

Kyoto University

Graduate Program for Medical Innovation (MIP)

What is the Graduate Program for Medical Innovation?

In order for medical and healthcare innovation in Japan to be accelerated and disseminated worldwide, a system for training excellent personnel who take charge of cutting-edge research and development, and its applications, needs to be established strategically. Based on this idea, the Graduate Program for Medical Innovation aims to train both MD (medical doctor) students and non-MD students to be medical innovators with a global mindset. This will be achieved through collaboration between accomplished medical, pharmaceutical, and health science researchers at Kyoto University.

Kyoto University has been pursuing the world's highest level of research and has produced internationally-recognized researchers including Nobel laureates. Curriculums that take advantage of this research-based strength of the university have been established by Graduate School of Medicine, Graduate School of Pharmaceutical Sciences, Center for iPS Cell Research and Application (CiRA), and the Institute for the Advanced Study of Human Biology (ASHBi), operating under the World Premier International Research Initiative (WPI).

Characteristics of the program

This program is a 5-year doctoral program. For students who fulfill the requirements for completion of the program in addition to attending and completing the curriculum in their departments, the statement, “completed Graduate Program for Medical Innovation,” will be added to the degree certificate.

Eligible Students/Enrollment Period

Students who enrolled the one of following departments.

Graduate school	Departments
Graduate School of Medicine	Medicine, Medical Science, Public Health, Human Health Sciences
Graduate School of Pharmaceutical Sciences	Pharmaceutical Sciences, Biomedical Sciences, Bioinformatics and Chemical Genomics

Recruitment for the program begins in April and the program commences in June.

There is no admission fee or tuition for the program.

Evaluation system

Multiple supervisors conduct qualifying examinations at multiple stages (twice in total during the master’s course and twice in total during the doctoral course). Evaluation will be performed from the perspectives of 1) capability to change viewpoints and think ahead, 2) creativity (unique thinking and research capability for exploration of new fields or approaches without being bound by existing research fields or techniques, and 3) communication skills. The students will prepare the research progress portfolio so that their supervisors understand the research process and provide advice and feedback to the students, instead of focusing only on the result of the research.

Curriculum

		M1	M2	D1	D2	D3/D4			
Research work		Research for doctoral dissertation		Research for doctoral dissertation			Thesis defense & Final Screening and Certificate for the Program		
		Pre-research		(Interdisciplinary) Joint research project					
Course work	Group of core courses	<u>Graduate Courses for Integrated Research Training</u> (“cross-stage type [basic/applied]” colloquium) <ul style="list-style-type: none"> · Approximately 10 courses will be established for each specialty · More than 200 young instructors allocated as mentors for students 						Thesis defense & Final Screening and Certificate for the Program	
		<u>Core medical education courses</u> Systematic education of concepts in medical knowledge and way of thinking through anatomy, physiology, pathology, etc.							
	Group of courses for career development and improvement of skills		Frontier type Human Resource Development in Medical Science		Practical lectures by outside lecturers such as corporate researchers Promotion of interactions and exchange matching of research and human resources with students/university researchers				
			Introduction to Drug Discovery and Development						
Medical Engineering for Society									
		Healthcare Innovation Design							
		Entrepreneurship Program							
Activities for career development		Internship in Japan and abroad							
International brain circulation		Industry-academia matching academic exchange meeting/company tour							

Unlike conventional core courses, students in the program can take “Core Medical Education Courses” and “Graduate Courses for Integrated Research Training” that fit their background and research objectives to customize their education. The requirements for courses and number of credits specified by each graduate school, which are also required for completion of the program, should still be met.

The “Core Medical Education Courses ” are designed assuming that they are taken by non-MD students such as working adults and international students. These courses include topics on anatomy, physiology, and pathology.

The goal of the “Graduate Courses for Integrated Research Training” for individual specialties is to improve the practical ability for research, capability for changing perspectives and forward thinking, creativity, and communication skills that are necessary for intellectual professionals. Colloquium-type lectures and exercises are given in English without being bound by the division of student’s laboratory, for about 10 individual specialties including cancer, immunity/allergy/infection, neuroscience, regenerative medicine/organ reconstruction medicine, and lifestyle diseases/aging/metabolic medicine.

Contact Information

Education Promotion Office, Graduate School of Medicine, Kyoto University
Room 302, 3rd Floor, Science Frontier Laboratory Building, Faculty of Medicine Campus
Yoshida-Konoe-cho, Sakyo-ku, Kyoto 606-8501, JAPAN
Phone: 075-753-9334
E-mail: takuetsu-med@mail2.adm.kyoto-u.ac.jp
URL: <https://www.mip.med.kyoto-u.ac.jp>

FAQ

Q1 How are the graduate school, MIP, and the requirements for completion of each of them related?

[Answer]

As per the standard procedure, you will fulfill the requirements at your graduate school by preparing your graduate thesis in accordance with the rules of your graduate school. Completion of MIP occurs by completing the required training (see Q5) and earning credits for the specified subjects in 5 (or 4) years.

Q2 What can I do in MIP?

[Answer]

MIP is, in principle, a 5-year program. The timing for enrollment in the program is 1) the first year in a master's course, 2) the first year in a doctorate course (which follows a master's course), or 3) the first or second year of a 4-year doctorate course. During the first and second years in MIP, you will be trained to improve your practical ability to complete your doctorate course while taking "Core Medical Education Courses." During the third to fifth years in MIP, you will be mainly engaged in research work. You will either develop a plan for interdisciplinary research or work on an internship in Japan or abroad, under the supervision of the supervisor in your graduate school. MIP will cover a portion of the expenses.

Q3 Is there any financial support for MIP students?

[Answer]

There is a system for providing Research Assistant (RA) compensation to students selected for MIP in a doctorate course or in a 4-year doctorate course. The compensation is approximately 120,000 yen per month. There are certain criteria which must be met in order to receive this compensation. For students in a master's course, Teaching Assistant (TA) compensation of 50,000 yen per month will be provided if certain conditions are met.

*The details of this financial support are subject to change. Please see the program's website for the most current information.

Q4 Is there any support for the career development after completion of MIP?

[Answer]

MIP is designed to produce doctoral graduates who are active in not only academia but companies. Upon request from students, the program will organize company tours, company briefings, internships, or other events.