

Academic Year 2027

Doctoral Program (Four Years) in Pharmacy

**Division of Pharmacy Research,
Graduate School of Pharmaceutical Sciences,**

Osaka Medical and Pharmaceutical University

Student Recruitment Guidelines



Osaka Medical and Pharmaceutical University

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University Philosophy

Based on its founding ethos and credo “Shisei Jinjutsu (Sincerity and Benevolent Medical Practice)”, the Osaka Medical and Pharmaceutical University educates students to become highly humane and creative medical professionals who will contribute to the welfare of humanity and the advance of culture through the provision of teaching with an international outlook, research and high-quality medical practices.

Purpose of University

The University aims, in conformity with its philosophy, to foster human resources with rich humanity and an international outlook who will:

1. Strive to maintain and promote well-being, prevent and overcome diseases, and relieve pain, which are challenges shared by all mankind;
2. Respond to changes in society and continue to learn the latest knowledge and the best technology throughout their lifetimes; and
3. Play an active part with an inquisitive spirit in fields ranging from community healthcare to world-class research and development.

Purpose of Graduate School

The Graduate School aims to teach and research the theory and applications of medical science, pharmaceutical science and nursing science, and master their depths, thereby contributing to the advance of culture.

Purpose of Doctoral Program

The doctoral program aims to train human resources to become excellent researchers, educators, or medical professionals in the pharmacy research field, closely related to clinical and medical services, who can maintain and promote people's health and prevent and treat illnesses, using their broad vision and high-level expertise.

The *Oncology Professional Training Program* within the program aims to develop individuals with extensive knowledge and advanced skills in cancer care, including cancer-specialized pharmacists.

Admissions Policy

The six-year doctoral program of the Osaka Medical and Pharmaceutical University seeks students who understand the philosophy of the university, meet the doctoral program purpose of human resource development, and possess flexible thinking and creativity. The following qualifications are also required:

1. Those who have acquired a broad vision and expertise as pharmaceutical researchers, and are strongly motivated to contribute to the maintenance and promotion of public health.
2. Those who have a strong desire to contribute to the prevention and treatment of disease by acquiring superior clinical analytical skills, techniques and ethics as medical professionals.

The program also accepts those who majored in pharmacy under the former pharmacy four-year system and have at least three years of work experience as pharmacists and who have been awarded a master's degree at home or abroad.

Successful applicants will be selected based on the results of each applicant's 1) foreign language proficiency (English); 2) essay (in specialized field); 3) interview, and 4) presentation and an oral examination.

Curriculum Policy

The doctoral program cultivates each student's broad perspective and highly specialized research capabilities in the clinical and medical pharmaceutical fields and is based on education and research to foster superior human resources that contribute to the maintenance and promotion of public health, improvements in public health, prevention of disease and treatment of diseases with advanced knowledge and skills. Therefore, the program focuses on the following points:

1. To provide a comprehensive clinical and medical pharmacy education that includes medical pharmacy, biological and preventive medicine, drug discovery chemistry and clinical pharmacy with clinical and medical care practice, all of which organically link with feedback from translational research and clinical reports.
2. To foster highly specialized research skills and the ability to accurately present and explain research results and information. We cultivate the noble sense of ethics and a sense of mission required in clinical and medical fields. The program consists of lectures and exercises with special studies.
3. In the *Oncology Professional Training Program*, students acquire advanced basic and applied research skills through drug discovery, pharmacotherapy research, and clinical training.

Active learning, experiential learning, online education, and LMS-based learning are incorporated according to course content.

Diploma Policy

The requirements for the awarding a degree in the doctoral program are: being enrolled for the designated period, receiving educational and research instructions in line with the philosophy of doctoral education and research, passing the screening and examination of a doctoral dissertation, and completing the doctoral program. The degree to be awarded is Ph.D. in Pharmacy, and the criteria below are to be used for the screening.

1. Having sufficient ability to contribute to pharmaceutical research and advanced, extensive and up-to-date knowledge, as well as advanced and superior skills, attitudes, ethics and a sense of responsibility
2. Having excellent clinical insight, observation and analytical skills, and a familiarity with clinical practice

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Student Recruitment Guidelines

1. Number of students to be recruited: 4 students
(including a few positions for the *Oncology Professional Training Program*)
2. Major and field

Major	Field
Pharmacy major	Medical Pharmacy, Clinical Pharmacy, Biological and Healthcare Pharmacy, Drug Discovery Chemistry

A special timetable consideration^{*1} will be given to working students in accordance with Article 14 of the Standards for Establishment of Graduate Schools. Furthermore, the rules^{*2} for long-term study have been established.

- *1. Education may be provided by an appropriate method, such as teaching or research instructions at night or at a specific time slot or period (specified by the inner regulations of this graduate school).
 - *2. Those who have a job or who have circumstances, such as the necessities of childcare or nursing care, can systematically extend the term of stay for one year or two at this graduate school. Tuition fees for extended periods will be waived.
3. Application Qualifications (Applicants must qualify under any one of the following conditions)
 - 1) Those who graduated from university courses (six-year courses) in pharmacy, medicine, dentistry or veterinary medicine, or who are expected to graduate in March 2027.
 - 2) Those who hold a master's degree and are recognized as having at least the same academic ability as those who graduated from the pharmacy course (6-year program) at this graduate school or those who are expected to complete the course in March 2027.
 - 3) Those who have been awarded a degree equivalent to a master's degree abroad.
 - 4) Those who have been appointed by the Minister of Education, Culture, Sports, Science and Technology
 - 5) Those who have reached the age of 24 and have demonstrated that they have at least the same academic ability as those who have a master's degree through individual entrance examinations at this graduate school.
 - 6) Those who have three or more years' work experience as a pharmacist after acquiring the pharmacist license (Please check with Educational Affairs Section, Pharmaceutical Academic Affairs Department before applying to see whether you meet the standards set by this university.)

Note: If you are an international student (a person who does not have Japanese nationality and has not obtained a permanent residence permit in Japan) and privately financed, you are eligible for the above-mentioned application, on the condition that you can obtain or renew your status of residence of Student stipulated by the Immigration Control and Refugee Recognition Act after admission.

4. Application Period and Method

- 1) Period: Monday, August 24, 2026 to Tuesday, September 1, 2026
- 2) Submission in Person: Educational Affairs Section, Pharmaceutical Academic Affairs Department
Business Hours: 9 am–4:30 pm on weekdays
- 3) Submission by postal mail: Send your application to Educational Affairs Section, Pharmaceutical Academic Affairs Department by simplified registered mail or express mail. Only ones marked with a postmark during the application period will be accepted. In addition, write Second-term Doctoral Program Application in red on the envelope.

5. How to Apply for Admission

Please submit the following documents along with the entrance examination fee of 20,000 yen (exempted if you are a graduate of this university) during the application period.

If you submit your application by postal mail, please transfer the application fee of 20,000 yen to the bank account listed below. Please note that the bank transfer fee shall be borne by the applicant.

Application Fee: 20,000 yen*

Bank Account for Payment : Bank: Sumitomo Mitsui Banking Corporation, Takatsuki Branch
Account Type: Ordinary Account
Account Number: 1777923
Account Name: Gak. Osaka Ika Yakuka Daigaku

Please note that the bank transfer fee must be borne by the applicant.

- Please make the payment under the name of the applicant.
- Applications will not be accepted if the payment is not completed within the application period.

1) Application Form

Use the form designated by this university and attach a photo of yourself taken within three months prior to the application.

2) Graduation Certificate^{*3} or Certificate of Expected Graduation^{*3}

To be prepared and sealed up by the graduating university

3) Official Transcript^{*3}

To be prepared and sealed up by the university

4) Statement of Purpose^{*3}

To be described in a form specified by the University, limited to 1,000 characters in Japanese or 250 words in English

5) Abstract of Graduation Research

To be described in a form specified by this university, limited approximately to 500 characters in Japanese or 150 words in English

- 6) Return Envelope (*Nagagata* #3 (120 mm x 235 mm) Standard-size envelope)
Required only if you mail the application documents: In order for us to send the examination ticket, the envelope needs to be self-addressed with a 410-yen (Standard postage: 110 yen; Express delivery fee: 300 yen) stamp on the envelope.
- 7) If you fall under application qualification 6) or if you work in a company or hospital and are conducting new research, please submit your applicable research report and abstract (limited to five pages of a 400-character manuscript paper) in place of the document specified in 5).
- 8) Data on Graduation Research and Research Summary Presentation
Please submit Microsoft PowerPoint files (saved on a USB flash drive or other storage media) to Educational Affairs Section, Pharmaceutical Academic Affairs Department by 10 am on the day of the examination.
- 9) Prior Consultation
Please consult in advance and obtain approval from the faculty member (prospective supervisor) of the laboratory you wish to join.
- 10) Examination Permit
If you work for a firm, submit a written form (any form) signed by your immediate manager stating that you will take the examination and will be affiliated with the firm during the study under the consent of the supervisor.

*3. Required only if you are from a different university.

Submit the following items in addition to items 1) to 9) if you are an international student.

- 11) Certificate of Eligibility or resident card (with the residence status and period of residence stated), and a copy of passport in the case of applying from outside Japan
- 12) Guarantor's letter*⁴ (The guarantor needs to be a resident in Japan.)
- 13) Medical Certificate
- 14) Letter of Recommendation
- 15) Resume

*4. Required only if you are an international student privately financed.

6. Selection Method

The applicant will be selected as a screening result of an academic examination*⁵, interview, and submitted documents.

*5. You may be exempt from the academic examination if you are a government-sponsored foreign student.

7. Academic Examination

- 1) Date: Friday, September 11, 2026
- 2) Place: The Abuyama Campus of Osaka Medical and Pharmaceutical University 4-20-1 Nasahara, Takatsuki City

3) Schedule

Time	Examination subject
10:00 am – Noon	Written exam: Foreign language (English)* ⁶ One common compulsory subject and two other subjects selected from four major fields need to be answered.
1:00 pm - 2:00 pm	Written exam: pharmacy and pharmaceutical sciences One subject selected from four fields needs to be answered.* ⁷
From 2:45 pm	Presentation and oral examination: To be presented based on applicant's submitted data on his/her graduation research and research summary presentation

An interview will be held after the presentation and oral examination.
The timetable is subject to change.

- *6. 1) It is possible to bring dictionaries (except for electronic and specialized dictionaries).
- 2) The foreign language test may be exempted if you are an international student making a presentation in English.
- *7. For the written examination (pharmacy and pharmaceutical sciences), questions may also be given and answered in English upon request. If you prefer English, please make such request when submitting your application.

8. Announcement of Acceptance

The announcement of acceptance will be made at The Abuyama Campus of Osaka Medical and Pharmaceutical University on Friday, October 9, 2026, and each applicant will be notified in writing.

9. Admission Procedure

Each successful applicant will be notified individually of the admission procedure in detail.
The applicant who has accepted the procedure described in this notice will be admitted.

Deadline: Primary Deadline (for payment of the enrollment fee and submission of the required documents) Friday, December 11, 2026

Secondary Deadline (for payment of the first half-year tuition fees) Monday, March 8, 2027

10. Payment

- 1) Admission fee: 100,000 yen (excepted if you are a graduate of this university or have achieved all required credits)
 - 2) Tuition: 500,000 yen (annual sum)
- In addition, pay 18,000 yen (annual sum) as a commission (the PA fee at Faculty of Pharmacy).

11. Research Assistant (R.A.) System

Students in the doctoral program can be commissioned as a research assistant (R.A.) to receive payment. However, this system does not apply to students who are affiliated with firms or with long-term study.

12. Others

- 1) Neither documents submitted nor payment, once made, will be returned.
- 2) The admission may be canceled if there is a fact such as a false statement on admission.
- 3) Those who wish to take special measures before taking an exam or studying, contact Educational Affairs Section, Pharmaceutical Academic Affairs Department in advance.
- 4) Applicants must be sure to discuss the research details with the academic advisor in charge at the laboratory they wish to join, prior to submitting an application.

Contact information for entrance examination:
Educational Affairs Section, Pharmaceutical Academic Affairs Department,
Osaka Medical and Pharmaceutical University

4-20-1 Nasahara, Takatsuki, Osaka 569-1094

Tel.: +81-72-690-1000 (Main phone number)

Tel.: +81-72-690-1013 (Direct)

E-mail: p-educate@ompu.ac.jp(Direct)

Website: <https://www.ompu.ac.jp/>

Major research projects in the Pharmacy major (Doctorate program)

Field	Department・Academic advisor	Research themes
Medical Pharmacy	Pathological and Molecular Pharmacology Prof. Mamoru Ohkita Assoc. Prof. Masashi Tawa	- Research on pathophysiological roles of endothelin and nitric oxide - Research on drug efficacy evaluation for acute kidney injury and chronic kidney disease and its underlying mechanism - Research on drug development targeting soluble guanylate cyclase - Development research of new therapeutic agents for various cardiovascular diseases - Pharmacological research of various functional foods
	Pharmacology Prof. Hisashi Shirakawa Assoc. Prof. Saki Shimizu	- Pathophysiological and pharmacological research on neurological diseases (e.g., , dementia, cerebrovascular disease, multiple sclerosis, chronic pain, Parkinson's disease, depression, schizophrenia, epilepsy, anxiety disorders) - Development of animal models for neurological diseases and discovery research on new medications - Analysis of the neuron-glia interaction in the central nervous system
	Pharmacotherapeutics and Toxicology Prof. Ryuji Kato Assoc. Prof. Yuka Kohda	- Investigation of mechanisms underlying serious adverse effects and the associated predictive markers - Research on pathophysiology and prevention of oxidative stress-related diseases - Research on clinical usefulness of Therapeutic Drug Monitoring in home health care
	Pharmacotherapeutics II Prof. Akio Fukumori	- Pathophysiological mechanisms of dementia and their application to diagnosis and treatment - Pathogenesis of autoimmune encephalitis and its application to diagnostic and therapeutic strategies - Comprehensive identification of orphan receptor ligands using genetically encoded noncanonical amino acids - Generation of gene-edited animal models using CRISPR/Cas9 for pathophysiological studies (For intended for working graduate students) Analysis of clinically relevant drug information using electronic medical records and adverse event databases
	●Analytical and Bioanalytical Chemistry Prof. Akira Kotani	- Design and development of electrochemical sensors to determine biologically important substances - Development of highly sensitive and selective analytical methods for determining drugs and biological molecules - Research on in vivo diagnostic technologies based on electrochemical and/or radiochemical methods
	●Pathobiochemistry Prof. Ko Fujimori	- Function of lipid mediators and their regulatory mechanisms - Regulatory mechanism of lipid mediator-related diseases - Molecular mechanism of obesity and development of anti-obesity medicines - Disease control by functional compounds
Clinical Pharmacy	Pharmaceutics Prof. Junya Nagai Assoc. Prof. Hideyuki Motohashi	- Molecular mechanisms of pharmacokinetic changes in disease states and application to optimization of drug therapy - Enhancement of drug efficacy and reduction of adverse drug reactions by modulating molecules responsible for ADME - Improvement of efficacy and safety of mesenchymal stem cell-based medicine and evaluation of usefulness - Pharmaceutical examination on relationship between pharmacokinetic properties of anticancer agents and efficacy/toxicity of chemotherapy - Pharmacokinetic investigation to improve efficacy and safety of pharmacotherapy for chronic disease patients

Field	Department・Academic advisor	Research themes
Clinical Pharmacy	Formulation Design and Pharmaceutical Technology Prof. Yuichi Tozuka Assoc. Prof. Hiromasa Uchiyama	• Solubility and absorption enhancement techniques of hydrophobic compounds • Nanocomposite formation using hydrophobic compounds and functional food additives • Functional particle formation by mechanochemical grinding
	Social and Administrative Pharmacy Prof. Mitsuko Onda ★	• Research on health promotion function of community pharmacy • Outcome research and health economic evaluation on pharmacotherapy and pharmaceutical practice • Research on system design of community medicine
	Clinical Kampo Medicines Prof. Makio Shibano	• Research on anti-chronic inflammatory activities of traditional herbal medicines • Scientific evaluation for specific processing of traditional herbal medicines • Research on preventing medical side effects of Kampo medicines
	Education and Research Center for Clinical Pharmacy Prof. Tsutomu Nakamura Prof. Kazunori Iwanaga Prof. Toshiaki Nakamura ★ Prof. Ryoichi Yano Prof. Kaori Kadoyama	• Variation of intestinal drug absorption caused by the difference of medicine taking media • Exploration and clinical evaluation of biomarkers for efficacy and safety of cancer chemotherapy • Exploration and clinical evaluation of biomarkers for efficacy and safety of pharmacotherapy for circulatory system diseases • Researches into evaluation and utilization of the drug information • Clinical epidemiology and data-driven optimization of drug therapy • Advancing pharmacy education and professional clinical practice • Research on the implementation and effectiveness of women's healthcare education programs
Biological & Healthcare Pharmacy	Environment and Health Sciences Prof. Keiichiro Okuhira	• Research on the function and physiological role of atherosclerosis-related factors • Research on the development of drug delivery systems for cancer chemotherapy • Research on the molecular mechanism of various diseases where reactive oxygen species are involved • Research on the tight junction modulation of blood-brain barrier • Research on the investigation of pharmaceutical residues in the environmental waters
	Microbiology and Infection control Prof. Atsushi Komano	• Development of novel strategies to control pathogenic microbe infections • Elucidation of molecular mechanism of the virulence of pathogenic microbes via host-pathogen interactions
	Functional Morphology Prof. Hiroaki Okuda	• Research on the mechanism of chronic pain and the development of new treatments • Research on anti-inflammatory mechanisms of plant-derived phytochemicals • Research on the functional diversity of glial cells • Research on the mechanisms of cell proliferation, differentiation, and cell death
	Physical Chemistry Assoc. Prof. Koji Tomoo ★ Assoc. Prof. Akiko Asano	• Analysis of the structure and function of translational initiation factors of eukaryote • Elucidation of the self-aggregation mechanism of tau protein related to Alzheimer's disease and development of inhibitors for tau aggregation • Elucidation of the intracellular transport mechanism of xylooligosaccharide in bacteria • Elucidation of the iron transport system in the pathogenic bacteria and development of the new antimicrobial agent • Research on the conformation control of peptides • Research on the cell penetrating peptides using non-proteinogenic amino acids

Field	Department・Academic advisor	Research themes
Drug Discovery Chemistry	●Biochemistry Prof. Tomoaki Hishida	• Role of stemness and cellular senescence in carcinogenesis • Regulation of cellular phenotypes using partial reprogramming technologies • Molecular mechanism of inflammatory response regulated by cytokines • Molecular mechanism of growth and differentiation signaling mediated by protein kinases and transcriptional factors • Systematic analysis of intracellular signal transduction pathways by using the CRISPR/Cas9 method • Molecular theory of the enzymatic function of phospholipases
	Bioorganic Chemistry Prof. Shinya Fujii Assoc. Prof. Shun-ichi Wada	• Development of novel biologically active compounds using a wide variety of elements • Development of new synthetic methods for functionalized organometallic compounds • Medicinal chemistry research based on vitamins and hormones • Development of carrier peptides capable of cell penetration • Application of carrier peptides as a tool for the intracellular delivery of nucleic acid drugs • Development of molecular imaging peptide probes for visualization of cancer cells • Development of small molecule drugs to improve mitochondrial function • Design and synthesis of novel bioactive compounds
	Medicinal Chemistry Prof. Tomoya Hirano	• Development of photofunctional molecules for medical purposes • Development of assay system for epigenetics and epitranscriptome • Drug discovery for biological defense, anticancer and senolytics
	●Pharmaceutical Organic Chemistry Prof. Yoshihide Usami ★	• Research on the synthesis and biological activity of carbasugar type natural products and their analogs • Synthesis of novel heterocyclic compounds • Design and synthesis of vanin-1 inhibitors
	●Natural Products Research Prof. Masahiko Taniguchi ★	• Research on the structural analysis and bioactivity of various herbal medicine constituents • Research on the usefulness of supplements • Research on medicinal plant-derived epigenome (histone deacetylase) and protein-protein interaction modulators

Applicants must discuss the research details with the academic advisor in charge prior to submitting an application.

Departments marked with * will not receive any applicants.

Professors marked with ★ will retire before the completion of their projects.

Departments with ● may be supervised concurrently as Pharmacy and Pharmaceutical Sciences major.

