in emerging Asian countries using the solid research platform in lifestyle disease epidemiology offered by the Center for Epidemiologic Research in Asia and other organizations at SUMS. Students who plan to enroll in the NCD Program should be flexible enough to adapt to Asian and other foreign cultures and be sufficiently proficient in English so that they can participate in lectures and exercises conducted in English. We look for students with determination, a strong sense of duty, and high ethical standards that aspire to be active leaders in overcoming NCD-related problems in the Asian Pacific region.

Curriculum Policy

The curriculum is designed to foster internationally minded leaders actively engaged in interdisciplinary work. Thus, an emphasis is placed on English communication so that students can develop effective debating skills in English. The Center for Epidemiologic Research in Asia plays a central role in educating well-balanced leaders possessing medical knowledge of NCD, expertise in epidemiological methodology and biostatistics, as well as the ability to formulate novel solutions for improving public health in Asia. Japanese and international students study together in small classes or workshops facilitated by faculty members of Japanese and foreign nationalities. Students enrolled in this program will also participate in a training program or conduct fieldwork in Asia, Europe, and the US.

Diploma Policy

In order for the students enrolled in this doctoral program to be certified for a diploma, they must complete the research curriculum; obtain all the required credits; publish a doctoral dissertation in an international academic journal; and pass the dissertation review and final examination held by the screening board, which includes external judges as well as foreign scholars. Students will be assessed on whether they have been able to acquire 1) medical knowledge of NCD, expertise on epidemiological methodology and biostatistics, and an ability to devise novel solutions to address public health issues in Asia; 2) sufficient proficiency in English to engage in effective debate; and 3) leadership skills necessary to solve NCD-related problems in Asia and the rest of the world, combined with the flexibility to work in harmony with other people while upholding high ethical standards.

Student Application Guidelines

Number of Students to Be Admitted

Nine students will be admitted to the Graduate Program for Reducing the Burden of NCD in the Asian Pacific Region, NCD Program, which has been selected as a Program for Leading Graduate Schools by the Japanese government. This program is also a part of the Course for Research in Advanced Medicine in the Doctoral Program of the Graduate School of Medicine, Shiga University of Medical Science (SUMS). This program provides education, that includes research guidance and classwork at flexible times (e.g. during the evening) and period which are suitable for employed student in Japan as “a special case of educational methods” by applying “Article 14, Standards for Establishment of Graduate School”. Practicum subjects of the program are not applicable for this “special case”.

Commencement of the Program

The NCD Program will begin in April, 2018.

Note: Times indicated in this document always refer to Japan Standard Time.

Admission Requirements

Applicants must fall into one of the following categories in order to qualify for admission:

1. Graduation from a faculty of medicine or dentistry, or a six-year curriculum for pharmacy or veterinary medicine, or expected graduation by March, 2018.
2. Completion of 18 years of education that includes the curriculum for medicine, dentistry, pharmacy or veterinary medicine in a foreign country, or expected completion by March, 2018.
3. Completion of 18 years of education that includes the curriculum for medicine, dentistry, pharmacy or veterinary medicine in Japan through correspondence courses offered by a foreign school, or expected completion by March, 2018.
4. Completion of 18 years of education that includes the curriculum for medicine, dentistry, pharmacy or veterinary medicine, organized by an educational system in a foreign country and offered in an educational institute in Japan, and also, recognized by the Minister of Education, Culture, Science, Sports and Technology of Japan as such otherwise.
5. Recognition of academic competence equivalent to or higher than those who have completed the curriculum for medicine, dentistry, pharmacy, or veterinary medicine by the Minister of Education, Culture, Science, Sports and Technology of Japan based on Ministry Notice No. 39 (April 8, 1955) and No. 118 (September 1, 1989), including completion of a master's course.

6. Completion of four years or more at a faculty of medicine, dentistry, pharmacy, or veterinary medicine with a six year-curriculum, for applicants that the Graduate School of Medicine at SUMS recognizes as having obtained the relevant credits with excellent grades.
7. Completion of 16 years of education that includes the curriculum for medicine, dentistry, pharmacy or veterinary medicine in a foreign country, in Japan through correspondence courses offered by a foreign school, or through an educational institution in Japan that is deemed to offer the same curriculum as that of a foreign university by the education system of that foreign country and designated as such by the Minister of Education, Culture, Science, Sports and Technology of Japan; or applicants that the Graduate School of Medicine at SUMS recognizes as having obtained the relevant credits with excellent grades.
8. Recognition of academic competence equivalent to those who have completed a curriculum of six years or more in a faculty of medicine, dentistry, pharmacy, or veterinary medicine in the individualized applicant screening process conducted by the Graduate School of Medicine, SUMS and 24 years of age or older as of March 31, 2018.

Notes:

1. The applicant who is employed in Japan must fulfill one of the 8 items listed above. In addition, the applicant must be currently employed fulltime in Japan and receive permission from the employer's institution to take on the designated requirements of being a student at SUMS. Students can also maintain their employment during the time they are student at SUMS.
The applicant from the following designated institution is not eligible.
2. Students of designated universities (e.g., institutions) with international exchange program partnerships with SUMS who apply for the special entrance exam must obtain letters of recommendation from their home universities. Students of non-designated Universities should apply for general examination.
3. The applicants of the special entrance exam can take the 2nd stage of the examination at your home universities by Online Conference System.

Designated Universities		
Beihua University	Harbin Medical University	University of Georgia
Changchun Municipal Hospital	University Hospital of Amiens-Picardie	University of Nairobi
The University of British Columbia	Cho Ray Hospital	Kenya Medical Research Institute
University of Michigan	University of Medicine and Pharmacy at Ho Chi Minh City	Mongolian University of Medical Science
China Medical University	Northeastern University (China)	University of Indonesia
Rome University "La Sapienza"	University of Ottawa	National Brain Center Hospital, Jakarta
The University of Picardie Jules Veme	National University of Malaysia	Bangladesh National Heart Foundation Hospital & Research Institute

4. Those who apply under categories 5 to 8 will undergo individualized eligibility screening for admission. Please see Eligibility Screening

Eligibility Screening

Applicants in categories 5 through 8 must apply for review of eligibility by completing the following instruction. Prospective applicants who meet the applicant qualifications will go on to the first stage of the screening process. In addition to the application documents for the doctoral course listed in Section 3 of the Application Procedure, such applicants need to submit additional documents at the same time.

1. Application documents

- (1) Those who plan to apply under category 6 or 7 should submit documents 1 and 2 **in addition to** the application documents listed in Section 3 of the Application Procedure.
- (2) Those who plan to apply under category 5 or 8 should submit document 1 **in addition to** the application documents listed in Section 3 of the Application Procedure.
 - 1 Application form for eligibility screening provided by SUMS.
 - 2 Copy of the table of curriculum and syllabus at the applicant's university

2. Application period

September 25, 2017- October 10, 2017 ***Applications must arrive by 17:00**

3. Application documents should be submitted to:

Address: Admissions Office

Shiga University of Medical Science

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

TEL: 077-548-2071 (direct number) FAX: 077-548-2799

E-mail: hqnyushi@belle.shiga-med.ac.jp

- (1) Hand-delivered applications are accepted from 9:00 to 17:00 on weekdays. No documents are accepted on Saturdays, Sundays, and National Holiday.
- (2) Applicants living overseas should send all required documents by Express Mail Service (EMS). The EMS tracking number, application form for eligibility screening and Form A to Form E should be sent by fax or e-mail (fax number and e-mail address are mentioned above).

4. Eligibility screening

Applications will be reviewed based on the submitted documents. A request for an interview may be necessary. In such case, applicants will be contacted individually by SUMS.

5. Results of the eligibility screening

Applicants will be notified of the results of the eligibility screening by **October 20, 2017**.

Documents not used for the eligibility screening shall be returned to those who do not meet qualifications.

Application Procedure

1. Application period

September 25, 2017- October 10, 2017 *Applications must arrive by 17:00

2. Any inquiries and all application documents should be addressed to:

Address: Admissions Office

Shiga University of Medical Science

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

TEL: 077-548-2071 (Direct line) FAX: 077-548-2799

E-mail: hqnyushi@belle.shiga-med.ac.jp

3. Required application documents

(*Use the form provided by SUMS. Forms may be completed in Japanese or English, except Items 3 and 5 which should be in English.)

Documents		Remarks
1	Application form*	Form A 3 references should be faculty at your home university, supervisor of your institute, or equivalent. For students from designated universities, at least one reference should be the faculty member (or equivalent) from that designated university to qualify for Special Entrance Exam.
2	Curriculum Vitae*	Form B
3	Personal Statement*	Form C In English
4	Scientific and Academic Activities *	Form D
5	Certification of English Proficiency*	Form E In English
6	Recommendation letter*	Form F 3 recommendation letters sealed by each recommender with signature across the seal
7	Academic transcript	Should be prepared and sealed by the applicant's university. Applicants from SUMS do not need to submit an academic transcript. In addition, those who have completed or are expected to complete a master's course should submit the academic transcript prepared and sealed by the applicant's graduate school.
8	Diploma or graduation letter	Should be prepared and sealed by the applicant's university. Not required for applicants from SUMS.
9	Confirmation of payment of the examination fee (Use the payment slip at the end) *	The entrance examination fee of 30,000 yen must be paid at a bank using the payment slip at the end of application booklet. The fee must be paid between September 13, 2017 and October 10, 2017. Affix a stamped receipt as proof of payment on the confirmation.
10	Examination admission ticket, photo slip*	Affix your full-face photo (4 cm x 3 cm) from the waist up, taken within the past three months to the photo slip.

11	Mailing label *	Include the applicant's name and address on the mailing label in order to receive the results of the examination. (Don't peel the label off.)
12	Return envelope for the examination admission ticket *	Write the applicant's name and address on the front of an envelope and affix a 362 yen stamp (only for Japanese residents).
13	Permission from employer's institution	A designated form must be signed by the head of the institution in Japan, if you are an applicant who wish to remain employed during the time you are student at SUMS.

Notes:

1. Form A to Form F, Please download from the website
<https://www.shiga-med.ac.jp/admission/graduate/requirements>
2. No changes to application materials will be accepted once they are submitted. No documents submitted by qualified applicants shall be returned for any reason. Documents submitted by applicants who are found to be not qualified during the applicant qualification review process will be returned.
3. An applicant living outside of Japan should pay the examination fee following the steps mentioned in (3) in Section 4 (below) and do not need to submit Document 12.
4. Applicants from the designated universities taking the Special Entrance Examination do not need to submit Documents 9 – 13, and should pay the examination fee following the steps mentioned in “(3) Applicants living overseas” and “Overseas remittance procedure” shown as below.
5. The document submitted for eligibility screening also can be used for this application procedure. You do not need to submit same two documents.
6. The acceptance of enrollment will be cancelled if we find that your application form contains inaccurate or invalid information.

4. Submission of application documents

(1) By mail

Place all required application documents in the envelope attached to the Application Guidelines and send them **by registered express mail**.

(2) Hand delivery

Applicants may bring the application documents to the Admissions Office, SUMS in person. See Section 2 of the Application Procedure for the address.

Submission hours: 9:00 – 17:00 on weekdays (except Saturdays, Sundays, and National Holiday)

(3) Applicants living overseas

Applicants living overseas should send all required documents by Express Mail Service (EMS).

The EMS tracking number and Form A to Form E should be sent by fax or e-mail (fax number and e-mail address are mentioned above).

The examination fee (30,000 yen) should be remitted from an overseas financial institution according to the procedure outlined below in Japanese yen. **A copy of the Application for remittance should be enclosed with the application documents.** The original should be kept by the applicant. The remittance fee should be borne by the applicant.

This examination fee of 30,000 yen must be kept separate from any bank or transfer charges.

Examination fees that fall short of this amount will not be accepted and the application will not be processed.

Overseas remittance procedure

Type of remittance	Telegraphic transfer (T/T)
How the money should be paid to the beneficiary	Advice and pay
Remittance fee	At the payer's expense (Applicant) (OUR)
Currency & Amount	30,000 yen
Payment due date	October 10, 2017
Purpose of remittance	Examination fee
Beneficiary bank (Paying bank)	THE SHIGA BANK, LTD
Beneficiary branch	Seta Ekimae Branch
Beneficiary's account number (Payee account number)	Ordinary Deposit 190-146970
Beneficiary's name (Name of Payee account holder)	Shiga University of Medical Science
Beneficiary branch address	1-12-9 Ogaya, Otsu City, Shiga 520-2144, Japan
SWIFT code (BIC code)	SIGAJPT
University address (Beneficiary's address)	Seta Tsukinowa-cho, Otsu City, Shiga 520-2192, Japan
Other remarks	If the payer is not the applicant, enter the applicant's name in the "Message to Payee, if any" column.

Notes:

1. Immediately after submitting remittance from overseas, inform the Admissions office (hqnyushi@belle.shiga-med.ac.jp) of the remitter's name and address, the remitted amount, and the amount of the remittance fee.
2. **Please note that if the examination fee is not received by the due date, no application documents shall be accepted. Once the application is accepted, the examination fee shall not be refunded for any reason.**

5. Other remarks

- (1) The applicant for general examination will receive the examination admission ticket by post around October 20, 2017. If you do not receive this material by October 24, 2017, please contact SUMS at the address shown in Section 2 of the Application Procedure on page 6.
- (2) The applicant for Special examination will receive the information about your examination ID No. by email around October 20, 2017. If you do not receive this email by October 24, 2017, please contact SUMS at the address shown in Section 2. of the Application Procedure on page 6.
- (3) In case an applicant requires accommodations due to disabilities, please contact the University (at the address in Section 2 of the Application Procedure) prior to submission of application documents.
- (4) Reimbursement of the examination fee
The examination fee shall be refunded in the following situations. No refunds shall be made for any other reasons.

- 1) Those who paid the examination fee but did not submit the application documents or those who paid the examination fee but whose application documents were not accepted.
 - 2) Those who paid the examination fee more than once by mistake.
 - 3) Those who paid the examination fee but were found to be not qualified in the review process.
- Those who fall under any of these three categories should contact the University (at the address in Section 2 of the Application Procedure) by November 10, 2017.

Screening Method

Applicants will be screened in two stages as follows:

1. First stage of screening

All applications will be reviewed based on the submitted documents, i.e. Application form, Curriculum Vitae, Personal Statement, Scientific and Academic Activities, Certification of English Proficiency.

2. Second stage of screening

Applicants who pass the first stage of screening will undergo an English proficiency test, a essay test, and an individual interview in English. Applicants shall be selected according to the results of these tests as well as the submitted application documents.

(1) Testing schedule

1. General Examination

Date	Timetable	Testing method
November 30th, 2017	10:00 – 11:30	English proficiency test
	12:30 – 13:30	Essay
	14:00 -	Individual interview in English*

Notes:

1. Applicants are allowed to use non-electronic dictionaries during the English proficiency test.
2. Only pencils (mechanical or propelling pencils are acceptable), a pencil sharpener (non-electronic), an eraser, eyeglasses, and a watch (with no other functions) are allowed in the examination room.
3. *Interviews in English are held on an individual basis to determine if the applicant is suitable for our program in terms of qualifications and scholastic aptitude.
4. Examination venue (for the General Examination only)

Shiga University of Medical Science

Detailed information shall be given to those who pass the first stage of screening.

2. Special Examination for applicants from designated universities

Date	Timetable	Testing method
November 16 – November 27, 2017	*	Oral exam in English

Notes:

1. The Special Examination for applicants from designated universities will be administered over the internet.
2. The oral examination will be conducted in English and will cover the same subject as the Personal Statement written in Form C.
3. The examination venue shall be designated by the applicants' university or SUMS.
4. The time for each individual oral examination will be informed via e-mail to persons in charge of the examination at each designated university and each applicant. *

Announcement of Examination Results

First stage of screening: **At 10:00 on November 2, 2017 (tentative)**

Second-stage of screening: **At 10:00 on December 14, 2017 (tentative)**

1. The ID number of successful applicants shall be posted on the bulletin board on campus (see campus map on page 18) and on the SUMS website
<https://www.shiga-med.ac.jp/admission/graduate/result2>
2. The University will send a letter of admission (first stage of screening) by post to applicants who pass the first stage of general examination. If a successful applicant does not receive this mail by November 6, 2017, please contact SUMS at the address shown in Section 2 of the Application Procedure on page 6.
3. Applicants from designated universities who successfully pass the first stage of screening will receive a letter of admission via email. If a successful applicant does not receive this email by November 6, 2017, please contact SUMS at the address shown in Section 2 of the Application Procedure on page 6.
4. The University will send by post a letter of admission and enrollment related documents to all successful applicants of the second stage of screening.
5. No inquiries by telephone will be accepted.

Enrollment Procedure

1. Enrollment period
 - In-person enrollment should be completed between 9:00 and 17:00 on March 8, 2018. If you cannot finish the procedure in time due to circumstances beyond your control, you may inform the University (at the address below) within the period mentioned above (between 9:00 and 17:00 March 8, 2018) and follow the procedure between 9:00 to 17:00 on March 9, 2018.
 - Enrollment can be completed by mail as well. You must inform the University by 17:00 on March 8, 2018, that you are mailing the documents. The mailed documents must arrive by 17:00 on March 9, 2018.
2. Venue for enrollment in person / Mailing address
 Address: Admissions Office
 Shiga University of Medical Science
 Seta Tsukinowa-cho, Otsu City, Shiga 520-2192, Japan
 TEL: 077-548-2071 (Direct line)
3. Admission and tuition fees
 (1) Current Admission fee: 282,000 yen

- (2) Current Tuition fee: 267,900 yen (for half a year)
- 1) Successful applicants will be informed of the details individually.
 - 2) Tuition fees for the semester must be paid using the payment slip provided by SUMS before the end of April, 2018.
 - 3) Tuition fee can be paid yearly.
 - 4) When the tuition fee is revised, the new fee shall be applied starting on the day when the revision takes effect.
4. Exemption from admission and tuition fees
- Admission and tuition fees may be exempt or payment may be postponed, in special circumstances. Successful applicants will be provided with detailed information. In principle, all applicants from designated universities who pass the Special Entrance Examination shall be exempt from admission fee and tuition fees for at least one year.
5. Submission of documents
- Details on the enrollment procedure and required documents shall be provided to successful applicants of the second stage of screening, along with the letter of admission.
6. Other remarks
- (1) For successful applicants who took the General Entrance Examination, the examination admission ticket is required for enrollment. Thus, please keep it until you finish the enrollment process.
 - (2) Those who fail to complete the enrollment procedure by the deadline mentioned above shall be considered to have declined admission.

Handling of Personal Information

Please note that personal information disclosed to SUMS during the application process will be handled according to the following principles.

1. Personal information shall be handled according to the *Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc.* and the *Rules on the Measures for Appropriate Management of Personal Information Held by the National University Corporation, Shiga University of Medical Science.*
2. Personal information, including the name and address provided in the application documents, shall be used for 1) screening of applicants (processing of application and screening), 2) announcement of examination results, and 3) the enrollment procedure.
3. Examination results will be used to prepare documents on how to improve the screening method in the future.
4. Personal information provided in the application documents by applicants that ultimately successfully enroll at the University shall be used for tasks related to 1) student and course registration, 2) student support (health management, application for exemption of tuition fees or scholarships, employment support), and 3) collection of tuition fees.

Goal of the Program

The Doctoral program of the Graduate School of Medicine, Shiga University of Medical Science, is intended to educate able researchers in medical science so they may contribute to the development of medicine and the improvement of social welfare. Students will be provided with a wide breadth and depth of knowledge and skills to allow them to work creatively and independently.

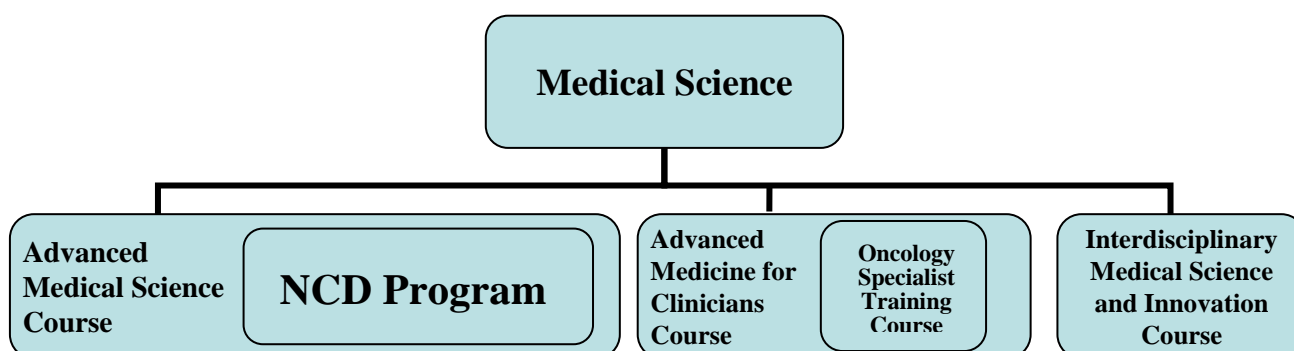
Structure of the Program

Doctoral Program consists of 1 specialty and 3 courses.

In the Course of Advanced Medical Science, there is the Project for Reducing the Burden of Non-Communicable Disease (NCD) in the Asian Pacific Region, NCD Program, which is the Program for Leading Graduate Schools.

In the Course of Advanced Medicine for Clinicians, there is the Oncology Specialist training course.

【Graduate School of Medicine】



The aim of these 3 courses are to train 1. Medical Scientists or High-quality clinicians who can accomplish advanced biomedical experiments 2. Individuals who have interdisciplinary knowledge and capacity in fields including Medicine & Engineering, Medicine & Biotechnology 3. Doctors and Medical Researchers who have biomedical knowledge and ethical understanding.

【Advanced Medical Science Course】

: Take medical experience from basic medicine to clinical medicine, and prepare and complete a dissertation for the doctoral degree.

1. Researchers who have the knowledge and skills to accomplish a creative and ethical research program.
2. Person who has an inquiring mind with the creativity to solve many problems in medicine from basic medical science to clinical medicine.
3. Doctors/Medical researchers who can understand advanced biomedical discoveries and new research activities.

[Advanced Medicine for Clinicians Course]

: Build on experiences in clinical medicine and specialist training to prepare and complete a dissertation for the doctoral degree.

1. Advanced clinicians who possess both ethical understanding and outstanding clinical skills, combined with excellent experimental ability
2. Use experimental results to develop medical research leading to new methods for diagnosis and treatment.
3. Understand the ethical and legal considerations in clinical medicine, and the ability to read and understand the biomedical literature.

[Interdisciplinary Medical Science and Innovation Course]

: Take experiences in medical innovation combined with new discoveries from the fusion of medicine and other fields, and prepare and complete a dissertation for the doctoral degree. This course provides material and subjects for students without a medical school background.

1. Researchers and clinicians include those with ethical skills, interdisciplinary knowledge and research techniques beyond conventional scholarship, including medicine, engineering, biotechnology
2. Researchers will use interdisciplinary knowledge and research to contribute to medical innovation
3. Researchers will contribute to knowledge of basic science and clinical medicine, and provide the interdisciplinary view and research ability to participate in academic, institutional and business environments.

Course Subjects and Number of Credits

See Table 1.

Academic Plan

1. During the four years of the program, students are required to earn 16 credits in the required subjects and four credits in the semi-obligatory subjects in a core area; two credits in the semi-obligatory subjects in a supplemental area; and six credits in the required subjects and two credits in a semi-obligatory of practicum.
2. Starting in the second year, students will engage in their own research work 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.
3. After completion of 2 years of coursework, you will be required to a QE to evaluate your basic academic skills that are necessary for completion of your thesis research project. The QE will include:
 - a. Written examination for required subjects
 - b. Presentation of your planned research
 - c. Oral examination

Your promotion to the 3rd grade will be based on your QE results and your performance in the course work during the first 2 years.

4. Practicum subject (see above 2) are not transferable under “Article.14, Standards for Establishment of Graduate School. Students have to take 1-3 months’ leave from their current employment to complete the coursework.

Major Research Areas

See Table 2.

Awarding of the Degree

1. The degree will be awarded to those who have completed four years of training.
2. The degree awarded is The Doctor of Philosophy in Medical Science (in the Shiga University of Medical Science Leading Graduate Program for Reducing the Burden of Non-Communicable Disease in the Asian Pacific Region)
3. The degree will be awarded to those who have registered as graduate students over 4 years, received credit for more than 30 credits as above mentioned, taken necessary research guidance, and passed the dissertation screening and final examination.

Scholarship and Stipend Support

It is expected that almost students enrolled in this program will be provided with a monthly stipend for supplies and living expenses so that they can concentrate on their studies and research. The employed student cannot receive the monthly stipend. The current stipend is approximately 150,000 yen per month. This can vary from time to time. An internal review committee will decide the award and amount every year based on student performance of course work and research.

This support will terminate on 31st March, 2020 along with support from the MEXT (Ministry of Education, Culture, Science, Sports and Technology of Japan)

Table 1. Medical Science
— Reducing the Burden of Non-Communicable Disease(NCD) In The Asian Pacific Region —

Area	Course grouping	Subject	Grade	Credits			Elective/Required/semi-obligatory subjects
				Lecture	Exersice	Practice	
Core Area	Public Health	Fundamentals of Public Health	1	2			Required
		Health Administration and Public Health Law	2	2			
		Thesis preparation	2		2		
	Fundamentals of 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 Cardiovascular and Neurological Diseases	1	2			semi-obligatory subjects
		Epidemiology of Cancer and Respiratory Diseases	1	2			
		Epidemiology of Metabolic and Kidney Diseases	1	2			
		Social Epidemiology	2	2			
	International Communication	Workshop for Discovering Asian Culture and Ethics	1		2		Required
		Presentation and debates	2		2		
Supple mental Area	Clinical Medicine	Clinical Medicine of Cardiovascular and Neurological Diseases	1	1			semi-obligatory subjects
		Clinical Medicine of Cancer and Respiratory Diseases	1	1			
		Clinical Medicine of Metabolic and Kidney Diseases	2	1			
	Fundamentals of Translational Science	Medical Technology Development	2	1			semi-obligatory subjects
		Fundamentals of Community Medicine and Nursing	2	1			
		The Role of Basic Science	1	1			
Practicum		Global Research Training	2			2	semi-obligatory subjects
		Research and Development in Health-related Industries	2			2	
		Fieldwork in an Asia-Pacific region	3			4	Required
		Presentation at International Conferences	4			2	

Table 2 Major Research Areas

(As of August 1, 2017)

(Faculty belonging to SUMS)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Department of Fundamental Biosciences	Division of Computational Biomedicine	Professor	Masaru Komori	1. Development of innovative laparoscopic surgery simulator 2. 3D modeling of organs with variation 3. Research on medical applications with VR/AR/MR technologies such as depth sensors and haptics
Department of Culture and Medicine	Division of Philosophy	Professor	Yoshihito Muroji	1. Buddha's teachings and his life 2. Philosophy of mahāyāna buddhism 3. Bioethics and medical ethics 4. Asian culture and religions
	Division of English	Professor	Reiko Aiura	1. George MacDonald's views of life and death 2. Study on Byron 3. Inter-Cultural studies 4. Medical English education
Department of Physiology	Division of Integrative Physiology	Professor	Seiji Hitoshi	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
Department of Biochemistry and Molecular Biology	Division of Molecular Medical Biochemistry	Professor	Hisakazu Ogita	1. Signal transduction reseach and genetic analysis in the field of cancer biology and cardiovascular diseases 2. Molecular mechanism of cell adhesion
Department of Pharmacology	—	Professor	Eiichiro Nishi	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
Department of Social Medicine	Division of Public Health	Professor	Katsuyuki Miura	1. Epidemiologic research of cardiovascular diseases 2. Preventive medicine of cardiovascular diseases 3. Nutritional epidemiology
		Associate Professor	Akira Fujiyoshi	1. Epidemiology on cardiovascular disease and lifestyle-related disease 2. Coronary artery calcium 3. Mild cognitive impairment and measures up atherosclerosis
	Division of Medical Statistics	Associate Professor	Sachiko Tanaka	1. Prediction of the future incidence and death 2. Statistical methods for epidemiologic researches 3. Pharmacoepidemiology
Department of Internal Medicine	Division of Cardiovascular and Respiratory Medicine	Professor	Minoru Horie	1. Basic and clinical cardiac electrophysiology 2. Genetic testing in cardiovascular diseases 3. Regenerative medicine in heart failure 4. Research on mechanisms and treatment of ischemic heart diseases
		Associate Professor	Yasutaka Nakano	1. Structure and function relationship of the lung 2. Structure and function relationship of respiratory diseases
	Division of Gastroenterology and Hematology	Professor	Akira Andoh	1. Mucosal immunology 2. Gut microbiota 3. Cytokine network
	Division of Diabetology, Endocrinology and Nephrology	Professor	Hiroshi Maegawa	1. Nutrition and metabolic disease 2. Mechanism of insulin resistance 3. Diabetogenic genes
		Associate Professor	Shinichi Araki	1. Mechanism of development of diabetic nephropathy 2. Risk factors on development of diabetic vascular complications 3. Nutritional research on renal pathophysiology
Department of Surgery	Division of Gastrointestinal Surgery and General Surgery	Professor	Masaji Tani	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
	Division of Cardiovascular Surgery and Thoracic Surgery	Professor	Tohru Asai	1. Vascular functional investigation of coronary artery bypass conduits 2. Hemodynamic functional analysis during off-pump coronary bypass 3. Studies on cardiovascular regenerative therapy 4. Surgical invasiveness in cardiovascular surgical procedures 5. Reparative technical consideration in mitral valve surgery
Department of Neurosurgery	—	Professor	Kazuhiko Nozaki	1. Research for cerebral ischemia 2. Research for cerebral aneurysms 3. Research for cerebral arteriovenous malformations
Department of Radiology	—	Professor	Kiyoshi Murata	1. Researches of diagnosis imaging of the chest 2. Researches of tumor imaging 3. High-resolution CT analysis of diffuse lung diseases
Department of Medical Onclogy	—	Professor	Yataro Daigo	1. Isolation and functional analysis of cancer -klated gene. 2. Elucidation of molecular pathology of cancer by genomics and proteomics analysis. 3. Development of molecular-targeted drugs and cancer vaccines through translational reseach. 4. Development of precision medicine and new cancer biomarkers thorough translational research

Table 2 Major Research Areas

(As of August 1, 2017)

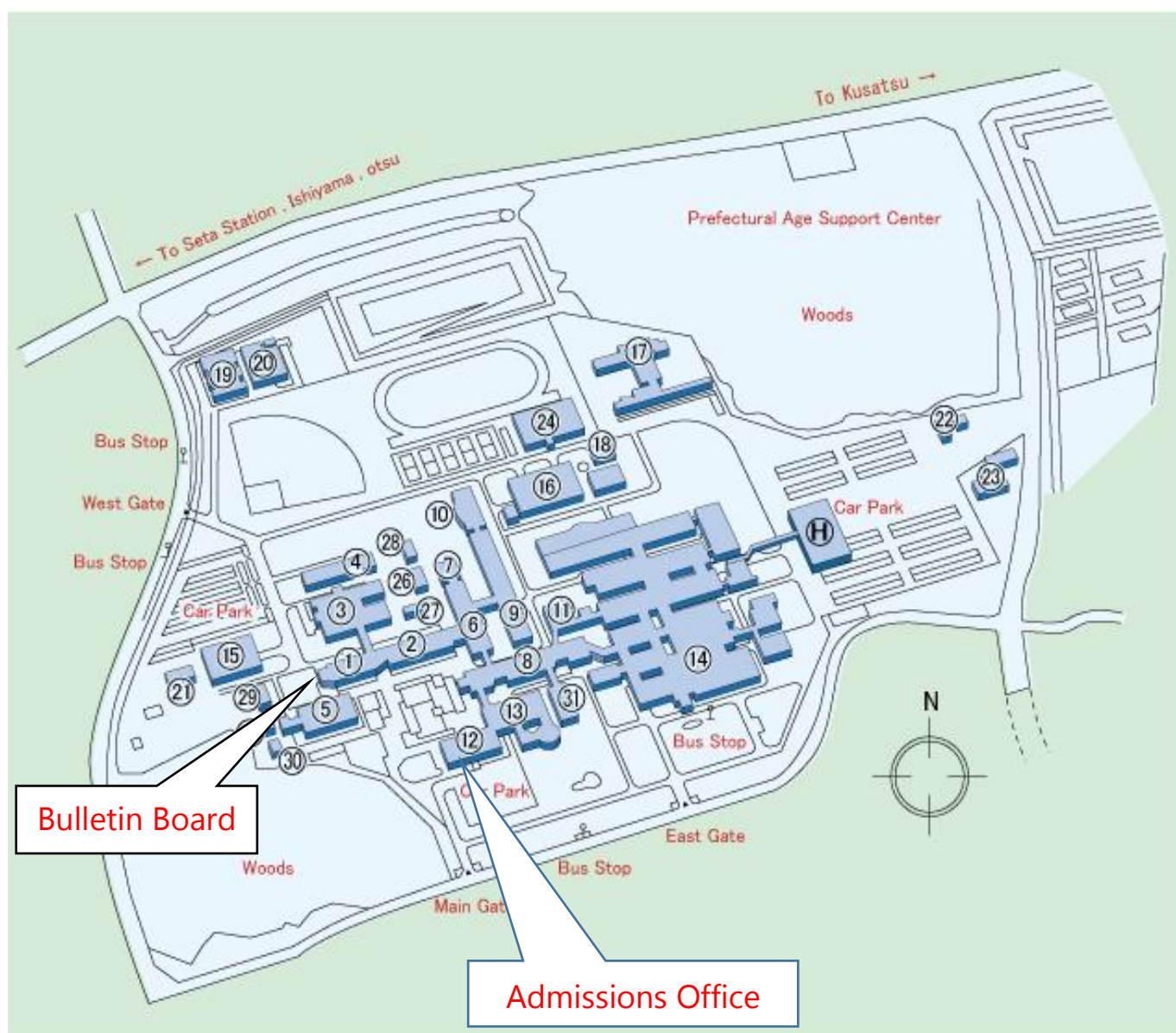
(Faculty belonging to SUMS)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
Medical Informatics and Biomedical Engineering Section	—	Professor	Satoru Nagata	1. Human interface 2. Visual information processing 3. Medical information system development
Center for Clinical Research and Advanced Medicine	—	Professor	Hiromu Kutsumi	1. Regulatory science 2. Development of innovative medicine 3. Gastroenterological endoscopy
Molecular Neuroscience Research Center	Translational Research Unit - Department of Diagnostics and Therapeutics for Brain Diseases	Professor	Ikuo Tooyama	1. Study on Alzheimer's disease and development of diagnostic and therapeutic methods 2. Prevention and preemptive medicine of dementia 3. Magnetic resonance imaging of neurological diseases 4. Molecular biology on neurological diseases
	Translational Research Unit - Department of Biomedical MR Science	Associate Professor	Akihiko Shiino	1. Development of molecularly targeted agents 2. Study and programing of diagnostic software for brain MR imaging 3. Magnetic resonance spectroscopy 4. Clinical study in neurological disorders
Center for Epidemiologic Research in Asia	—	Special Contract Professor	Hirotsugu Ueshima	1. Epidemiology of cardiovascular disease and their risk factors 2. Comparison of coronary artery calcium between US and Japan
	—	Special Contract Professor	Robert Abbott	1. Biostatistics for epidemiologic research 2. Epidemiology of cardiovascular diseases, neurodegeneration, and cognitive impairment 3. Survival analysis and regression analysis
	—	Special Contract Associate Professor	Aya Kadota	1. Epidemiology on DM, CVD and NCD 2. Preventive medicine on DM, CVD and NCD 3. Epidemiologic study on Subclinical atherosclerosis
	—	Special Contract Associate Professor	Seiko Ohno	1. Genomic epidemiology in cardiovascular disease 2. Study of inherited cardiovascular disease
Department of Clinical Nursing	Division of Adult Health Nursing	Professor	Nomi Miyamatsu	1. Health impairment and its lifestyle-related risk factors in adulthood 2. Lifestyle modification for primary and secondary prevention of CVD
Department of Public Health Nursing	—	Professor	Mikiko Ito	1. Family caregivers' experiences of long-term caregiving for older people requiring assistance at home for a long term 2. Long-term prognosis of people living with chronic disease, and exploring their effective life skill

(Faculty belonging to other institutes)

Department / Centre	Division / Unit	Title	Name	Major Study Themes
University of Pittsburgh	—	Associate Professor	Akira Sekikawa	1. International epidemiology of chronic diseases between the US and Japan
Imperial College London	—	Professor	Paul Elliott	1. Cardiovascular disease epidemiology 2. Nutritional epidemiology 3. International cooperative studies
Shiga Prefecture	Health and Medical Welfare Department	Deputy Director	Fumihiko Kakuno	1. Public Health Administration 2. Epidemiology of Infectious disease
The National Institute of Health and Nutrition	Center for International Collaboration and Partnership	Director	Nobuo Nishi	1. Regional difference and time trend in lifestyles and obesity
Aichi Cancer Center Research Institute	Division of Molecular Medicine	Chief	Keitaro Matsuo	1. Cancer Epidemiology 2. Molecular Epidemiology
Johns Hopkins Bloomberg School of Public Health	—	Assistant Scientist	Kunihiro Matsushita	1. Cardiovascular epidemiology (coronary disease, heart failure, peripheral artery disease) 2. Chronic kidney disease epidemiology 3. Risk prediction 4. Epidemiology of diabetes, obesity and adipokines
Fukuoka University	Faculty of Medicine	Professor	Hisatomi Arima	1. Epidemiology of cardiovascular diseases and their risk factors 2. Clinical trials for prevention and treatment of cardiovasclar disease 3. Meta-analysis of observational studies and clinical trials
OMRON Corporation	Division of Technology and Intellectual Property	Technical Specialist	Hiroshi Nakajima	1. Big data analysis of lifestyle such as sleep, nutrition, exercise and blood pressure 2. Research and development to support medical treatment and lifestyle modification
Glaxo Smith Kline	Healthoutcomes Department	Department Head	Toshihiko Kaise	1. Disease epidemiology (respiratory diseases, cancer, diabetes etc.)

Campus Map



Name of Facility

- | | |
|--|---|
| 1 General Education and Research Building | 17 Nurses Housing |
| 2 Basic Medicine Education and Research Building | 18 Incinerator Facilities |
| 3 Basic Medicine Laboratories and Lecture Halls | 19 Waste Treatment Facilities |
| 4 School of Nursing Building | 20 Waste Water Treatment Facilities |
| 5 Student Center | 21 Martial Arts Gymnasium |
| 6 Central Research Laboratory | 22 Guest House |
| 7 Molecular Neuroscience Research Center | 23 International House |
| 8 Clinical Medicine Education and Research Bldg. | 24 Swimming Pool |
| 9 Central Research Laboratory | 25 Music Hall |
| 10 Research Center for Animal Life Science | 26 Nuclear Magnetic Resonance (NMR) Center |
| 11 Clinical Lecture Halls | 27 Others |
| 12 Administration Building | 28 Biomedical Innovation Center |
| 13 University Library | 29 Nursery Center |
| 14 University Hospital | 30 Creative Motivation Center |
| 15 Gymnasium | 31 Center for Epidemiologic Research in Asia |
| 16 Energy Center | |

University Access

From Kansai International Airport (KIX)

1. Take Airport Express "Haruka" bound for JR Kyoto station (approx. 75-80 min).
2. At Kyoto station, change to JR Biwako line (local train), and get off at JR Seta station (approx. 20min).
3. Take Teisan or Oumi bus bound for Shiga-Idai, and get off at Shiga-Idai-Mae (approx. 15min).

From Osaka International Airport (ITM)

1. Take a limousine bus bound for JR Shin-Osaka station (approx. 25min).
2. At Shin-Osaka station, change to JR Kyoto line (rapid or local train).
(note: If you get on the Super rapid train, the train can not stop at Seta Station.)
3. Get off at JR Seta station (approx. 50min). Take Teisan or Oumi bus bound for Shiga-Idai, and get off at Shiga-Idai-Mae (approx. 15min).

