



Graduate School Graduate School of Pharmacy and Pharmaceutical Sciences

Doctoral Program

With the rapid aging of society and evolving lifestyles, healthcare is becoming increasingly sophisticated and specialized. As such, pharmacists are expected to demonstrate the highest ethical standards and advanced professional expertise, as well as a profound understanding of medical safety. In addition, there is an urgent need to cultivate pharmacists who are also equipped with the ability to conduct clinical pharmacy research. However, at present, only a limited number of pharmacists are capable of discussing matters on the basis of evidence-based medicine, and the field faces numerous challenges, including inadequate human resource development systems in the areas of clinical pharmacy and specialist pharmacy, along with a lack of leaders, and insufficient management education. In light of this background, there is a pressing need to cultivate pharmacist-scientists equipped with both clinical and research perspectives.

At the same time, new drug discovery modalities are emerging all the time, thanks to advances in the life sciences and technology. A deep understanding of clinical practice is essential in order to foster pharmacy researchers capable of accurately understanding these new modalities and linking them into practical research. With its nine undergraduate faculties, seven graduate schools, and six affiliated hospitals, Juntendo University has a track record of integrating healthcare, education, and research to achieve progress. The Graduate School of Pharmacy and Pharmaceutical Sciences takes full advantage of these strengths, and attaches importance to the coordination of pharmacy education with clinical practice.

The doctoral program in pharmacy promotes wide-ranging research from basic to advanced fields, and cultivates personnel equipped not only with advanced expertise, but also a good general education, an international outlook, and planning ability. In addition, to ensure that graduates of the program can play an active role as researchers, educators, and professionals in a diverse array of fields after receiving their degree, we have established two courses—the Advanced Pharmacy Research Course and the Clinical Pharmacy Research Course—with the aim of nurturing personnel who will be able to contribute to society.



Become a pharmacist shaping the future of therapeutics

Graduate education designed to cultivate world-class pharmaceutical professionals by linking drug discovery with clinical practice

With the advent of the super-aging society and changes in lifestyles, medical care is becoming increasingly sophisticated and specialized. As such, pharmacists require a highly ethical perspective and great expertise, as well as a profound understanding of medical safety. In addition, there is an urgent need to cultivate pharmacists who are also equipped with the ability to conduct clinical pharmacy research. However, at present, only a limited number of pharmacists are capable of discussing matters on the basis of evidence-based medicine, and the field faces numerous challenges, including inadequate human resource development systems in the areas of clinical pharmacy and specialist pharmacy, along with a lack of leaders, and insufficient management education. In light of this background, there is a powerful need to nurture pharmacist-scientists equipped with both clinical and research perspectives.

At the same time, new drug discovery modalities are emerging all the time, thanks to advances in the life sciences and technology. A deep understanding of clinical practice is essential in order to foster pharmacy researchers capable of accurately understanding these new modalities and translating them into clinically applicable research. With its nine undergraduate faculties, seven graduate schools, and six affiliated hospitals, Juntendo University has a track record of organically blending medical care, education, and research to achieve progress. The Graduate School of Pharmacy and Pharmaceutical Sciences takes full advantage of these strengths, and attaches importance to the coordination of pharmacy education with clinical practice.

The doctoral program in pharmacy promotes wide-ranging research from basic to advanced fields, and cultivates professionals who possess advanced expertise, a broad academic foundation, an international outlook, and planning ability. In addition, to ensure that graduates of the program can play an active role as researchers, educators, and professionals in a diverse array of fields after receiving their degree, we have established two courses—the Advanced Pharmacy Research Course and the Clinical Pharmacy Research Course—with the aim of nurturing personnel who will be able to contribute to society.

The Advanced Pharmacy Research Course seeks to foster researchers and educators capable of producing research outcomes that directly inform clinical practice, in order to create the latest drug modalities. As well as developing an understanding of clinical

questions and needs, and gaining unsurpassed expertise and insight, students will acquire the ability to undertake in-depth multidisciplinary investigation, and to think flexibly from an international perspective about not only basic research in medicine and pharmacy, but also its clinical applications.

At a time when a steady stream of new pharmaceuticals is emerging, the Clinical Pharmacy Research Course enables students to gain the ability to think logically about increasingly advanced and complex drug therapies, and to pursue them scientifically. The course aims to cultivate highly skilled professionals with practical skills that will ensure they can play an active role in medical settings as clinical pharmacists and clinical specialist pharmacists, as well as equipping them with advanced management abilities in the field of drug therapy. It also seeks to nurture pharmacists equipped with a grounding that will enable them to play an active role at universities and research institutions as educator-researchers.

The Graduate School of Pharmacy and Pharmaceutical Sciences offers three specialist domains; supervisors in each domain support students in acquiring advanced expertise through lectures and practical classes in the research field they cover, while also providing one-on-one guidance tailored to each student's research topic.



Graduate School of Pharmacy specialist domains and associated research fields

Specialist Domain	Research Fields
Pharmaceutical Sciences	Pharmaceutical chemistry, molecular structural analysis, applied pharmaceutical science
Biopharmacy	Molecular biosciences, molecular bioinformatics, environmental health and preventive pharmacology
Pharmaceutical Health Care	Functional efficacy analytics, pathologic analysis and control, clinical pharmacy

Graduate School of Pharmacy and Pharmaceutical Sciences (Doctoral Program)

Process through to graduation

