

Program for Nurturing Global Leaders in Tropical and Emerging Communicable Diseases



Training the next generation
of global leaders
in infectious diseases control and management.

Training the next generation of global leaders in infectious disease control

Infectious diseases such as malaria, dengue fever and trypanosomiasis continue to pose a serious threat to the health of the vast population of those living in tropical regions. Furthermore, due to globalisation and climate change, such diseases are also beginning to pose risks to public health in non-tropical countries. Tropical infectious diseases, must now be considered a global public health concern, rather than a local problem, and efforts to reduce their impact must focus on global, international solutions. Cooperation among nations and organizations is a must if we are to effectively combat these threats.

The Graduate School of Biomedical Sciences at Nagasaki University has established a new educational program that aspires to train the next generation of global leaders in emerging communicable disease control. This program aims to provide young professionals with the knowledge and skills necessary to oversee the control of tropical infectious diseases at both the national and international levels.

Nagasaki University's Institute of Tropical Medicine, the only such institute in Japan, has over 70 years of experience in tropical disease research, enabling it to offer an outstanding and unique learning environment to students in this program.



Graduate School of Biomedical Sciences



Institute of Tropical Medicine

Practical research at Nagasaki University's Overseas Research Stations

Overseas research stations have been established in Kenya and Vietnam in collaboration with Nagasaki University. Resident university faculty members conduct advanced research in tropical regions and train students in the treatment of tropical infectious diseases. In 2011, a system was arranged for graduate students to perform extended field research in areas affected by tropical diseases. This international education and research environment is suited to students looking to gain real practical experience.

Overseas Host Organizations

Nagasaki University Institute of Tropical Medicine(Kenya Research Station/Nairobi), Vietnam Research Station(Institute of Tropical Medicine/Hanoi), World Health Organization (Geneva etc.), National Institute of Hygiene and Epidemiology (Hanoi), National Institute of Communicable Diseases of the National Health Laboratory Service (Sandringham), St. Luke's Medical Center (Manila), San Lazaro Hospital Medical Center (Manila), University of the Philippines Diliman (Quezon), University of the Philippines Visayas (Cebu), Mahidol University (Bangkok), Thammasat University (Bangkok), Chiang Mai University (Chiang Mai), London School Of Hygiene and Tropical Medicine (London), The University of Liverpool (Liverpool), Defense Research and Development Establishment (Gwalior), Kenya Medical Research Institute (Nairobi), University of Nairobi (Nairobi), Airlangga University (Surabaya), Institute of Jiangsu Province Blood Center (Jiangsu), Department of Medical Sciences, Ministry of Public Health (Nonthaburi), National University of Singapore (Singapore), Rocky Mountains Laboratories NIAID, NIH (Hamilton), Institute of Tropical Medicine, Antwerp (Antwerp)



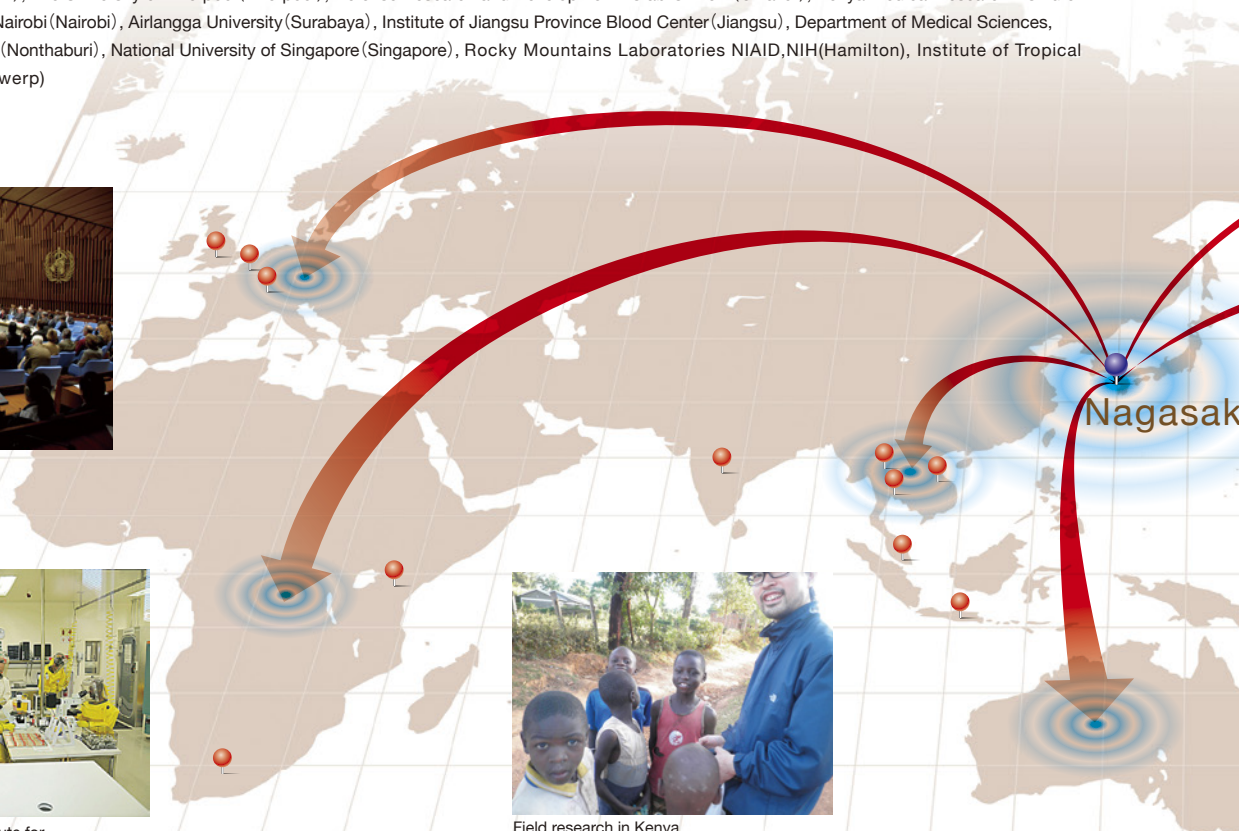
World Health Organization



South Africa National Institute for Communicable Diseases BSL-4 Laboratory

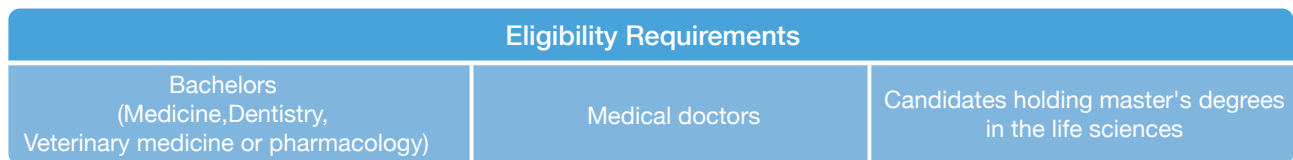


Field research in Kenya

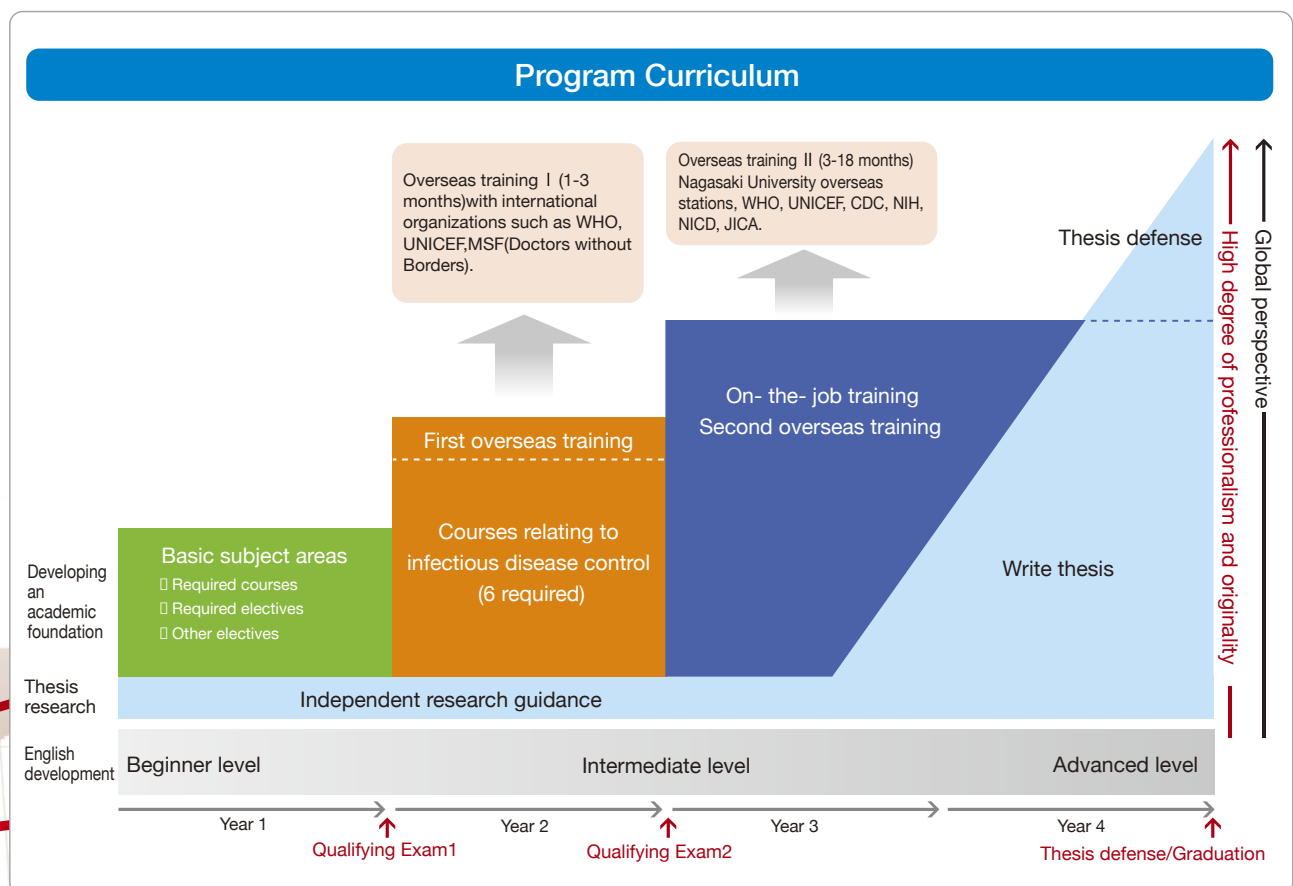
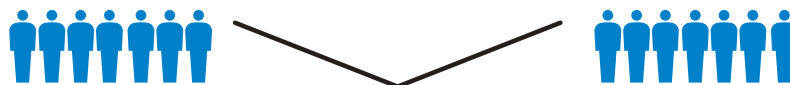


Professional training with an international perspective over a four-year curriculum

Over the course of the four-year duration of this doctoral course, students will learn both theoretical and practical skills from established tropical disease professionals. This education will furnish students with the experience necessary to work effectively in environments where tropical diseases are endemic. The curriculum includes practical components such as on-the-job training in infectious disease control, how to collaborate with international organisations, internships and pathogen handling skills.

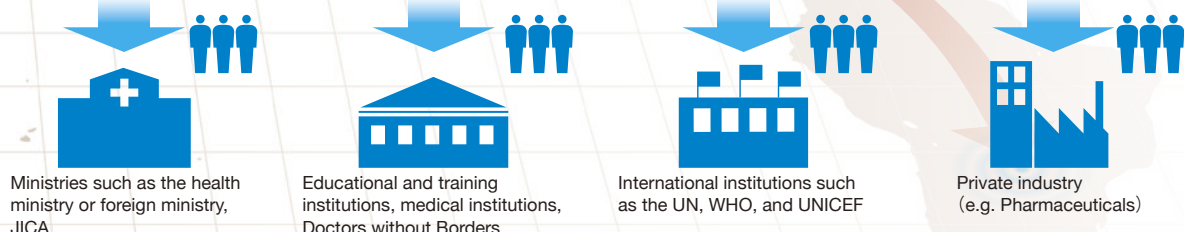


Admissions Selection: Limited to 15 students



Career path assistance

Doctorate (in medicine): After completing the program



Outline of the Program for Nurturing Global Leaders in Tropical and Emerging Communicable Diseases

In order to train experts that can respond to and treat tropical and emerging infectious diseases, the following components are included in the four-year graduate program.

1. Courses offered by experienced faculty and leading experts

Lectures, laboratories, and research sessions are conducted by 28 faculty members, including professors from the Nagasaki University Institute of Tropical Medicine, the Graduate School of Biomedical Sciences, and others experienced in working with international institutions. In addition, experts in infectious disease are employed as adjunct professors at Nagasaki University.

2. All-English curriculum

All lectures in the Ph.D Course in Tropical Medicine at the Graduate School of Biomedical Science are conducted in English.

3. Communication skills taught throughout the program

Communication skills are taught throughout the program. Faculty members who have worked at the WHO or other international organizations, JICA, the Japanese Foreign Ministry, or nongovernmental organizations teach these courses. Students are trained using interactive methods such as role play and debates.

4. Student evaluations

Students are evaluated at four checkpoints: on admission, in Year 1, in Year 2, and upon graduation. The following three examinations must be completed: the admissions examination, a first qualifying examination, and a second qualifying examination. Communication skills are also evaluated. Finally, students must produce a doctoral thesis. This assessment process guarantees that students' knowledge and skills can contribute to solving problems in the field of tropical and emerging infectious diseases.

5. Practical professional training

In collaboration with international organizations, several research institutions aid in providing practical training to graduate students in the program at overseas research stations in Kenya, Vietnam and organizations such as the World Health Organization (WHO), Doctors without Borders (MSF), and the South Africa National Institute for Communicable Diseases (NICD).

6. Student financial aid

A scholarship program is available so that students can focus exclusively on their studies. This program is offered to 15 students per year.

7. Mentorship program

Faculty experienced in working with international organizations and visiting professors from the WHO or other nongovernmental organizations serve as mentors providing emotional support and career counseling.



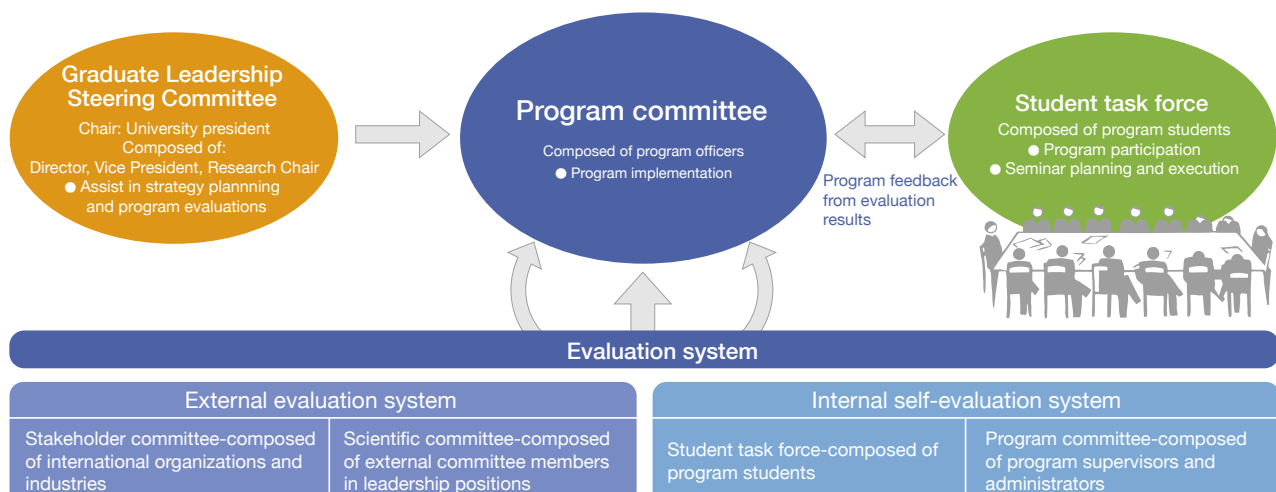
Leadership promotion

Curriculum guidance and career path support

The 28 faculty members previously mentioned form the Graduate Leadership Program Committee. One member is assigned to oversee each subject area. For each student, one faculty member familiar with the student's career track or research field is appointed to serve as a mentor. Faculty from other university centers such as the Center for International Collaborative Research and the Center for Industry, University, and Government Cooperation are also available to assist students.

Program governance

The Graduate Leadership Steering Committee, chaired by the president of Nagasaki University, makes decisions regarding planning, management, progress evaluation, and operational policies of the program. This committee is also responsible for deciding on important matters that arise from time to time. A Leadership Program Student Seminar is conducted by a student task force made up of program students. The purpose of this seminar is to evaluate the program from a student's perspective.

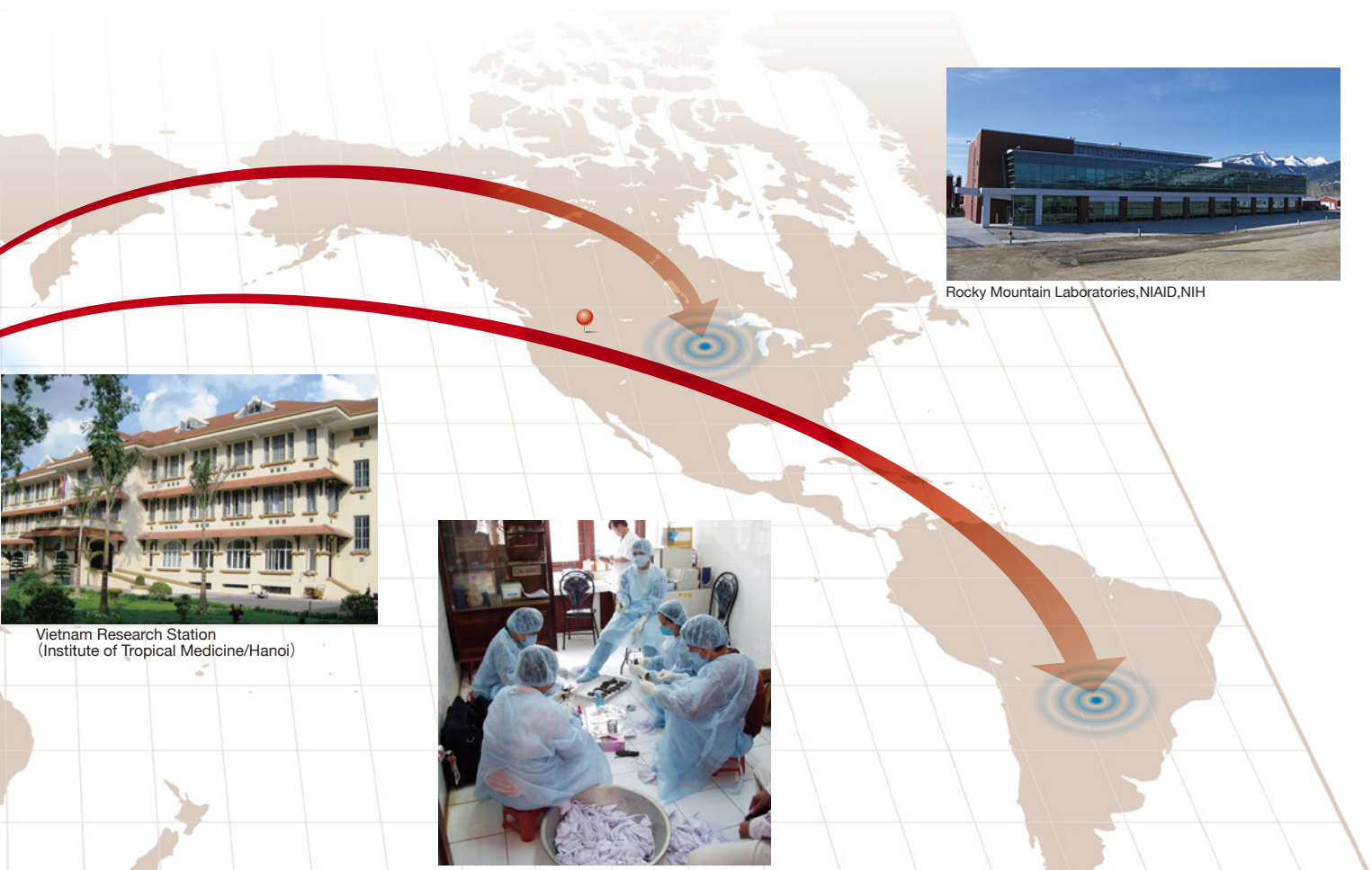




Nagasaki University President,
Shigeru Katamine

In the past 30 years, mankind has been faced with the threat of new and emerging infectious diseases such as AIDS, severe acute respiratory syndrome (SARS), bovine spongiform encephalopathy (BSE), and highly pathogenic influenza. Further, in developing countries within Asia and Africa, many individuals continue to contract infectious and parasitic diseases such as our old enemies malaria and diarrheal. The World Health Organization (WHO) refers to leishmaniasis, dengue fever and other infectious tropical diseases as “neglected tropical diseases” (NTDs) and calls for all nations to cooperate in efforts to combat them. Since the Infection Research Department was established at Nagasaki University Graduate School of Biomedical Sciences in 2000, the number of faculty researching tropical and emerging infectious diseases has increased and partnerships with overseas institutions have been strengthened. The educational and research infrastructure of the department is being advanced at various locations in Africa and Asia; for example, research facilities of Nagasaki University have been established in Kenya and Vietnam. The Institute of Tropical Medicine is internationally recognized and is a designated WHO Collaborating Center for Tropical Viral Diseases.

The new program for nurturing global leaders in tropical and emerging infectious diseases aims to provide practical education using a curriculum that harnesses the university’s resources and its well-developed research system. Students graduate well equipped to become global leaders who can solve problems from an international perspective.



Rocky Mountain Laboratories, NIAID, NIH



Vietnam Research Station
(Institute of Tropical Medicine/Hanoi)



List of Faculty in the Nagasaki University Program for Nurturing Global Leaders in Tropical and Emerging Communicable Diseases

Name	Department	Special subject
Susumu Shirabe	Regent and Vice President Nagasaki University,Prof.	Neurology
Kouchi Morita	Institute of Tropical Medicine Nagasaki University Dean,Prof.	Virology
Noriyuki Nishida	Nagasaki University Graduate School of Biomedical Sciences, Director of the Course of Emerging Infectious Diseases,Prof.	Pathogenic microbiology
Shigeru Kouno	Trustee, Nagasaki University/Director, Nagasaki University Hospital ,Prof.	Internal medicine
Taro Yamamoto	Institute of Tropical Medicine,Nagasaki University, Prof.	International health science
Toshiaki Inada	Director of the Center for Language Studies,Prof.	linguistics and applied linguistics
Masayuki Susai	Trustee ,Nagasaki Univeisty,Prof.	International Finance,Monetary Economics
Nobuyuki Kobayashi	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Vilology
Tosihumi Matsuyama	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Virology, Molecular epidemiology
Hiroyuki Moriuchi	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Pediatrics
Osamu Nakagomi	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Molecular epidemiology
Koji Nakayama	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Infectious microbiology
Katsunori Yanagihara	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Medical microbiology and Infectious Diseases
Katsuyuki Yui	Nagasaki University Graduate School of Biomedical Sciences,Prof.	Immunology
Kouya Ariyoshi	Institute of Tropical Medicine, Nagasaki University, Prof.	Infectious internal medicine
Shinjiro Hamano	Institute of Tropical Medicine, Nagasaki University, Prof.	Parasitology,Immunology
Masahiro Hashizume	Institute of Tropical Medicine, Nagasaki University, Prof.	Public health
Kenji Hirayama	Institute of Tropical Medicine, Nagasaki University, Prof.	Immunology
Toshiya Hirayama	Institute of Tropical Medicine, Nagasaki University, Prof.	Bacteriology
Yoshio Ichinose	Institute of Tropical Medicine, Nagasaki University, Prof.	Bacteriology
Osamu Kaneko	Institute of Tropical Medicine, Nagasaki University, Prof.	Parasitology,Protozoology
Laothavorn Juntra	Institute of Tropical Medicine, Nagasaki University, Prof.	Clinical Product development
Noboru Minakawa	Institute of Tropical Medicine, Nagasaki University, Prof.	Enviromental medicine
Tetsu Yamashiro	Institute of Tropical Medicine, Nagasaki University, Prof.	Tropical microbiology
Jiro Yasuda	Institute of Tropical Medicine, Nagasaki University, Prof.	Virology
Hutoshi Hasebe	Center of International Collaborative Research,Prof.	Virology
Yasuhiko Kamiya	Nagasaki University Graduate School of International Health Development	International health science
Richard Culleton	Institute of Tropical Medicine, Nagasaki University, Associate Prof.	Malariaology,Genetics

Leading program teachers

Kiri Honma	Nagasaki University Graduate School of Biomedical Sciences, Associate Prof.	Immunology, Pediatrics
Takeshi Ishikawa	Nagasaki University Graduate School of Biomedical Sciences, Associate Prof.	Bioinformatics
Nguyen Huy Tien	Institute of Tropical Medicine, Nagasaki University,Associate Prof.	Evidence-based medicine,Parasitology,Biochemistry
Todd Saunders	Nagasaki University Graduate School of Biomedical Sciences, Assistant Prof.	Geography,Epidemiology,Biostatistics
Ken Watanabe	Nagasaki University Graduate School of Biomedical Sciences, Assistant Prof.	Virology
Masahito Asada	Institute of Tropical Medicine, Nagasaki University, Assistant Prof.	Parasitology,Protozoology
Chaves Sanabria Luis Fernando	Institute of Tropical Medicine, Nagasaki University, Assistant Prof.	Mathematical biology,Biometry
Daisuke Hayasaka	Institute of Tropical Medicine, Nagasaki University, Assistant Prof.	Vilology, Immunology
Risa Nakamura	Institute of Tropical Medicine, Nagasaki University, Assistant Prof.	Immunology
Saori Sakabe	Institute of Tropical Medicine, Nagasaki University, Assistant Prof.	Virology
Shah Mohammad Monir	Asia/Africa Research Station,Assistant Prof.	Bacteriology
Taichiro Takemura	Asia/Africa Research Station,Assistant Prof.	Virology,Tropical microbiology
Mai Kumagami	Center for Language Studies,Assistant Prof.	Applied linguistics

Course List

Course division	Subject	Year				Course division	Subject	Year				
		1	2	3	4			1	2	3	4	
Basic subject	Required	Infectious Disease Epidemiology	○				Related to the infectious diseases management	International Health		○		
		Medical Virology	○					Medical Microbiology and Infectious Diseases		○		
		Medical Microbiology	○					Emergency Management in Communicable Disease Epidemics		○		
		Medical Parasitology	○					Clinical Management of Tropical Infectious Diseases		○		
		Medical Immunology and Genetics	○					Epidemiology & Statistics		○		
		Bioethics	○					Risk Management		○		
		Medical Entomology	○					Overseas training I		○		
	Required electives	Practical training for laboratory work A-1	○				Overseas training II			○	○	
		Practical training for laboratory work A-2	○				Thesis Research			○	○	
		Practical training for laboratory work B-1	○				Practical training for communication skill	Communication Skill I	○			
		Practical training for laboratory work B-2	○					Communication Skill II		○		
	Electives	Practical training for laboratory work C-1	○				Communication Skill III			○	○	
		Practical training for laboratory work C-2	○				Communication Skill IV			○	○	
		International Economics	○	○								
		International Law and Policy	○	○								
	Organizational Management	○	○									
	Cultural Anthropology	○	○									



Nagasaki University Graduate School of Biomedical Sciences Student Affairs Division Leading Graduate School Support Office

1-12-4 Sakamoto, Nagasaki 852-8523 Tel:+81-95-819-7161 Fax:+81-95-819-7168 Email:lead_jimu@ml.nagasaki-u.ac.jp
Program home page (to launch April 1, 2013) :<http://www.tecd.prj.nagasaki-u.ac.jp/>