

Program for Nurturing Global Leaders in Tropical and Emerging Communicable Diseases



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	Affiliation	Specialty
Prof. Shunichi Yamashita	Trustee, Nagasaki University	Endocrinology, Metabolism
Prof. Kouichi Morita	Dean, Institute of Tropical Medicine	Virology
Prof. Noriyuki Nishida	Graduate School of Biomedical Sciences	Pathogenic Micrology
Prof. Koichi Izumikawa	Graduate School of Biomedical Sciences	Infectious Diseases, Infection Control, Medical Mycology
Prof. Taro Yamamoto	Institute of Tropical Medicine	International and Global Health, Field Medicine
Prof. Toshiaki Inada	Director, Center for Language Studies	Linguistics and Applied Linguistics
Prof. Masayuki Susai	Faculty of Economics	International Finance, Monetary Economics
Prof. Nobuyuki Kobayashi	Graduate School of Biomedical Sciences	Virology, Molecular Biology
Prof. Toshifumi Matsuyama	Graduate School of Biomedical Sciences	Virology, Molecular Immunology
Prof. Hiroyuki Moriyuchi	Graduate School of Biomedical Sciences	Pediatrics, Virology, Infectious Diseases
Prof. Osamu Nakagomi	Graduate School of Biomedical Sciences	Hygiene, Molecular Epidemiology
Prof. Koji Nakayama	Graduate School of Biomedical Sciences	Infectious Microbiology
Prof. Katsunori Yanagihara	Graduate School of Biomedical Sciences	Clinical Microbiology, Infectious Diseases
Prof. Katsuyuki Yui	Graduate School of Biomedical Sciences	Immunology
Prof. Koya Ariyoshi	Institute of Tropical Medicine	Infectious Internal Medicine
Prof. Shinjiro Hamano	Institute of Tropical Medicine	Parasitology, Immunology
Prof. Masahiro Hashizume	Institute of Tropical Medicine	Epidemiology, Population Health
Prof. Kenji Hirayama	Institute of Tropical Medicine	Immunogenetics
Prof. Toshiya Hirayama	Institute of Tropical Medicine	Bacteriology
Prof. Yoshio Ichinose	Institute of Tropical Medicine	Bacteriology
Prof. Osamu Kaneko	Institute of Tropical Medicine	Parasitology, Protozoology
Prof. Laothavorn Juntra	Institute of Tropical Medicine	Clinical Product Development
Prof. Noboru Minakawa	Institute of Tropical Medicine	Environmental Medicine
Prof. Tetsu Yamashiro	Institute of Tropical Medicine	Tropical Microbiology
Prof. Jiro Yasuda	Institute of Tropical Medicine	Virology
Assoc. Prof. Richard L. Cullerton	Institute of Tropical Medicine	Malariaology, Genetics
Prof. Futoshi Hasebe	Center of International Collaborative Research	Virology
Prof. Kazuhiko Moji	Dean, Graduate School of International Health Department	Human Ecology, Eco Health Study
Prof. Yasuhiko Kamiya	Graduate School of International Health Department	International Health Science
Assoc. Prof. Tsuyoshi Hamada	Nagasaki University Advanced Computing Center	Computer Technology

Nagasaki University Leading Program Teachers

Assoc. Prof. Kiri Honma	Graduate School of Biomedical Sciences	Immunology, Pediatrics
Assoc. Prof. Takeshi Ishikawa	Graduate School of Biomedical Sciences	Molecular Simulation, Bioinformatics
Asst. Prof. Todd Saunders	Graduate School of Biomedical Sciences	Geography, Epidemiology, Biostatistics
Asst. Prof. Ken Watanabe	Graduate School of Biomedical Sciences	Virology
Assoc. Prof. Nguyen Huy Tien	Institute of Tropical Medicine	Evidence-based Medicine, Parasitology, Biochemistry
Asst. Prof. Masahito Asada	Institute of Tropical Medicine	Parasitology, Protozoology
Asst. Prof. Luis F. Chaves	Institute of Tropical Medicine	Mathematical Biology, Biometry
Asst. Prof. Daisuke Hayasaka	Institute of Tropical Medicine	Virology, Immunology
Asst. Prof. Risa Sonoda	Institute of Tropical Medicine	Immunology
Asst. Prof. Saori Sakabe	Institute of Tropical Medicine	Virology
Asst. Prof. Mohammad M. Shah	Institute of Tropical Medicine	Bacteriology, Biochemistry, Immunopharmacology
Asst. Prof. Taichiro Takemura	Institute of Tropical Medicine	Virology, Tropical Microbiology
Asst. Prof. Mai Kumagami	Center for Language Studies	Applied Linguistics

(as of January 1, 2015)

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		○			
	Required electives	Bioethics	○					Risk Management		○			
		Medical Entomology	○					Overseas training	Overseas Training I		○		
		Practical training for laboratory work A-1	○						Overseas Training II			○	○
		Practical training for laboratory work A-2	○					Thesis Research	Thesis Research			○	○
		Practical training for laboratory work B-1	○						Communication Skill I		○		
Electives	Practical training for laboratory work B-2	○				Practical training for communication skill	Communication Skill II		○				
	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	○	○										



Contact:

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

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Program Website: <http://www.tecd.prj.nagasaki-u.ac.jp/>



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 with over 70 years of experience in tropical disease research, and the only such institute of its kind in Japan has a working relationship with the TECD program enabling the Institute to offer an outstanding and unique learning environment to program students.



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



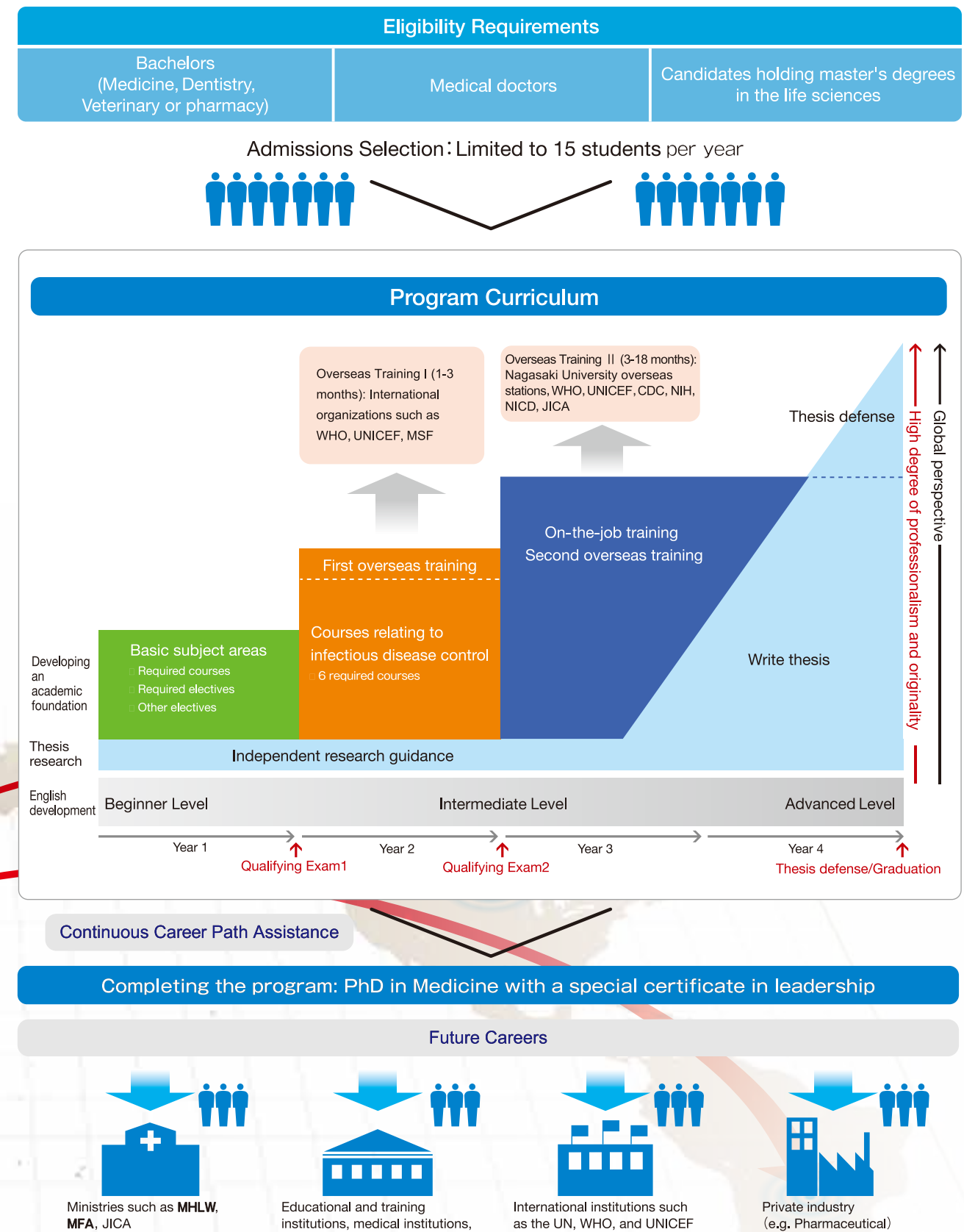
South Africa National Institute for Communicable Diseases BSL-4 Laboratory



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.



Outline of 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, Ministry of Foreign Affairs Japan 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

Students enrolled in this program may be awarded a scholarship (up to 170,000JPY per month) to cover school and living expenses so that they can focus exclusively on their studies.

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.

