

Course Outline

The Doctoral Program provides well integrated education, offering courses which may be chosen depending on the goals of individual students to meet social needs.

Basic Medicine Course	<p>For future researchers and educators in medical/life sciences Students acquire broad expertise required to become independent researchers, learn various research approaches including techniques for designing experiments, and develop their research capabilities. They are also expected to acquire the competence and skills to apply and utilize their expertise to medical and life science fields with interdisciplinary approach.</p>
Clinical Medicine Course	<p>For future clinicians who excel in clinical techniques and research competence Students will gain the research competence by applying methods targeting human rather than traditional methods using model animals or cells. This course provides the Clinical Collaborative Departments, where students can proceed their research in clinical medicine under multiple instructors including dedicated instructors and collaborative leading clinicians at institutions where advanced and specialized diagnoses, examinations and treatments are conducted.</p>
Social Medicine Course	<p>For future professionals who undertake the task of improvement of health and safety at the regional and international levels. Students start by learning research methods in social sciences including research ethics, basic and applied statistics, medical informatics and EBM (evidence-based medicine). This course emphasizes social medicine and preventive medicine, rather than biology and life science. Students aim at mastering the research approaches and skills that are necessary for research in public health and preventive medicine.</p>

Standard Duration for Completion: 4 Years

- Early Graduation: A doctoral student who publishes at least two main research papers as the first author in English-language journals with impact factor and who meets other requirements may complete the Doctoral Program up to 1 year before the end of the course term.
- Long-Term Study Program: Working students may take up to 6 years, paying tuition for 4 years.

Interim Evaluation

Students have to undergo an interim evaluation at the beginning of the 3rd year, where examiners will check the progress of the work.

Completion Requirements

- 1) Submission of a thesis (Dissertation).
- 2) One main research paper accepted or published in an English-language journal with impact factor (the applicant must be the first author).
- 3) Completion of the required number of credits (30 or more credits).

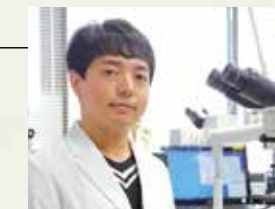
Clinical Collaborative Departments

A system of clinical collaborative departments was implemented to promote highly advanced clinical medicine research, and it was designed for Doctoral Program students who choose the Clinical Medicine Course. It aims at training students to be excellent clinicians with impeccable clinical skills and research acumen. Under this system, students can receive research instruction from leading clinicians of unique medical institutions where advanced, specialized diagnoses, examination and treatments are conducted and patients' data, the information which may not be readily available at the university hospital, are collected. Furthermore, full-time faculty members also provide consummate theoretical and practical education.

Messages from Students of the Doctoral Program

Pathology Research for Clinical Application

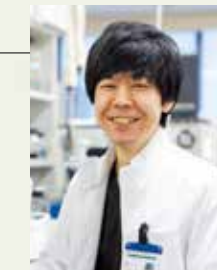
ISE Koki
2nd-year Doctoral Student
Basic Medicine Course, Department of Cancer Pathology



I chose to become a pathologist in my 4th year of undergraduate school because I found diagnostic pathology so interesting. Pathology is a profound field, and as the science advances, pathology classifications are continually updated and revised on a daily basis. Therefore, I thought it would be a very valuable time for me to enter a doctoral program in parallel with my clinical training to learn about the latest scientific practices and experience molecular pathological techniques. I wish to learn the latest research techniques and conduct research that can be applied to clinical practice using methods such as spatial analysis, which is a strong point of pathology. It is also attractive that I can get find inspiration from a wide variety of researchers involved in the department.

Aiming to develop better treatments

SHIRAISHI Masahiro
4th-year Doctoral Student
Clinical Medicine Course, Department of Pediatrics



After completion of my clinical training, I worked as a pediatric cardiologist. It was in this capacity that I faced numerous challenges and limitations in my practice as a doctor. These experiences as well as my desire to contribute to the development of better medical treatments led me to apply for the doctoral course. Although cardiac stem cell transplantation therapy may be a therapeutic option for heart failure, many issues remain for clinical application, including therapeutic effects. To improve therapeutic effects, we are conducting research in collaboration with the Laboratory of Molecular Design of Pharmaceuticals, Faculty of Pharmaceutical Science. My theme is the development of cardiac stem cell transplantation therapy using cardiac progenitor cells with activated mitochondria. I look forward to working with you on research that will lead to a brighter future for medical care.

Considering the Health of Communities

WAKASA Hana
2nd-year Doctoral Student
Social Medicine Course, Department of Public Health



As a nursing student, I developed an interest in societal health while caring for patients. This inspired me to pursue graduate studies and research during my master's program, which motivated me to pursue a Ph.D. Currently, my research focuses on how the lifestyle habits of individuals in a community affect their overall health. Since I am studying actual residents in the area, the results may not always align with my expectations. However, I persevere by analyzing data on my computer and occasionally going out into the community, searching for hints that may contribute to better health. I hope that the results of my research will be useful for the community and society at large.