# Application Guidebook for Admission Graduate School of Pharmaceutical Sciences (Ph.D's Program) [Major in Medicinal and Life Sciences] Nagoya City University (NCU) for Academic Year 2026

#### 1. Number of students to be admitted

Major in Medicinal and Life Sciences ··· 8 students\*

- \*This number is the total of students admitted through the general selection, special selection for working professionals, and October enrollment.
- \*The 2nd entrance exam may not be held if the maximum admission capacity is reached.
- \*The number of students enrolled in "International Program to Conjoin Brain Science and Society" (see P. 6) is included in the above number.

#### 2. Eligibility for applicants

All applicants must satisfy one or more of the following qualifications:

- (1) A person who has a master's degree or is expected to graduate from master's course at a university by March 31, 2026
- (2) A person who has obtained or is expected to obtain a master's degree or an academic degree equivalent to a master's degree at a foreign university by March 31, 2026
- (3) A person who has obtained or is expected to obtain a degree equivalent to a master's degree in schooling program of the country outside Japan that is provided by correspondence education in Japan by March 31, 2026
- (4) A person who has completed or is expected to complete a university educational program, approved by the Minister of Education, Culture, Sports, Science and Technology of Japan, at an institution outside Japan (it is limited to a person who is recognized to complete a master's degree schooling outside Japan) by March 31, 2026
- (5) A person who has obtained or is expected to obtain a master's degree or an academic degree equivalent to a master's degree at United Nations University established based on United Nations General Assembly Resolution (December 11, 1972) defined by the Act on Special Measures Incidental to Enforcement of the "Agreement between the United Nations and Japan regarding the Headquarters of the United Nations University" (Act No. 72 of 1976) 1–1 by March 31, 2026
- (6) A person who has completed a university educational program at an institution outside Japan or United Nations University, and has passed the examination that is defined in the Standards for the Establishment of Graduate School of Universities (No. 28 of Ministry of Education Ordinance in 1979) No. 16–2, and is recognized that a person has academic ability equivalent to or higher than those who have a master's degree by the Graduate School of Pharmaceutical Sciences of NCU
- (7) A person approved by the Minister of Education, Culture, Sports, Science and Technology of Japan
- (8) A person who has academic ability equivalent to or higher than those who have graduated from a university by the individual achievement test conducted by the Graduate School of Pharmaceutical Sciences, NCU, and who will be 24-year-old or more at the end of March 2026

Notice: Prior to submitting application materials to NCU, any applicants have to ask for a faculty member, from whom you wish to receive academic instruction, about research plan after you will enroll in the graduate school.

#### 3. Eligibility screening

Any applicants who fall under qualifications (6), (7) or (8) of "2. Eligibility for applicants" need to request an eligibility screening prior to the application. Under the consultation with a faculty member of the specialized department (prospective supervisor), send the preliminary examination-application documents from post office by registered express mail to the address shown below. Please write "Application documents for preliminary examination to Ph.D.'s program of the Graduate School of Pharmaceutical Sciences, NCU" in red letters in the lower left section on the front of the envelope. The mail must arrive during the application period shown below [must be received. The date of the postmark is not valid].

[ 1st application ] from May 20 (Tue) to May 22 (Thu), 2025 [ 2nd application ] from November 12 (Wed) to November 14 (Fri), 2025

The mail sent from outside Japan will not be accepted. If applying from outside Japan, be sure to entrust your application procedure to a proxy residing in Japan.

#### The preliminary examination-application documents: (Use the prescribed form of NCU)

- (1) Application for preliminary examination
- (2) Curriculum Vitae
- (3) Reasons for application
- (4) Certificate of research experience
- (5) List of research achievements
- (6) Self-addressed reply envelope with 410-yen postage stamp(s) (Clearly indicate your receiving address.)
- (7) ② and ③ described in the following "5. Application documents, etc."

Notifications from NCU will be addressed to your proxy. The result will be notified two days before "4. period of application." If you do not receive the notice, please ask for Student Affairs Division, Administration Office of NCU.

#### 4. Period of application

[ 1st application ] June 25 (Wed)—July 1 (Tue), 2025 [must be received] [ 2nd application ] December 11 (Thu)—December 17 (Wed), 2025 [must be received]

# Must be sent by post. Delivery in-person is not accepted.

Fill out the required items on the cover which is designated by NCU, and paste the cover on the envelope (240 mm  $\times$  332 mm) prepared by yourself. Enclose your application documents in the envelope above, and send them by registered express mail.

No Application forms are received in-person at the office or outside the designated period of application (The date of postmark is not valid). After your application documents, etc. are accepted, you will receive your examination admission card and instructions for examination from the Administration Office.

If you do not receive them within a week after application deadline, please be sure to contact the Student Affairs Division, Administration Office of NCU.

#### Application documents must be sent by post to

Nagoya City University Student Affairs Division, Administration Office of NCU 1, Kawasumi, Mizuho-cho, Mizuho-ku, Nagoya, Aichi 467-8601, Japan

Application by post from outside Japan will not be accepted. <u>If applying from outside Japan</u>, <u>be sure to entrust your application procedure to a proxy residing in Japan</u>. Notifications from NCU will be addressed to your proxy.

# 5. Application documents, etc. (Fill out in Japanese)

Γ	Oocuments, etc.	Description				
Application for admission/ Photo Identification card/ Examination admission card/ Curriculum Vitae (reverse side of application form)		• If you have received school education outside Japan, fill in all of your school				
2	Transcript	<ul> <li>Submit a transcript prepared by the president of the university that you are enrolled in or have graduated from.</li> <li>A photocopy is acceptable only if a reissued transcript is not available. To verify its authenticity, be sure to present the original during the admission procedure.</li> <li>If your academic transcript is prepared in a foreign language, prepare a Japanese translation in any form, and attach it to the original transcript. Do not write the</li> </ul>				
3	Diploma (graduation letter), Certificate of completion (expected completion) of master's degree	<ul> <li>Japanese translation directly on the original transcript.</li> <li>Submit your diploma prepared by the president of the university that you are enrolled in or have graduated from.</li> <li>If you have completed (or are expected to complete) a graduate school, submit the certificate of completion (or expected completion) of the graduate school, together with the university diploma, etc.</li> <li>If you apply under qualifications (2) or (5) of "2. Eligibility for applicants," submit a document certifying your eligibility.</li> <li>If you apply under qualification (7) of "2. Eligibility for applicants," submit documents certifying your eligibility and offer certificate published by university or the institution outside Japan.</li> <li>Photocopies are acceptable only if your diploma and/or certificate cannot be reissued. To verify their authenticity, be sure to present the original during the admission procedure.</li> <li>Prepare a Japanese translation in any form and attach it to the original certificate. Do not write the Japanese translation directly on the original certificate.</li> </ul>				
4	Abstract of the Master's thesis or its alternative document	Submit an abstract of master's thesis (A4, 2 pages). Applicants without a master's degree must submit the alternative documents on their research (A4, 2 pages).				
5	Letter of acceptance from the supervisor	[Use the prescribed form of NCU]  Consult with the faculty member of your first choice, from whom you wish to receive academic instruction, about research planning, etc. before submitting your application. Submit an acceptance letter with the signature of the prospective supervisor.				
6	Examination fee (30,410 yen)	<ul> <li>Fill out the bank transfer request form (prescribed form of NCU) with required information and transfer 30,410 yen (Examination fee 30,000 yen + Express mail fee to send the admission card 410 yen) from a bank or other finance institution.</li> <li>* Japan Post Bank or Yucho Bank are not acceptable. Do not use ATM, etc.; use only a teller for transfer.</li> <li>* Remittances from overseas to Japan are not accepted.</li> <li>* The relevant bank fees will be charged to the applicant.</li> <li>• Submit the "Examination Fee Payment Certificate (Slip B)" received from the bank, etc. after the transfer procedure, together with other application documents. (Do not submit the "Receipt of Transfer Amount (and Transfer Fee) (Slip A)," which should be retained by you.)</li> <li>* The examination fee is not refundable in principle. (See (4) of "12. Cautions.")</li> </ul>				

7	Mailing label	[Use the prescribed form of NCU]				
		The mailing label will be used to notify you of the admission decision. Write the proper				
		address and name.				
8	Residence certif-	• If you are a foreign national and eligible for residence in Japan, submit residence				
	icate (only for	certificate that does not contain the Social Security and Tax Number.				
	applicants who	• If your visa status is for short-term residence, submit a photocopy of the Japan entry				
	have foreign	visa stamped in your passport.				
	nationality)	• If you are residing in a foreign country, submit a photocopy of your passport.				
9	Document for	[Use the prescribed form of NCU]				
	interview test	• Bring the document to NCU on the interview day. The number of copies necessary				
		will be informed when sending the examination admission card.				
		• List your academic achievements, such as academic conference presentation and				
		papers, in order of most recent. Applicants who are employed or graduates can also				
		list achievements at the last school attended.				
		• Along with the above document, applicants also need to submit a				
		document (A4, 2 pages, free format) that describes your current research				
		at a university, graduate school, or office. Applicants who are employed or have				
		graduated can describe their research at the last school attended.				
		<the university="" website=""></the>				
		https://www.nagoya-cu.ac.jp/admissions/graduate/phar/index.html				
10	Envelope to	Fill out the required items on the cover, designated by NCU, and paste the cover on				
	submit the	the envelope (240 mm × 332 mm) prepared by yourself. You can download the cover				
	application	from the website of NCU. Enclose the application documents in the envelope and send				
	documents	them by registered express mail.				
		<the university="" website=""></the>				
		https://www.nagoya-cu.ac.jp/admissions/graduate/phar/index.html				

<sup>\*1</sup> If you have taken the eligibility screening for examination prior to application, it is not necessary to submit the application documents ② and ③ when you apply.

# 6. Prior consultation with applicants with a disability

A person with a disability who needs extra care for taking an entrance examination or studying has to notify Student Affairs Division.

# 7. Schedule and method of selection for admission

# (1) Schedule, subjects, etc.

Details will be provided in the instructions for the examination, mailed to applicants together with their examination admission card.

Examination date	Examination time	Examination subject	
1st application August 5 (Tue), 2025 2nd application January 27 (Tue), 2026	10:00—	Written or oral examinations on specialized subjects, English, master's thesis abstracts, etc.	
	13:30-	Interview	

# (2) Examination location

Graduate School of Pharmaceutical Sciences, Nagoya City University (3-1, Tanabe-dori, Mizuho-ku, Nagoya)

<sup>\*2</sup> If the name written on your "Academic Transcript," "Diploma" or other certificates is different from your current name, provide the document to prove that your name has been changed (e.g., family register).

#### (3) Selection

Selection will be made based on overall consideration of the abstract of the master's dissertation or equivalent, academic transcript, etc., and the results of the examination (major subject, English, and interview).

#### 8. Announcement of examination results

# [1st application] August 18 (Mon), 2025 at 10:00 [2nd application] February 3 (Tue), 2026 at 10:00

The examination results will be posted at the entrance of Graduate School of Pharmaceutical Sciences, NCU, and the Administration Office will send a letter of acceptance to each applicant on the day.

- \*Successful applicants should make sure that important documents needed for admission procedure will be sent by Letter Pack mail.
- \*If you do not receive the documents within a week from the announcement, please contact Student Affairs Division, Administration Office of NCU.

# 9. Admission procedure

(1) Date of procedure

[1st application] September 3 (Wed), 2025

[2nd application] Mid-February, 2026

Successful applicants (or their proxies) will be notified of the specific date in a document, sent with the letter of acceptance.

(2) Details of admission procedure

Details on the admission procedure will be announced by the documents in the Letter Pack.

(3) Payments required for admission

a. Admission fee Nagoya City residents, etc. 232,000 yen
Other applicants 332,000 yen

- \*Applicants who will proceed to this doctoral program immediately after completing the master's course of this graduate school are exempted from the admission fee payment.
- b. Disaster and Accident Insurance for Student Education and Research ("Gakkensai")
  c. Liability Insurance coupled with "Gakkensai"
  1,020 yen
  - Note 1: The admission fee should be paid through a financial institution before the admission procedure. **The** paid admission fee is not refundable.
  - Note 2: "Nagoya City residents, etc." refers to enrolled students who can certify by a resident card that (1) the students or (2) their spouse or a first-degree family member have had an address within Nagoya City for at least one consecutive year beginning from the day before the date of admission.
  - Note 3: The current fee listed above may be subject to change at the time of your admission, and any revisions will be informed immediately.

#### 10. Tuition

Annual fee 535,800 yen (267,900 yen for a semester)

- Note 1: After admission, tuition fees should be paid twice a year (for the 1st and 2nd semesters) through an automatic withdrawal from your account.
- Note 2: The current tuition fee shown above may be subject to change during your study at NCU, in which case the revised tuition fee will apply.
- Note 3: Graduate School of Pharmaceutical Sciences may charge additional cost without any advance notification.

# 11. Scholarship system

The loan-type scholarship program of the Japan Student Services Organization (JASSO) is available to graduate students. Students who wish to apply for the scholarship will be reviewed and recommended by NCU based on their academic achievement, research ability, etc.

#### 12. Cautions

- (1) Applications lacking necessary documents will not be accepted.
- (2) Applicants, found to have made false statements in their application documents, may have their admission revoked even after enrollment.
- (3) Application documents, etc. will not be returned.
- (4) The examination fee is not refundable in principle. However, the paid examination fee (excluding bank transfer fee) is refunded in any of the following cases.
  - 1. The examination fee was transferred twice.
  - 2. The application documents were not submitted after the examination fee was transferred (or the application was not accepted).
- (5) If your return address changes, please notify the Office of new address immediately.
- (6) As a rule, double enrollment is prohibited.

## 13. Treatment of your personal information

NCU treats your personal information in accordance with the Act on the Protection of Personal Information of Nagoya City.

- (1) Use of your personal information
  - a. Your name, address and other personal information given in application documents, etc. are used for our operations of selection for admission (e.g., application registration, selection, examination result announcement, admission procedure).
  - b. Your personal information used for selection for admission (e.g., academic transcript) may be used as reference material for investigative research and academic research to improve future selection for admission and graduate education. (Investigative research results are announced in such a way that individuals cannot be identified.)
  - c. After you are admitted, your personal information is used for operations related to educational affairs (e.g., enrollment management, schooling guidance), student support (e.g., health control, tuition waiver, application for scholarship, job placement support), and tuition collection.
- (2) Entrustment of operations to external business operators

  The operations of (1) above may be entrusted to some external business operators under an agreement with them for proper treatment of personal information.

# 14. International Program to Conjoin Brain Science and Society

- (1) Along with the adoption by MEXT, this program invites the designated number of international students from the priority areas designated by MEXT members into the 2-year Master program or the 3-year Doctoral program, and through the lectures, seminars and other academic activities held in English, educate them to become young researchers who have acquired the global level of brain and mental health area.
- (2) A limited number of applicants will be admitted.
- (3) Students of this program will be determined through the internal selection from those who have passed the Doctoral Program entrance exam.
  - \*Students of this program is required to simultaneously satisfy the requirements of both their major in the graduate school and this program.

#### 15. Admission policy

Admission policy of Graduate School of Nagoya City University

Nagoya City University (NCU) aims to be a university in which all citizens feel pride and affinity. In graduate

education, based on our recognition that research guidance for graduate students is a challenge in offering research activities. We aim to cultivate researchers and professionals who can gain advanced expertise and an interdisciplinary thinking.

With this philosophy and aim, the graduate school is widely looking for individuals who possess advanced expertise and an eagerness and aptitude for activity both within Japan and abroad, in addition to diverse skills and work experience.

### Admission policy of Graduate School of Pharmaceutical Sciences

#### (1) «Philosophy, Purpose, Educational Goals»

The Graduate School of Pharmaceutical Sciences aims to foster researchers and technical experts with creative and outstanding ability who can execute innovative research in pharmaceutical life sciences, drug discovery science, environmental and health science, and clinical pharmaceutical sciences, by acquiring a broad knowledge and deep expertise about pharmaceutical science. In addition, we also aim to develop human resources with prominent ability to play an active part in education, public administration, and medical front with wide view and high ethics. In order to cultivate these diverse and highly specialized human resources, we welcome following students.

#### (2) «Profile of students sought»

- Students who are willing to perform cutting-edge research outcomes, to transmit them to the world, and to contribute to society
- Students who are motivated to acquire their problem-finding and -solving abilities through the process of publishing research outcome
- From the point of view of developing diverse human resources, students who have different academic backgrounds (students who had graduated from other research fields than Pharmaceutical Sciences and Pharmacy) and are willing to perform researches in pharmaceutical sciences
- From the point of view of developing international human resources, students from overseas who want to perform researches in pharmaceutical sciences

# (3) «Contents and level of required knowledge, abilities and skills»

- In addition to the basic ability of material sciences and life sciences, advanced knowledge and basic experimental techniques in related research fields
- In addition to the basic language ability, language skill necessary for preparing research manuscripts, presentations and discussions at international meetings

#### (4) «Selection method»

Students with basic academic skills in materials and life sciences, knowledge and skills in related fields, and necessary language skills will be selected by the following method.

#### [General selection]

Selection of applicants is based on comprehensive review of the master's thesis abstract, transcripts, examinations (major subjects), foreign language (English) and interviews.

The language skills required for research will be evaluated by reading and comprehending English papers. In addition to the basic academic skills in materials science and life science required to carry out research, advanced knowledge and skills in related fields will be evaluated by examining the major subjects and a summary of the master's thesis. Furthermore, an interview will be conducted to evaluate the applicant's aptitude in terms of basic academic skills, knowledge, and to assess whether the applicant meets the requirements for the desired student, in terms of basic academic skills and knowledge, as well as motivation and willingness to undertake research.

Selection is based on a combination of these results and the evaluation of transcripts.

# Notifications from NCU in case of emergency

In case of emergency (e.g., occurrence of disaster) or if changes are required to the contents of this application guidebook, students will be notified those changes through the website of NCU. Particularly as the examination day draws near, pay close attention to the website of NCU. Applicants may also be directly contacted. In your application documents, therefore, be sure to provide contact details where you can always be reached.

NCU Website https://www.nagoya-cu.ac.jp/

# A ban on smoking in the premises

NCU has banned smoking in the premises. All students are requested to observe this policy, and asked to further cooperate by not smoking on roads and alleys around NCU.

# **Outline of Graduate School**

Department	Research interests				
	1. Molecular design, synthesis, and evaluation of biologically functional and useful				
Chemistry	compounds				
	2. Development of the methods for exploration and analysis for bioactive substances based on chemical approach				
	3. Bioorganic chemistry for reactive oxygen species and nitric oxide				
	4. Development of the compounds for controlling cellular properties based on				
	photochemistry and organic chemistry				
Bioorganic chemistry	1. Chemistry of enzyme and enzyme models				
	2. Development of a functional molecule useful for clarification of biotic functions				
	<ul><li>3. Rational design, synthesis and activity evaluation of drug lead compounds</li><li>4. Development of functional molecules based on a new concept</li></ul>				
Synthetic Organic	Studies on the synthesis of biologically active natural products				
Chemistry	2. Studies toward drug discovery based on biologically active natural products				
	3. Development of efficient methods for construction of molecular architectures				
	4. Development of highly selective synthetic reactions				
Synthetic	1. Development of multicomponent domino reaction by using a transition metal				
Supramolecular Chemistry	catalyst, and its application to drug synthesis  2. Logical study of transition metal-catalyzed reaction by ab initio molecular orbital				
Chemistry	study calculation				
Cellular Biophysics	1. Analysis of allergic responses				
	2. Artificial cell				
	3. Mechanism of neural development				
DI 1 CI 1 C	4. Mechanism of exocytosis				
Physical Chemistry of Colloid and Polymer	<ol> <li>Study of the ordering of soft matter (colloid, gel, polymer, micelle)</li> <li>Formation of gel immobilized colloid crystal, and its application to materials</li> </ol>				
Conoid and I orymei	3. Computer simulation of the ordering process of soft matter				
	4. Application of colloid system to drug field				
Structural Biology and	1. Elucidation of the functional mechanisms of biomolecules by integrative structural				
Biomolecular	biology				
Engineering	2. Structural glycobiology for elucidating pathological mechanisms and drug development				
	3. Exploration of dynamical ordering of biomolecular systems for creation of integrated				
	functions				
Molecular Biology	1. Organelle biology				
	2. Pathology for neurological disorders				
	<ul><li>3. Epigenetics for metabolism</li><li>4. Intracellular signals for cancer immunity</li></ul>				
Drug Delivery and	Development of a targeting drug delivery system (DDS) for brain cancer and other				
Nano Pharmaceutics	various cancer				
	2. Design of a DDS for nano-micro lung-administered particles				
	3. Formulation design of poorly soluble and absorbable drugs				
26 1.11 1	4. Development of a DDS for nano particle carriers				
Multilevel	<ol> <li>Elucidation of biomolecular networks using omics analysis</li> <li>Structural and functional analysis of glycans and drug discovery</li> </ol>				
Biofunctional	3. Research on biosynthetic systems of glycoproteins				
Analytics					
Dhamaaaaa	1 Madical pharmacontical study of smids during Language 40-124-11-11-11-11-11-11-11-11-11-11-11-11-11				
Pharmacognosy [Kampo Medicinal	1. Medical pharmaceutical study of crude drugs, Japanese traditional kampo medicines and natural materials				
Therapeutics]	Usability assessment of traditional medicines aiming at the application to various				
	diseases, and their action mechanism				
	3. Searching of biofunctional materials made from natural materials including plants or				
	microbes and their application to drug discovery  4. Genetic control for secondary metabolic function in plants and microbes, and				
	4. Genetic control for secondary metabolic function in plants and microbes, and production of useful compounds				
	5. Analysis of the diverseness of medicinal resource plants based on genome				
	information, and its application to crude drug assessment				

Department	Research interests				
Molecular and Cellular					
Health Science	2. Studies on the pathogenesis of chronic inflammatory diseases				
	3. Evaluation of novel drug delivery system using microorganisms				
	4. Immune responses against microorganisms, including Mycobacterium and				
	Staphylococcus spp.				
Biological Chemistry	1. Molecular mechanism of translation and mRNA decay				
	2. Posttranscriptional regulation of gene expression				
	3. Antiviral defense mediated by exogenous mRNA decay				
	4. Pathological mechanism of cancer, neurodegenerative diseases resulting from RNA				
	aberrations				
	5. Development of mRNA-based drug for gene therapy				
Molecular and Cellular	1. Physiological functions of ion channels				
Pharmacology	2. Pathophysiological roles of ion channels in cardiovascular diseases				
[Biomolecular	3. Electrophysiology and pharmacology in smooth muscle cells, cardiomyocytes,				
Pharmacology]	neurons, chondrocytes, and immunocytes				
	4. Drug development in the ion channel research field				
Biomedical Science	1. Molecular mechanism of neuronal network formation				
[Molecular	2. Molecular mechanism of higher brain function (e.g., memory, reading, feeling)				
Neuroscience]	3. Development of novel methods of diagnosis, prevention, and treatment of				
	neurodevelopmental disorders				
	4. RNA metabolism and its relation with neurodevelopmental disorders				
Biopharmaceutics	1. Functions and regulation mechanisms of transporters involved in drug disposition				
[Biopharmaceutics and	2. Roles of transporters in drug disposition				
Clinical	3. Physiological and pathophysiological roles of transporters				
Pharmacokinetics]	4. Methodologies of evaluation and prediction of drug disposition				
Pathobiology	1. Neuroprotective effect and glial function				
[Pathobiology and	2. Microenvironment around cancer				
Pharmacotherapy in	3. Spontaneous regression and malignancy of neuroblastoma				
Pharmaceutical	4. Early stage of arteriosclerosis				
Practice]	5. Bone disease and osteoclast disfunction				
Cell Signaling	1. Clarification of cancer biological properties and development of novel molecular				
[Stress Response	targeted drugs				
Cellular Biology]	2. Clarification of the mechanisms of TGF $\beta$ signal and cancer malignant progressions				
	3. Clarification of cellular stress, including endoplasmic reticulum stress, and the				
	pathogenesis of lifestyle-related diseases				
	4. Understanding metabolic reprogramming and its application to disease prevention				
	5. Effects of stress on drug and toxicant metabolism				
Neuropharmacology	1. Analysis of the molecular mechanism for sleep-wake regulation using model animals				
[Clinical	2. Pharmacotherapeutics and clinical studies in sleep medicine				
Neuropharmaology]	3. Neuropharmacological study of chronic pain and palliative care				
	4. Pharmacological approach to alleviate the higher brain dysfunction in metabolic				
	disease				
	5. Understanding of the mechanism of sensory abnormality caused by nerve injury				
Regulatory Science	1. Exploring study of biomarkers related to the idiosyncratic drug adverse reaction				
[Medicinal Safety	2. Study of pathogenic mechanism for the idiosyncratic drug adverse reaction				
Science]	3. Pharmacoepidemiologic study by analyzing the big medical data				
	4. Study of ethnic factors in the drug response among East Asia populations				
	5. Analysis of clinical study design				
Clinical Pharmacy	1. Differentiation of human iPS cells into intestinal cells and brain microvascular				
[Clinical Applied	endothelial cells, and its application to the study of a new drug development				
Pharmacotherapeutics]	2. Development of new anti-hepatitis B virus and evaluation of metabolism and toxicity				
[Clinical Formulation]	of new anti-HBV drugs				
[Community	3. Clarification of the mechanism of vascular disorder due to diabetes, and examination				
Healthcare and Health	of medication				
Promotion]	4. Development of patient-friendly formulations				
	5. Development of formulations for wound healing				
	6. Study on improving the solubility of poorly water-soluble drugs				

Department	Research interests				
	7. Studies on risk factors of adverse drug event incidence, medical costs and medical				
systems for appropriate use of pharmaceuticals					
	8. Studies on influence of pharmaceutical use on quality of life				
	9. Studies on construction of support and education resulting in behavioral modification				
	to appropriate pharmaceutical use and health promotion				

[Departments in Affiliate Graduate School]

[Departments in Affiliate Graduate School]						
Department	Research interests					
Oncology (Aichi Cancer Center Research Institute)	<ol> <li>Clarifying the roles of tumor microenvironment in cancer formation and progression</li> <li>Elucidating the molecular mechanisms of metastasis</li> <li>Unraveling the pathophysiology of cancer cachexia</li> <li>Study on the dysfunction of cellular signaling pathways in cancer</li> </ol>					
Experimental Gerontology (National Center for Geriatrics and Gerontology Research Institute)	To elucidate mechanisms underlying the pathogenesis of Alzheimer's disease     To identify therapeutic targets to halt the progression of Alzheimer's disease     To investigate roles of glial cells in neurodegenerative diseases					
Quality Assurance Science for Pharmaceuticals (National Institute of Health Sciences)	<ol> <li>Study on bioequivalence evaluation and quality management of generic drug products</li> <li>Study on formulation and process design of pharmaceuticals</li> <li>Studies on the quality control and quality assurance of regenerative/cellular therapy products</li> <li>Development of testing methods for the assessment of quality and safety of regenerative/cellular therapy products derived from human ES/iPS cells</li> </ol>					
Integrative Science for Dynamic Living Systems (National Institutes of Natural Sciences)	Structural biology and its research methods     Protein structure and functional relationship     Development of molecular dynamics simulation method and its application to proteins     Theoretical study on the formation mechanism of protein aggregates causing neurodegenerative diseases					
Regulatory Science for Evaluation of Pharmaceuticals and Medical Devices (Pharmaceuticals and Medical Devices Agency)	<ol> <li>Study of quality, efficacy and safety evaluation of pharmaceuticals</li> <li>Study of quality, efficacy and safety evaluation of medical devices</li> <li>Study of quality, efficacy and safety evaluation of regenerative medicine products</li> </ol>					
Molecular Profiling for Cancer Precision Therapy (Japanese Foundation for Cancer Research)	strategies to overcome the resistance  2. Understanding the diversity of cancer and development of new therapeutic strategies  3. Identification of new therapeutic targets based on cancer genomic and epigenomic information  4. Molecular mechanisms of cancer metastasis and development of anti-cancer metastasis drug					
Biomedical Innovation Initiative (National Institutes of Biomedical Innovation, Health and Nutrition)	<ol> <li>Cancer drug discovery without side effects through in vivo regulation of cancer-specific functional molecules</li> <li>Development of immunotherapy and novel RNA vaccines aiming for functional cure against chronic infectious diseases</li> <li>Development of personalized cancer immunotherapy through genomic and immunogenomic analysis</li> </ol>					

# List of Faculty Members, Graduate School of Pharmaceutical Sciences (Faculty of Pharmaceutical Sciences)

(As of Apr. 2025)

_	I = _ 2			(As of Apr. 2025)
Department	Professor	Associate prof.	Assistant	Research
G ' PI	m m 11	m 11' ** **	Professor	Assosiate
Community Pharmacy	Tomoya Tachi	Tadahiro Hashita,	Eisei Hori	
Management	Takahiro Iwao	Yuji Hotta	Saito Masayuki Tomoaki Ishida	
Individual Differences	Yayoi Kawano	(concurrent)	I omoaki Isnida	
and Personalized				
Medicine				
[Clinical Pharmacy]				
Medicinal Safety				
Science				
[Regulatory Science]	m 1:1:361:	77 ' 1 ' 7 1 ' 1 '		
Kampo Medicinal	Toshiaki Makino	Kanichiro Ishiuchi	Kazuhiro Terasaka	
Therapeutics				
[Pharmacognosy]	TT'		TT 1:1:0 1:	D 1" 77 1
Biomolecular	Hisao		Yoshiaki Suzuki	Rubii Kondo
Pharmacology	Yamamura			
[Molecular and Cellular				
Pharmacology]	M't1 II	Т.1 И.1	M.1.1 T.1	
Molecular	Mitsuharu Hattori	Takao Kohno	Maki Takagishi	
Neuroscience				
[Biomedical Science]	Himaalai Waa	Tamana Varia	T-11:	
Biopharmaceutics and	Hiroaki Yuasa	Tomoya Yasujima	Takahiro Yamashiro	
Clinical			Y amasniro	
Pharmacokinetics				
[Biopharmaceutics]	M		Hiromasa Aoki	Kohki Toriuchi
Pathobiology and	Mineyoshi Aoyama		Hiromasa Aoki	Konki Toriuchi
Pharmacotherapy in Pharmaceutical Practice				
[Pathobiology] Stress Response	Yasumichi Inoue		Chiharu Miyajima	
Cellular Biology	1 asumem mode		Ciiiiaru iviiyajiiia	
[Cell Signaling]				
Pharmacotherapeutics -	Kazuhiko Kume	Jun Tomita	Yoshinori Suzuki	
Palliative Care for	Kazuliko Kullic	Juli Tollilla	1 OSHIHOTI SUZUKI	
Cancer Patients				
[Clinical				
Neuropharmaology]				
Organic and Medicinal	Hidehiko Nakagawa	Mitsuyasu		Yuhei Ohta
Chemistry	11100111NO 1 tanagawa	Kawaguchi,		I dilei Oilu
		114,14840111		
Bioorganic-Inorganic	Naoki Umezawa		Yosuke Hisamatsu	Ryosuke Ishida
Chemistry				
,				
Synthetic Organic	Seiichi Nakamura			Eisaku Ohashi
Chemistry				
Cynthatia		Shin-ichi Ikeda		
Synthetic		Siliii-iciii ikeda		
Supramolecular				
Chemistry				
Cellular Biophysics	Naohide Hirashima	Masahiko Tanaka		
Contain Diophysics				

Department	Professor	Associate prof.	Assistant	Research		
			Professor	Assosiate		
Physical Chemistry of	Jyunpei Yamanaka	Tohru Okuzono,				
Colloid and Polymer		Akiko Toyotama				
Structural Biology and	Koichi Kato		Maho Yagi			
Biomolecular	(specially appointed					
Engineering	professor)					
Molecular Biology	Michiko Shirane	Nakatsumi Hirokazu	Tomoya Ozaki			
Drug Delivery and	Tetsuya Ozeki		Koki Ogawa			
Nano Pharmaceutics						
Multilevel		Hirokazu Yagi				
Biofunctional Analytics						
Molecular and Cellular	Shigeaki Hida			Isamu Ogawa		
Health Sciences						
Biological Chemistry	Shin-ichi Hoshino	Tsuyoshi Udagawa		Hiroto Inagaki		
Affiliated Research Institutes h Institutes						
Staff	Professor	Associate prof.	Assistant	Research		
			Professor	Assosiate		
Institute of Drug						
Discovery Science						

# Affiliate Graduate School

Department Department	Professor	Associate prof.	Assistant Professor	Research Assosiate Assistant prof.
Oncology (Aichi Cancer Center Research Institute) Experimental Gerontology	Masahiro Aoki, Chitose Oneyama (Guest Prof.) Koichi Iijima (Guest	Teruaki Fujishita (Guest Associate Prof.) Michiko Sekiya		
(National Center for Geriatrics and Gerontology Research Institute)	Prof.)	(Guest Associate Prof.)		
Integrative Science for Dynamic Living Systems (National Institutes of Natural Sciences)	Kazuyoshi Murata (Guest Prof.)	Hisashi Okumura (Guest Associate Prof.)		
Quality Assurance Science for Pharmaceuticals (National Institute of Health Sciences)	Yoji Sato, Satoshi Yasuda (Guest Prof.)			
Regulatory Science for Evaluation of Pharmaceuticals and Medical Devices (Pharmaceuticals and Medical Devices Agency)	Naoyuki Yabana (Guest Prof.)			
Molecular Profiling for Cancer Precision Therapy (Japanese Foundation for Cancer Research)	Ryohei Katayama, Reo Maruyama (Guest Prof.)			
Biomedical Innovation Initiative (National Institutes of Biomedical Innovation, Health and Nutrition)	Toyomasa Katadiri, Takuya Yamamoto, Kazuma Kiyotani (Guest Prof.)	Takuto Nogimori (Guest Associate Prof.)		

<sup>[ ]:</sup> Advanced lecture to be delivered in the master's course of the doctoral program