

**Application Guidebook for Admission  
Graduate School of Pharmaceutical Sciences  
Doctoral Program (Four-Year Course)  
[Major in Experimental and Clinical Pharmaceutical Science]  
Nagoya City University (NCU)  
for Academic Year 2027**

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

Major in Experimental and Clinical Pharmaceutical Science … 10 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.

### **2. Eligibility for applicants**

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

- (1) A person who has graduated or is expected to graduate from a university of 6-year course in pharmacy, medicine, dentistry, and veterinary by March 31, 2027
- (2) A person who has completed or is expected to complete an 18-year course of schooling in pharmacy, medicine, dentistry, or veterinary outside Japan by March 31, 2027
- (3) A person who has completed or is expected to complete an 18-year course of schooling in pharmacy, medicine, dentistry, or veterinary program of the country outside Japan that is provided by correspondence education in Japan, by March 31, 2027
- (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 an 18-year schooling in pharmacy, medicine, dentistry, or veterinary outside Japan) by March 31, 2027
- (5) A person who has obtained or is expected to obtain a bachelor's degree by March 31, 2027 *via* 5-year or more year's program (only limited program including a course in medicine, dentistry, pharmacy or veterinary medicine) at a university or other tertiary institution in a foreign country assured by the government or authorized organization in the original country, or specified by the Ministry of Education, Culture, Sports Science and Technology of Japan. The program includes the comprehensive education study provided by a foreign university in a tertiary institution in Japan, or the program provided by a foreign educational institution established in Japan based on the educational system of the original country. In such cases, the institution should be specified by the Ministry of Education, Culture, Sports, Science and Technology of Japan.
- (6) A person approved by the Minister of Education, Culture, Sports, Science and Technology of Japan
- (7) A person who has been enrolled in a university for 4 years or more, or completed a 16-year course of schooling in pharmacy, medicine, dentistry, or veterinary outside Japan, and acquired the prescribed credits with excellent academic results that is approved by the Graduate School of Pharmaceutical Sciences of NCU
- (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 2027

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 19 (Tue) to May 21 (Thu), 2026**

**[ 2nd application ] from November 11 (Wed) to November 13 (Fri), 2026**

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. Notifications from NCU will be addressed to your proxy.

**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”

The eligibility screening result will be notified by 2 days before the application period. Applicants who meet the eligibility criteria must complete the application procedure by the designated date. If you do not receive the notice by the time specified above, please contact Student Affairs Division, Administration Office of NCU.

### 4. Period of application

**[1st application] June 24 (Wed)—June 30 (Tue), 2026 [must be received]**

**[2nd application] December 10 (Thu)—December 16 (Wed), 2026 [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 × 332 mm) prepared by yourself. Enclose the 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 the 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**

<p>Nagoya City University Student Affairs Division, Administration Office of NCU 1, Kawasumi, Mizuho-cho, Mizuho-ku, Nagoya, Aichi 467-8601, Japan</p>
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Application by post 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. Notifications from NCU will be addressed to your proxy.

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

Documents, etc.		Description
①	Application for admission/ Photo identification card/ Examination admission card/ Curriculum Vitae (reverse side of application form)	<p><b>[Use the prescribed form of NCU]</b></p> <ul style="list-style-type: none"> <li>• Affix your color photograph (4 cm high x 3 cm wide) to the application form. The photograph should be taken within 3 months prior to the application, showing your upper body and bare head, directly facing the camera, with no background.</li> <li>• Enter the address at which you are (or a proxy is) certain to be contactable.</li> <li>• In “Academic Background,” start with your initial admission to university.</li> <li>• If you have work experience, provide the details in “Career.”</li> <li>• If you have received school education outside Japan, fill in all of your school education from elementary education (equivalent to elementary school) to higher education (equivalent to university education).</li> </ul>
②	Transcript	<ul style="list-style-type: none"> <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 Japanese translation directly on the original transcript.</li> </ul>
③	Diploma (graduation letter), Certificate of completion (expected completion)	<ul style="list-style-type: none"> <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 (7) of “2. Eligibility for applicants,” submit a document certifying your eligibility.</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 graduation thesis or its alternative document	Submit an abstract of your graduation thesis or master’s thesis (A4, 2 pages). Applicants without a bachelor’s degree must submit the alternative documents on their research (A4, 2 pages).
⑤	Letter of acceptance from the supervisor	<p><b>[Use the prescribed form of NCU]</b></p> <p>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.</p>
⑥	Examination fee (30,410 yen)	<ul style="list-style-type: none"> <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>

	Mailing label	<b>[Use the prescribed form of NCU]</b> The mailing label will be used to notify you of the admission decision. Write the proper address and name.
⑧	Residence certificate (only for applicants who have foreign nationality)	<ul style="list-style-type: none"> <li>• If you are a foreign national and eligible for residence in Japan, submit residence certificate that does not contain the Social Security and Tax Number.</li> <li>• If your visa status is for short-term residence, submit a photocopy of the Japan entry visa stamped in your passport.</li> <li>• If you are residing in a foreign country, submit a photocopy of your passport.</li> </ul>
⑨	Document for interview test	<b>[Use the prescribed form of NCU]</b> <ul style="list-style-type: none"> <li>• Bring the document to NCU on the interview day. The number of copies necessary will be informed when sending the examination admission card.</li> <li>• List your academic achievements, such as academic conference presentations and papers, in order of most recent. Applicants who are employed or graduates can also list achievements at the last school attended.</li> <li>• 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.</li> </ul> <p>&lt; The University Website &gt;  <a href="https://www.nagoya-cu.ac.jp/admissions/graduate/phar/index.html">https://www.nagoya-cu.ac.jp/admissions/graduate/phar/index.html</a></p>
⑩	Envelope to submit the application documents	Fill out the required items on the cover, designated by NCU, and paste the cover on the envelope (240 mm × 332 mm) prepared by yourself. You can download the cover from the website of NCU. Enclose the application documents in the envelope and send them by registered express mail. <p>&lt; The University Website &gt;  <a href="https://www.nagoya-cu.ac.jp/admissions/graduate/phar/index.html">https://www.nagoya-cu.ac.jp/admissions/graduate/phar/index.html</a></p>

- \* 1 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.
- \* 2 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).

## 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 before making an application.

## 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
<b>1st application</b> August 4 (Tue), 2026	10:00—	Written or oral examinations on specialized subjects, English, graduation thesis abstracts, etc.
<b>2nd application</b> January 26 (Tue), 2027	13:30—	Interview

(2) Examination location

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

(3) Selection

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

## 8. Announcement of examination results

**【1st application】 August 17 (Mon), 2026**

**【2nd application】 February 2 (Tue), 2027**

The examination results will be dispatched on the date mentioned above.

※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 2 (Wed), 2026**

**【2nd application】 Mid-February, 2027**

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

(2) Details of 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")	3,300 yen
c. Liability Insurance coupled with "Gakkensai"	1,360 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. 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 sciences. 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 problem-finding and -solving abilities through the process of publishing research results
- Students who aim to contribute to society as a leading pharmacist, educator and researcher
- 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 science and life sciences, basic knowledge and techniques about clinical pharmaceutical sciences to perform clinical researches or their related filed
- 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]

Applicants are selected on the basis of their research reports, academic 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 necessary for conducting research, advanced knowledge and skills in related fields will be assessed through examinations of major subjects and research report. The interview will be conducted to evaluate whether the applicant is a person who meets the required image of a student, such as a person who has the will and motivation for research, a person who aims to become a researcher in clinical research or related fields, and a person who aspires to contribute to society as a leading pharmacist, educator, or researcher. The selection process 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
Clinical Pharmacy [Clinical Applied Pharmacotherapeutics] [Clinical Formulation] [Community Healthcare and Health Promotion]	<ol style="list-style-type: none"> <li>1. Differentiation of human iPS cells into intestinal cells and brain microvascular endothelial cells, and its application to the study of a new drug development</li> <li>2. Development of new anti-hepatitis B virus and evaluation of metabolism and toxicity of new anti-HBV drugs</li> <li>3. Clarification of the mechanism of vascular disorder due to diabetes, and examination of medication</li> <li>4. Development of patient-friendly formulations</li> <li>5. Development of formulations for wound healing</li> <li>6. Study on improving the solubility of poorly water-soluble drugs</li> <li>7. Studies on risk factors of adverse drug event incidence, medical costs and medical systems for appropriate use of pharmaceuticals</li> <li>8. Studies on influence of pharmaceutical use on quality of life</li> <li>9. Studies on construction of support and education resulting in behavioral modification to appropriate pharmaceutical use and health promotion</li> </ol>
Medicinal Safety Science [Regulatory Science]	<ol style="list-style-type: none"> <li>1. Exploring study of biomarkers related to the idiosyncratic drug adverse reaction</li> <li>2. Study of pathogenic mechanism for the idiosyncratic drug adverse reaction</li> <li>3. Pharmacoepidemiologic study by analyzing the big medical data</li> <li>4. Study of ethnic factors in the drug response among East Asia populations</li> <li>5. Analysis of clinical study design</li> </ol>
Kampo Medicinal Therapeutics [Pharmacognosy]	<ol style="list-style-type: none"> <li>1. Medical pharmaceutical study of crude drugs, Japanese traditional kampo medicines and natural materials</li> <li>2. Usability assessment of traditional medicines aiming at the application to various diseases, and their action mechanism</li> <li>3. Searching of biofunctional materials made from natural materials including plants or microbes and their application to drug discovery</li> <li>4. Genetic control for secondary metabolic function in plants and microbes, and production of useful compounds</li> <li>5. Analysis of the diverseness of medicinal resource plants based on genome information, and its application to crude drug assessment</li> </ol>
Biomolecular Pharmacology [Molecular and Cellular Pharmacology]	<ol style="list-style-type: none"> <li>1. Physiological functions of ion channels</li> <li>2. Pathophysiological roles of ion channels in cardiovascular diseases</li> <li>3. Electrophysiology and pharmacology in smooth muscle cells, cardiomyocytes, neurons, chondrocytes, and immunocytes</li> <li>4. Drug development in the ion channel research field</li> </ol>
Molecular Neuroscience [Biomedical Science]	<ol style="list-style-type: none"> <li>1. Molecular mechanism of neuronal network formation</li> <li>2. Molecular mechanism of higher brain function (e.g., memory, reading, feeling)</li> <li>3. Development of novel methods of diagnosis, prevention, and treatment of neurodevelopmental disorders</li> <li>4. RNA metabolism and its relation with neurodevelopmental disorders</li> </ol>
Biopharmaceutics and Clinical Pharmacokinetics [Biopharmaceutics]	<ol style="list-style-type: none"> <li>1. Functions and regulatory mechanisms of transporters involved in disposition of bioactive compounds (e.g., drugs, nutrients, and lipids)</li> <li>2. Roles of transporters in bioactive compound disposition</li> <li>3. Physiological and pathophysiological roles of transporters</li> <li>4. Methodologies for evaluation and prediction of bioactive compound disposition</li> </ol>
Pathobiology and Pharmacotherapy in Pharmaceutical Practice [Pathobiology]	<ol style="list-style-type: none"> <li>1. Neuroprotective effect and glial function</li> <li>2. Microenvironment around cancer</li> <li>3. Spontaneous regression and malignancy of neuroblastoma</li> </ol>
Stress Response Cellular Biology [Cell Signaling]	<ol style="list-style-type: none"> <li>1. Clarification of cancer biological properties and development of novel molecular targeted drugs</li> <li>2. Clarification of the mechanisms of TGF<math>\beta</math> signal and cancer malignant progressions</li> <li>3. Clarification of cellular stress, including endoplasmic reticulum stress, and the pathogenesis of lifestyle-related diseases</li> <li>4. Understanding metabolic reprogramming and its application to disease prevention</li> <li>5. Effects of stress on drug and toxicant metabolism</li> </ol>

Department	Research interests
Clinical Neuropharmacology [Neuropharmacology]	<ol style="list-style-type: none"> <li>1. Analysis of the molecular mechanism for sleep-wake regulation using model animals</li> <li>2. Pharmacotherapeutics and clinical studies in sleep medicine</li> <li>3. Neuropharmacological study of chronic pain and palliative care</li> <li>4. Pharmacological approach to alleviate the higher brain dysfunction in metabolic disease</li> <li>5. Understanding of the mechanism of sensory abnormality caused by nerve injury</li> </ol>

#### [Departments in Affiliate Graduate School 1]

Department	Research interests
Oncology (Aichi Cancer Center Research Institute)	<ol style="list-style-type: none"> <li>1. Clarifying the roles of tumor microenvironment in cancer formation and progression</li> <li>2. Elucidating the molecular mechanisms of metastasis</li> <li>3. Unraveling the pathophysiology of cancer cachexia</li> <li>4. Study on the dysfunction of cellular signaling pathways in cancer</li> </ol>
Experimental Gerontology (National Center for Geriatrics and Gerontology Research Institute)	<ol style="list-style-type: none"> <li>1. To elucidate mechanisms of Alzheimer's disease</li> <li>2. To develop therapeutics for Alzheimer's disease</li> <li>3. To investigate roles of glial cells in neurodegenerative diseases</li> <li>4. To understand aging using Drosophila models</li> </ol>
Quality Assurance Science for Pharmaceuticals (National Institute of Health Sciences)	<ol style="list-style-type: none"> <li>1. Study on bioequivalence evaluation and quality management of generic drug products</li> <li>2. Study on formulation and process design of pharmaceuticals</li> <li>3. Studies on the quality control and quality assurance of regenerative/cellular therapy products</li> <li>4. Development of testing methods for the assessment of quality and safety of regenerative/cellular therapy products derived from human ES/iPS cells</li> </ol>
Molecular Profiling for Cancer Precision Therapy (Japanese Foundation for Cancer Research)	<ol style="list-style-type: none"> <li>1. Study on molecular mechanisms of drug resistance in cancer and therapeutic strategies to overcome the resistance</li> <li>2. Understanding the diversity of cancer and development of new therapeutic strategies</li> <li>3. Identification of new therapeutic targets based on cancer genomic and epigenomic information</li> <li>4. Molecular mechanisms of cancer metastasis and development of anti-cancer metastasis drug</li> </ol>
Biomedical Innovation Initiative (National Institutes of Biomedical Innovation, Health and Nutrition)	<ol style="list-style-type: none"> <li>1. Cancer drug discovery without side effects through in vivo regulation of cancer-specific functional molecules</li> <li>2. Development of immunotherapy and novel RNA vaccines aiming for functional cure against chronic infectious diseases</li> </ol> <p>Development of personalized cancer immunotherapy through genomic and immunogenomic analysis</p>

#### [Major in Medicinal and Life Sciences]

Department	Research interests
Organic and Medicinal Chemistry	<ol style="list-style-type: none"> <li>1. Molecular design, synthesis, and evaluation of biologically functional and useful compounds</li> <li>2. Development of the methods for exploration and analysis for bioactive substances based on chemical approach</li> <li>3. Bioorganic chemistry for reactive oxygen species and nitric oxide</li> <li>4. Development of the compounds for controlling cellular properties based on photochemistry and organic chemistry</li> </ol>
Bioorganic chemistry	<ol style="list-style-type: none"> <li>1. Research on the design and creation of bioactive mid-sized molecules (peptides and peptide nucleic acids)</li> <li>2. Synthesis and application of functional polyamines</li> <li>3. Research and development of functional supramolecular systems</li> <li>4. Synthesis and biological evaluation of drug lead compounds</li> </ol>
Synthetic Organic Chemistry	<ol style="list-style-type: none"> <li>1. Studies on the synthesis of biologically active natural products</li> <li>2. Studies toward drug discovery based on biologically active natural products</li> <li>3. Development of efficient methods for construction of molecular architectures</li> <li>4. Development of highly selective synthetic reactions</li> </ol>

Department	Research interests
Synthetic Supramolecular Chemistry	<ol style="list-style-type: none"> <li>1. Development of multicomponent domino reaction by using a transition metal catalyst, and its application to drug synthesis</li> <li>2. Logical study of transition metal-catalyzed reaction by ab initio molecular orbital study calculation</li> </ol>
Multilevel Biofunctional Analytics	<ol style="list-style-type: none"> <li>1. Elucidation of biomolecular networks using omics analyses</li> <li>2. Structural and functional analysis of glycans and their application to drug discovery</li> <li>3. Research on the biosynthetic system of glycoproteins</li> <li>4. Research on molecular mechanisms regulating cell differentiation and functional development in the nervous and immune systems</li> </ol>
Physical Chemistry of Colloid and Polymer	<ol style="list-style-type: none"> <li>1. Study of the ordering of soft matter (colloid, gel, polymer, micelle)</li> <li>2. Formation of gel immobilized colloid crystal, and its application to materials</li> <li>3. Computer simulation of the ordering process of soft matter</li> <li>4. Application of colloid system to drug field</li> </ol>
Structural Biology and Biomolecular Engineering	<ol style="list-style-type: none"> <li>1. Elucidation of the functional mechanisms of biomolecules by integrative structural biology</li> <li>2. Structural biology for elucidating pathological mechanisms and drug development</li> <li>3. Exploration of dynamical ordering of biomolecular systems for creation of integrated functions</li> <li>4. Exploration of environmental adaptation mechanisms of life through structural and functional analysis of biomolecules</li> </ol>
Molecular Biology	<ol style="list-style-type: none"> <li>1. Organelle dynamics in nervous system</li> <li>2. Pathological mechanisms of Alzheimer's disease and neurodevelopmental disorders</li> <li>3. Drug discovery research using iPS-derived neural cells</li> <li>4. mTOR signaling pathway</li> </ol>
Drug Delivery and Nano Pharmaceutics	<ol style="list-style-type: none"> <li>1. Development of a targeting drug delivery system (DDS) for brain cancer and other various cancer</li> <li>2. Design of a DDS for nano-micro lung-administered particles</li> <li>3. Formulation design of poorly soluble and absorbable drugs</li> <li>4. Development of a DDS for nano particle carriers</li> </ol>
Molecular and Cellular Health Science	<ol style="list-style-type: none"> <li>1. Cytokine signaling and immune responses</li> <li>2. Studies on the pathogenesis of chronic inflammatory diseases</li> <li>3. Evaluation of novel drug delivery system using microorganisms</li> <li>4. Immune responses against microorganisms, including Mycobacterium and Staphylococcus spp.</li> </ol>
Biological Chemistry	<ol style="list-style-type: none"> <li>1. Molecular mechanism of translation and mRNA decay</li> <li>2. Posttranscriptional regulation of gene expression</li> <li>3. Antiviral defense mediated by exogenous mRNA decay</li> <li>4. Pathological mechanism of cancer, neurodegenerative diseases resulting from RNA aberrations</li> <li>5. Development of mRNA-based drug for gene therapy</li> </ol>

#### [Departments in Affiliate Graduate School 2]

Department	Research interests
Integrative Science for Dynamic Living Systems (National Institutes of Natural Sciences)	<ol style="list-style-type: none"> <li>1. Structural biology and its research methods</li> <li>2. Protein structure and functional relationship</li> <li>3. Development of molecular dynamics simulation method and its application to proteins</li> <li>4. Theoretical study on the formation mechanism of protein aggregates causing neurodegenerative diseases</li> </ol>
Regulatory Science for Evaluation of Pharmaceuticals and Medical Devices (Pharmaceuticals and Medical Devices Agency)	<ol style="list-style-type: none"> <li>1. Study of quality, efficacy and safety evaluation of pharmaceuticals</li> <li>2. Study of quality, efficacy and safety evaluation of medical devices</li> <li>3. Study of quality, efficacy and safety evaluation of regenerative medicine products</li> </ol>

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

(As of Apr. 2026)

Department	Professor	Associate prof.	Assistant Professor	Research Associate
Community Pharmacy Management Individual Differences and Personalized Medicine [Clinical Pharmacy]	Tomoya Tachi Takahiro Iwao Yayoi Kawano	Tadahiro Hashita, Yuji Hotta (concurrent)	Eisei Hori Masayuki Saito Tomoaki Ishida	
Medicinal Safety Science [Regulatory Science]	Hiroshi Arakawa		Toshiki Kurosawa	
Kampo Medicinal Therapeutics [Pharmacognosy]	Toshiaki Makino	Kanichiro Ishiuchi	Kazuhiro Terasaka	
Biomolecular Pharmacology [Molecular and Cellular Pharmacology]	Hisao Yamamura	Yoshiaki Suzuki	Rubii Kondo	
Molecular Neuroscience [Biomedical Science]	Mitsuharu Hattori	Takao Kohno	Maki Takagishi	
Biopharmaceutics and Clinical Pharmacokinetics [Biopharmaceutics]		Tomoya Yasujima	Takahiro Yamashiro	
Pathobiology and Pharmacotherapy in Pharmaceutical Practice [Pathobiology]	Mineyoshi Aoyama		Hiromasa Aoki	
Stress Response Cellular Biology [Cell Signaling]	Yasumichi Inoue		Chiharu Miyajima	
Pharmacotherapeutics - Palliative Care for Cancer Patients [Clinical Neuropharmacology]	Kazuhiko Kume	Jun Tomita	Yoshinori Suzuki	
Organic and Medicinal Chemistry	Hidehiko Nakagawa	Mitsuyasu Kawaguchi,		Yuhei Ohta
Bioorganic Chemistry	Naoki Umezawa	Yosuke Hisamatsu		Ryosuke Ishida
Synthetic Organic Chemistry	Seiichi Nakamura			Eisaku Ohashi
Synthetic Supramolecular Chemistry		Shin-ichi Ikeda		
Multilevel Biofunctional Analytics	Hirokazu Yagi	Masahiko Tanaka		

Department	Professor	Associate prof.	Assistant Professor	Research Associate
Physical Chemistry of Colloid and Polymer		Tohru Okuzono, Akiko Toyotama		
Structural Biology and Biomolecular Engineering	Koichi Kato (specially appointed professor)	Maho Yagi		
Molecular Biology	Michiko Shirane	Hirokazu Nakatsumi	Tomoya Ozaki	
Drug Delivery and Nano Pharmaceuticals	Tetsuya Ozeki		Koki Ogawa	
Molecular and Cellular Health Sciences	Shigeaki Hida		Yuka Ito	Isamu Ogawa
Biological Chemistry	Shin-ichi Hoshino	Tsuyoshi Udagawa		Hiroto Inagaki

#### Affiliate Graduate School

Department	Professor	Associate prof.	Assistant Professor	Research Associate Assistant prof.
Oncology (Aichi Cancer Center Research Institute)	Masahiro Aoki, Chitose Oneyama (Guest Prof.)	Teruaki Fujishita (Guest Associate Prof.)		
Experimental Gerontology (National Center for Geriatrics and Gerontology Research Institute)	Koichi Iijima Michiko Sekiya (Guest 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)	Kumiko Kato 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.)		

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