Graduate School of Medicine and Pharmaceutical Sciences

Ph.D. Program in the Department of Pharmaceutical Sciences

Admission Guidelines
(Second Recruitment)

For Admission in April 2020

General Admission
Special Admission for Working Students
Special Admission for International Students

November 2019

University of Toyama
Table of Contents

Admission Policy 　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 1

General Admission 　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 1
1. Capacity
2. Eligibility
3. Selection Method

Special Admission for Working Students 　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 3
1. Capacity
2. Eligibility
3. Selection Method

Special Admission for International Students 　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 5
1. Capacity
2. Eligibility
3. Selection Method

Information for All Applicants 　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 6
1. Application Procedure
2. Notification of Acceptance
3. Admission Procedure
4. Privacy Policy
5. Cautions
6. Use of scores on external English examination

Overview of the Ph.D. Program in the Department of Pharmaceutical Sciences 　・・・・・・・・・・・・・・・ 12
1. Purpose
2. Standard Term of Study and Required Credits
3. List of Subjects
4. List of Academic Advisors and Their Research Fields Themes
5. Customized Schedule
6. Conferral of Degree
7. Courses for Developing Highly Skilled Professionals

Appendix I  List of Subjects 　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ 14
Appendix II  List of Academic Advisors and Their Research Themes List of Subjects 　・・・ 15

Although recruitment of students for the Ph.D. program (for entrance in April 2020 in the Department of Pharmaceutical Sciences of the Graduate School of Medicine and Pharmaceutical Sciences of this university) is implemented twice, the second recruitment of students will be implemented based on these guidelines.

The first recruitment of students was implemented at August 2019.
Admission Policy

This program, based on its aim of nurturing human resources as is shown in the policy of certifying completion of the program and granting degrees (diploma policy), accepts such applicants seeking to be researchers, educators and technicians who can play in the future an active role in the fields of pharmaceutical science and its interdisciplinary studies, with willingness to conduct the cutting edge research on the science of developing new drugs and life science.

General Admission

1. Capacity

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Students Accepted</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Sciences</td>
<td>A few</td>
<td>Includes the number of students recruited for working students and international students.</td>
</tr>
</tbody>
</table>

Note: Applicants should consult with the academic advisor for their desired area of study prior to submitting their application.

2. Eligibility

The following persons are eligible to apply:

1. Persons who hold a master’s degree or a professional degree (under Article 104, Paragraph 1 of the School Education Act and 1953 Ministry of Education Ordinance No. 9, Article 5, Paragraph 2), or persons scheduled to fulfill said requirement by March 2020
2. Persons who hold a degree equivalent to a master’s degree or a professional degree in a foreign country, or persons scheduled to fulfill said requirement by March 2020
3. Persons who hold a degree equivalent to a master’s degree or a professional degree after having completed, while residing in Japan, the required courses in distance education conducted by a school outside of Japan, or persons scheduled to fulfill said requirement by March 2020
4. Persons who hold a degree equivalent to a master’s degree or a professional degree after having completed, while residing in Japan, a program at an educational institution that provides courses for a foreign graduate school accredited under the school education system of the relevant foreign country and that is specifically designated as such by the Minister of Education, Culture, Sports, Science and Technology of Japan, or persons scheduled to fulfill said requirement by March 2020
5. Persons designated by the Minister of Education, Culture, Sports, Science and Technology of Japan (1989 Ministry of Education Notification No. 118)
   a. Persons who, after graduating from university, engaged in at least two years of research at a university or research institute and, based on the resulting research achievements, have been recognized as having academic ability equal to or higher than that of a person holding a master’s degree or professional degree
   b. Persons who, after completing a 16-year course of study in the educational institutions of a foreign country, or after completing a 16-year course of study in the educational institutions of the relevant foreign country by taking in Japan the required courses in distance education conducted by a school outside of Japan, engaged in at least 2 years of research at a university or research institute and, based on the resulting research achievements, have been recognized by the
Graduate School of Medicine and Pharmaceutical Sciences as having academic ability equal to or higher than that of a person holding a master’s degree or professional degree

(6) Persons who are 24 years of age or older at the time of entrance, and after having undergone the preliminary qualification screening and have been determined to have a level of academic ability equal to or higher than that of a person holding a master’s degree or professional degree

(7) Persons who hold or are expecting to obtain a master’s degree or equivalent by the end of March 2020, after completion of a course at the United Nations University (hereinafter referred to as UNU) as prescribed in Article 1 paragraph 2 of 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), which was established under the resolution of the General Assembly of the United Nations on December 11, 1972.

(8) Persons who have been recognized by the Graduate School of Medicine and Pharmaceutical Sciences as having academic ability equal to or higher than that of a person holding a master’s degree after having completed the required course at the United Nations University or an educational institution in a foreign country described in (4) and who have passed the examination or screening prescribed in Article 16 paragraph 2 of the Rules on Graduate Schools, or the equivalent of the examination or screening.

Note: Applicants who fall into categories (5),(6) or (8) are required to undergo preliminary qualification screening in advance. Please refer to Information for All Applicants, 1 Application Procedures, (4) Application for Approval of Eligibility.

3. Selection Method

Applicants are selected on the basis of the results of a written examination, an oral examination and an external English examination (only applicable persons, refer to “6 Use of scores on external English examination” on page 10), as well as an evaluation of academic transcripts.

(1) Written Examination


- Foreign language: English (Specialized)

※1 Applicants who submit a score sheet for an external English examination will be exempted from a written English examination.

※2 Applicants who completed the Master’s Program in the Department of Pharmaceutical Basic Sciences of Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama will be exempted from a written examination.

(2) Oral Examination

An oral examination on the master’s thesis, related research papers, and other specialized subjects is conducted.

(3) Examination Schedule and Venue

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Subject</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 7</td>
<td>9:30 ~ 11:30</td>
<td>Specialized subjects</td>
<td>University of Toyama</td>
</tr>
<tr>
<td>(Friday),</td>
<td></td>
<td></td>
<td>Sugitani Campus (Medicine and Pharmacetical</td>
</tr>
<tr>
<td>2020</td>
<td>13:00 ~ 14:00</td>
<td>Foreign language</td>
<td>Sciences), 2630 Sugitani, Toyama City, Toyama</td>
</tr>
<tr>
<td></td>
<td>15:00 ~ (planned)</td>
<td>Oral examination</td>
<td></td>
</tr>
</tbody>
</table>

Note: The starting time for the oral examination is subject to change, depending on the number of applicants. Should the starting time change, applicants will be notified when examination admission cards are sent.
Special Admission for Working Students

1. Capacity

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Students Accepted</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Sciences</td>
<td>A few</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Applicants should consult with the academic advisor for their desired area of study prior to submitting their application.
- Working students are given special consideration, including scheduling of classes and research guidance in the evenings or at other specific times to avoid conflicts with work schedules, if considered necessary from an educational standpoint. This special consideration is given in accordance with “special cases with regard to the method of education stipulated in Article 14 of the Requirements for Establishing Graduate Schools”.

2. Eligibility

Persons who work in a variety of research institutions, educational institutions, or in companies as professionals such as researchers, or who will work for such institutions or companies beginning in April 2020, and to whom any of the following items applies are eligible to apply for admission.

(1) Persons who hold a master’s degree or a professional degree (under Article 104, Paragraph 1 of the School Education Act and 1953 Ministry of Education Ordinance No. 9, Article 5, Paragraph 2), or persons scheduled to fulfill said requirement by March 2020

(2) Persons who hold a degree equivalent to a master’s degree or a professional degree in a foreign country, or persons scheduled to fulfill said requirement by March 2020

(3) Persons who hold a degree equivalent to a master’s degree or a professional degree after having completed, while residing in Japan, the required courses in distance education conducted by a school outside of Japan, or persons scheduled to fulfill said requirement by March 2020

(4) Persons who hold a degree equivalent to a master’s degree or a professional degree after having completed, while residing in Japan, a program at an educational institution that provides courses for a foreign graduate school accredited under the school education system of the relevant foreign country and that is specifically designated as such by the Minister of Education, Culture, Sports, Science and Technology of Japan, or persons scheduled to fulfill said requirement by March 2020

(5) Persons designated by the Minister of Education, Culture, Sports, Science and Technology of Japan (1989 Ministry of Education Notification No. 118)
   a. Persons who, after graduating from university, engaged in at least two years of research at a university or research institute and, based on the resulting research achievements, have been recognized as having academic ability equal to or higher than that of a person holding a master’s degree or professional degree
   b. Persons who, after completing a 16-year course of study in the educational institutions of a foreign country, or after completing a 16-year course of study in the educational institutions of the relevant foreign country by taking in Japan the required courses in distance education conducted by a school outside of Japan, engaged in at least 2 years of research at a university or research institute and, based on the resulting research achievements, have been recognized by the Graduate School of Medicine and Pharmaceutical Sciences as having academic ability equal to or higher than that of a person holding a master’s degree or professional degree
(6) Persons who are 24 years of age or older at the time of entrance, and after having undergone the preliminary qualification screening and have been determined to have a level of academic ability equal to or higher than that of a person holding a master’s degree or professional degree.

(7) Persons who hold or are expecting to obtain a master’s degree or equivalent by the end of March 2020, after completion of a course at the United Nations University (hereinafter referred to as UNU) as prescribed in Article 1 paragraph 2 of 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), which was established under the resolution of the General Assembly of the United Nations on December 11, 1972.

(8) Persons who have been recognized by the Graduate School of Medicine and Pharmaceutical Sciences as having academic ability equal to or higher than that of a person holding a master’s degree after having completed the required course at the United Nations University or an educational institution in a foreign country described in (4) and who have passed the examination or screening prescribed in Article 16 paragraph 2 of the Rules on Graduate Schools, or the equivalent of the examination or screening.

Note: Applicants who fall into categories (5),(6)or(8) are required to undergo preliminary qualification screening in advance. Please refer to Information for All Applicants, 1 Application Procedures, (4) Application for Approval of Eligibility.

3. Selection Method

Applicants are selected on the basis of the results of a written examination, an oral examination and an external English examination (only applicable persons, refer to “6 Use of scores on external English examination” on page 10), as well as an evaluation of academic transcripts.

(1) Written Examination

- Foreign language: English (Specialized)

※1 Applicants who submit a score sheet for an external English examination will be exempted from a written English examination.

※2 Applicants who completed the Master’s Program in the Department of Pharmaceutical Basic Sciences of Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama will be exempted from a written examination.

(2) Oral Examination

An oral examination on the master’s thesis, related research papers, and work experience is conducted.

(3) Examination Schedule and Venue

<table>
<thead>
<tr>
<th>Date</th>
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<th>Subject</th>
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<tbody>
<tr>
<td>Feb. 7 (Friday), 2020</td>
<td>9:30 ~ 11:30</td>
<td>Specialized subjects</td>
<td>University of Toyama</td>
</tr>
<tr>
<td></td>
<td>13:00 ~ 14:00</td>
<td>Foreign language (English (Specialized))</td>
<td>Sugitan Campus (Medicine and Pharmaceutical Sciences), 2630 Sugitan, Toyama City, Toyama</td>
</tr>
<tr>
<td></td>
<td>15:00 ~ (planned)</td>
<td>Oral examination</td>
<td></td>
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Special Admission for International Students

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<td></td>
</tr>
</tbody>
</table>

Note: Applicants should consult with the academic advisor for their desired area of study prior to submitting their application.

2. Eligibility

Persons of foreign nationality to whom any of the following items applies are eligible to apply for admission.

(1) Persons who hold or expect to obtain a master’s degree or professional degree in a foreign country by March 2020

(2) Persons who are 24 years of age or older at the time of entrance, and after having undergone the preliminary qualification screening and have been determined to have a level of academic ability equal to or higher than that of a person holding a master’s degree or professional degree

Note: Applicants to whom (2) above applies are required to undergo a preliminary qualification screening in advance. Please refer to (4) Application for Approval of Eligibility in “Information for All Applicants”

3. Selection Method

Applicants are selected on the basis of the results of a written examination, an oral examination and an external English examination (only applicable persons, refer to “6 Use of scores on external English examination” on page 10), as well as an evaluation of academic transcripts.

(1) Written Examination


- Foreign language: English (Specialized)

※1 Applicants who submit a score sheet for an external English examination will be exempted from a written English examination.

※2 Applicants who completed the Master’s Program in the Department of Pharmaceutical Basic Sciences of Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama will be exempted from a written examination.

(2) Oral Examination

An oral examination on the master’s thesis, related research papers, and other specialized subjects is conducted.

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</tr>
<tr>
<td></td>
<td>13:00 ~ 14:00</td>
<td>Foreign language</td>
<td>(Medicine and Pharmaceutical Sciences),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(English (Specialized))</td>
<td>2630 Sugitani, Toyama City, Toyama</td>
</tr>
<tr>
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<td></td>
</tr>
</tbody>
</table>

Note: The starting time for the oral examination is subject to change, depending on the number of applicants. Should the starting time change, applicants will be notified when examination admission cards are sent.
Information for All Applicants

1. Application Procedure
   (1) Method of Application
   After paying the examination fee by bank remittance, write the applicable item from 2) below on an envelope in red ink and post the application documents by registered express mail.

   1) Application Period
      From December 16 (Monday), 2019 to January 6 (Monday), 2020 (as indicated by postmark)
      Mailing address: Educational Affairs Division of Medicine and Pharmaceutical Sciences Majors (in charge of admission), University of Toyama, 2630 Sugitani, Toyama 930-0194
      For information on the Method of Examination Fee Payment, refer to (3) Method of Examination Fee Payment.
      Students currently enrolled in University of Toyama graduate schools who seek to enroll in the Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program) are not required to pay the examination fee.

   2) Items to Be Written on the Envelope
      • General Admission
         Contains an application for the Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program General Admission)
      • Special Admission for Working Students
         Contains an application for the Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program Special Admission for Working Students)
      • Special Admission for International Students
         Contains an application for the Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program Special Admission for International Students)

   (2) Application Documents

<table>
<thead>
<tr>
<th>Documents</th>
<th>Applicable Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Application for Admission</td>
<td>Prepared using the University's prescribed form</td>
</tr>
<tr>
<td>2) Certificate of (expected) completion of a master's program</td>
<td>Prepared by the president or dean of the issuing university (graduate school)</td>
</tr>
<tr>
<td>3) Academic transcript from the graduate school of the university which the applicant has graduated</td>
<td>Prepared and sealed by the president or dean of the graduate school of the university If forge-proof/copy-prevention paper is used, wax-sealing of the envelope is not necessary.</td>
</tr>
<tr>
<td>4) Academic transcript from the undergraduate faculty of the university from which the applicant has graduated</td>
<td>Prepared and sealed by the president or dean of the university (undergraduate faculty) If forge-proof/copy-prevention paper is used, wax-sealing of the envelope is not necessary.</td>
</tr>
<tr>
<td>5) Master's thesis or equivalent</td>
<td>One copy (Persons applying for eligibility approval and applicants taking the special admission for working students may submit their Research Paper List (Including Academic Conference Presentations) on the prescribed form of the University of Toyama, in lieu of a master's thesis.)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 6) | Summary of the above thesis | Two copies  
Prepare a summary of a maximum length of one page of A-4 size paper that includes the thesis title and the author's name. (When attaching figures, use a separate page, for a maximum length of two pages). Use body text 11 points or larger in size and top, bottom, left, and right margins of at least 20 mm. (Persons applying for eligibility approval and applicants taking the special admission for working students may submit a summary of research and/or work details of a maximum length of 800 words on A-4 size papers in lieu of a thesis summary.) |
| 7) | Examination Admission Card / Photo Identification Card | Prepared using the University's prescribed form. Attach a photograph (upper body photo of the applicant alone taken full face with no head covering within three months of the application (4 cm in length x 3 cm in width)). |
| 8) | Certificate of Examination Fee Transfer | After paying the examination fee at a financial institution using the University's prescribed Examination Fee Remittance Request Form, attach the slip of the Certificate of Transferred Amount (Examination fee) issued by the financial institution to the Certificate of Examination Fee Transfer (University's prescribed form), and submit it along with other documents. Persons currently enrolled in a master's program at the University of Toyama who seek to enroll in the Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program) are not required to pay the examination fee. |
| 9) | Letter of Approval for Entrance Examination | Applicants who are enrolled in a graduate school elsewhere than at the University of Toyama or who are employed at a public office or private company are required to submit an approval for examination signed by the dean of their graduate school or their immediate supervisor at work. (No specific format required) |
| 10) | Copy of the Certificate of Residence | Foreign nationals currently residing in Japan should attach a Copy of the Certificate of Residence issued by the city, town, village or special ward in which they reside. |
| 11) | Stamped, self-addressed envelope | Used to post the Examination Admission Card. Please write your name, address, and postal code on a No. 3 long envelope (23.5 cm x 12 cm) and attach postage stamps to the amount of ¥374 (special delivery). |
| 12) | Mailing label (used to post the notice of examination results) | Prepared using the University's prescribed form. Write your name, address, and postal code. |
| 13) | TOEFL/TOEIC score sheet (original) (applicants who wish to use a score for an external English examination only) | Applicants who have taken any of the following examinations are requested to submit the original score sheet. (We will return it in the reply envelope after photocopying it.)  
(1) TOEFL-iBT score report for the applicant  
(2) TOEFL-ITP score report  
(3) TOEIC L&R Official Score Certificate  
(4) TOEIC L&R-IP Score Report  
Only score sheets issued on or after September 1, 2017 are valid. |
Documents written in a foreign language other than English must be accompanied by documents translated into Japanese or English.

(3) Method of Examination Fee Payment
Applicants should pay the ¥30,000 examination fee by the prescribed method not later than 3:00 pm, January 6 (Monday), 2020. Persons currently enrolled in a master's program at the University of Toyama who seek to enroll in the Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program) are not required to pay the examination fee. Use the University's prescribed form to remit the examination fee at the service counter of a nearby bank, Shinkin Bank, agricultural cooperative, or other financial institution that handles wire transfers. Payment cannot be made at an automatic teller machine (ATM) or Japan Post Bank. Examination fees cannot be refunded for any reason except in the following cases:
1) The applicant does not apply to the University of Toyama after remitting the examination fee (The applicant does not submit the application documents, or the application documents are not received.)
2) Double payment
3) Payment exceeding the required amount
Note: When applying to the University of Toyama for an examination fee refund, affix the slip of the Certificate of Transferred Amount (Examination fee) to the designated Examination Fee Refund Request Form, and mail it to the University of Toyama.
Mailing address: Accounting Division, Financial Affairs Division, University of Toyama, 3190 Gofuku, Toyama 930-8555
Telephone: (076) 445-6053 From abroad: +81-76-445-6053

(4) Application for Approval of Eligibility
Individual eligibility screening is conducted for persons who seek to apply based on eligibility qualifications (5),(6),or(8) qualification (2) in the case of the special admission for international students). Applicants should submit the following documents to the Educational Affairs Group of Medicine and Pharmaceutical Sciences Majors (in charge of admission), Student Academic Affairs Division, University of Toyama by December 6 (Friday), 2019.
- Eligibility Approval Screening Form (University of Toyama prescribed form)
- Academic transcript and certificate of graduation from the school last attended
- Summary of research and work details
- Research Paper List (Including Academic Conference Presentations) (University of Toyama prescribed form)
Applicants will be notified of the results of eligibility screening by December 13 (Friday), 2019.

(5) Advance Consultation for Applicants with a Disability
Since applicants with a disability may require special consideration when taking the entrance examination or attending school, they are requested to consult with the Educational Affairs Group of Medicine and Pharmaceutical Sciences Majors (in charge of admission), University of Toyama in advance. At the time of consultation, applicants may be requested to submit a document containing the following matters and a doctor’s certificate.
- Type and degree of disability
- Matters requiring special consideration at the time of the entrance examination
- Matters requiring special consideration at the time of school attendance
- Circumstances of daily life and other matters for reference
1) Consultation deadline: December 6 (Friday), 2019.
2) Contact information: Educational Affairs Group of Medicine and Pharmaceutical
2. Notification of Acceptance
The examination numbers of successful applicants will be posted at the front entrance of the University of Toyama Sugitani Campus Faculty of Pharmacy and Pharmaceutical Sciences Bldg. at 3:00 pm on February 21 (Friday), 2020, and the successful applicants will be notified. Telephone and facsimile inquiries will not be accepted.

3. Admission Procedure
The enrollment procedure is as follows. Successful applicants will be given more details.
(1) Enrollment Date: March 23 (Monday), 2020 (planned)
(2) Place: University of Toyama Sugitani Campus
(3) Documents Required for Admission
   Notice of Acceptance, color photograph (4 cm in length x 3 cm in width), written pledge of school enrollment (University of Toyama prescribed form)
(4) Expenses Required for Admission
   a) Admission fee: ¥282,000 (provisional amount)
      Notes: 1) The above admission fee is a provisional amount. Should the admission fee be revised, the new admission fee will become effective at the time of the revision.
      2) Once paid, admission fees cannot be refunded for any reason.
   b) Other matters
      1) In cases where payment of the admission fee is judged to be difficult, after screening an exemption may be granted, or collection may be postponed.
      2) Tuition is paid after admission. Information on the tuition amount and payment method is provided at the time of enrollment.
      Reference information: Tuition for the 2019-2020 academic year is ¥535,800.
      3) Scholarships are available through the Admission Office.
      4) Students are required to pay the cost of Personal Accident Insurance for Students Pursuing Education and Research and other items separately.
(5) Cautionary Statement
   Persons who fail to complete the admission procedure by the deadline will be considered to have declined admission.

4. Privacy Policy
Personal information held by the University is handled in accordance with the Act on the Protection of Personal Information Held by Administrative Organs and the University of Toyama Policies on Personal Information Protection
(1) Names, addresses, and other personal information that the University of Toyama obtains from applicants will be used for 1) the selection of students (processing of applications and the selection process), 2) announcement of successful applicants, 3) enrollment procedures, 4) investigation and research for the selection process, and 5) other related activities.
(2) Personal information obtained from persons who have completed the admission procedures will be used for preparatory education before admission and for 1) instruction and administration (the school register, student guidance, etc.), 2) student assistance (health management, application for tuition exemptions and scholarships, employment assistance, etc.), 3) the collection of tuition after admission, and 4) statistical survey and data analysis.
(3) Only the applicant ID numbers, names and addresses of successful applicants may be used to facilitate contact by organizations related to after-school activities, the alumni association, the support association, and the student cooperative association of the University of Toyama.

Note: Successful applicants who do not wish to be contacted by the abovementioned organizations should notify the Educational Affairs Division of Medicine and Pharmaceutical Sciences Majors (in charge of admission), University of Toyama to that effect.

(4) The University of Toyama may partially outsource operations to commissioned companies (hereinafter referred to as “Contractors”). We may provide said Contractors with all or part of the personal information obtained through the application process as required for the execution of contracted business. We supervise the use of information to ensure compliance with confidentiality.

5. Cautions
(1) If there is any defect in the application documents, the application may not be accepted.
(2) Once accepted, the application documents and related materials shall not be returned for any reason.
(3) If any of the information provided in the submitted documents is found to be false even after acceptance for admission, the admission of a successful applicant may be cancelled.
(4) Please forward any inquiry about application or other matters to the following address:
   Educational Affairs Division of Medicine and Pharmaceutical Sciences Majors (in charge of admission), University of Toyama, 2630 Sugitani, Toyama 930-0194
   Telephone: (076) 434-7658 From abroad: +81-76-434-7658

6. Use of scores on external English examination
Applicants who have submitted their official scores on the TOEFL-iBT, TOEFL-ITP, TOEIC L&R, or TOEIC L&R-IP are not requested to take a written English examination: the score submitted by the student will be used for evaluation. The score conversion formulae are shown below. Only applicants who cannot submit their official scores on the TOEFL-iBT, TOEFL-ITP, TOEIC L&R, or TOEIC L&R-IP are requested to take a written English examination.

Scores on the TOEFL-iBT, TOEFL-ITP, TOEIC L&R, or TOEIC L&R-IP are converted into points out of 100, and used for the evaluation.

If an applicant has taken two or more examinations, the highest score will be used for the evaluation.

Scores submitted must have been issued on or after September 1, 2017.

<Score conversion formulae>
1) TOEFL-iBT
   70 or higher = 100 points
   In the case of lower than 70 :
   Converted score: 100 × (TOEFL-iBT score) / 70
2) TOEFL-ITP
   525 or higher = 100 points
   In the case of lower than 525:
   Converted score: \(100 \times \frac{(\text{TOEFL-ITP score}) - 310}{215}\)
   310 or lower = 0 point

3) TOEIC L&R and TOEIC L&R-IP
   730 or higher = 100 points
   In the case of lower than 730:
   Converted score: \(100 \times \frac{\text{TOEIC score}}{730}\)
Overview of the Ph.D. Program in the Department of Pharmaceutical Sciences

1. Purpose
This Ph.D. program in the department of pharmaceutical sciences offers instruction and research pertaining to the latest cross-disciplinary drug discoveries, and instruction pertaining to natural medicine and clinical pharmacy. It produces graduates who will apply the knowledge and technology acquired in the course to play an active role in pharmacy-related fields, including research into new drugs.

2. Standard Term of Study and Required Credits
(1) Term
The term for the Ph.D. Program in the Department of Pharmaceutical Sciences is three years as a standard.

(2) Credit standard
The requirements for the Ph.D. program in the department of pharmaceutical sciences are enrollment in the University of Toyama Graduate School for a period of three or more years, receiving research guidance from academic advisors, obtaining 20 or more credits in total (two or more credits for lectures on the subjects in the major field, four or more credits for practice on pharmaceutical sciences and 14 or more credits for special research on pharmaceutical sciences under the supervision of academic advisors), and successful completion of a screening of a doctoral dissertation and final examination after having obtained the necessary research guidance. However, a doctorate may be conferred on a student who has been enrolled in the Graduate School for a period of two years or longer, and has achieved excellent research results.

In the high-level professional course based on natural medicine, students must acquire internship, practice in developing drug formulation, practice in drug efficacy and pharmacokinetics, International Pharmaceutical Sciences in addition to the above credits.

If a student presents his or her plan to take and complete the program systematically over a certain period beyond the standard course term (3 years) due to special circumstances such as working outside the campus, the systematic course curriculum may be accepted.

3. List of Subjects
See Appendix I.

4. List of Academic Advisors and Their Research Themes
See Appendix II.

5. Customized Schedule
An eligible student may receive a customized schedule following submission of a study plan and consultation with the academic advisor. A customized schedule allows a student to take classes and receive research guidance in the evening from 6:10 to 9:20 pm from Monday through Friday in addition to the time allotted during the day. Depending on the subject, a student may be able to take classes at other times as well, such as on Saturdays or during the summer vacation.

<table>
<thead>
<tr>
<th>Period I</th>
<th>8:45 am to 10:15 am</th>
<th>Period II</th>
<th>10:30 am to 12:00 pm</th>
<th>Period III</th>
<th>1:00 pm to 2:30 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period IV</td>
<td>2:45 pm to 4:15 pm</td>
<td>Period V</td>
<td>4:30 pm to 6:00 pm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period VI</td>
<td>6:10 pm to 7:40 pm</td>
<td>Period VII</td>
<td>7:50 pm to 9:20 pm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Conferral of Degree
The degree offered is a Doctor of Philosophy in Pharmaceutical Sciences.

7. Course for Developing Highly Skilled Professionals
The Graduate School of Medicine and Pharmaceutical Sciences offers the program for developing highly skilled professionals based on natural medicine and pharmaceutical sciences (PDNP). The Graduate School accepts students from Japan, China, Korea, ASEAN, and other countries and cultivates human resources who will contribute to the field of pharmacological therapy through team medicine in medical practice, as well as excellent human resources involved in pharmaceutical research, and in the development and quality control of medicines in pharmaceutical companies. The Graduate School also contributes to the development of the field of Pharmaceutical Sciences based on the historical traditions of the Toyama area, use of the seeds accumulated at the University of Toyama through research and education, and cooperation among universities in Asia through this project. The pharmaceutical sciences course offers a program to develop professional experts in natural medicine through long-term internships at pharmaceutical companies with in-depth knowledge of natural medicine. There, students gain comprehensive experience that includes research, development and quality control of medicines. In the high-level professional course based on natural medicine, students are not only obtaining 20 or more credits in total, but also acquire four credits for internship and one credit for practice in Pharmaceutical Formulation Development or practice in Pharmacokinetics.
## List of Subjects

<table>
<thead>
<tr>
<th>Subject Name</th>
<th>Year</th>
<th>Credits</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Biopharmaceutical Sciences</td>
<td>1・2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Medicinal Science</td>
<td>1・2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Lecture in Advanced Oriental and Western Medicine</td>
<td>1・2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice in Pharmaceutical Formulation Development</td>
<td>2・3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice in Pharmacokinetics</td>
<td>2・3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Pharmaceutical Sciences</td>
<td>1・2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internships</td>
<td>2・3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminar for Pharmaceutical Sciences</td>
<td>1〜3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Special Research for Pharmaceutical Sciences</td>
<td>1〜3</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Research Ethics and Methods</td>
<td>1〜3</td>
<td>1</td>
<td>e-Learning</td>
</tr>
<tr>
<td>Japanese Language • Culture</td>
<td>1・2</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

| Total                                      | 18        | 14      | 5       |
# Appendix II

## List of Academic Advisors and Their Research Themes

<table>
<thead>
<tr>
<th>Educational Field</th>
<th>Academic Advisor</th>
<th>Research Themes</th>
</tr>
</thead>
</table>
| Biopharmaceutics             | Professor Ken-ichi Hosoya | ・Blood-retinal barrier transport function analysis and drug delivery to the retina  
                              |                              | ・Blood-retinal barrier cell reconstruction and analysis of interaction between cells  
                              |                              | ・Elucidation of biological function and transport function in in vivo barrier tissue |
| Applied Pharmacology         | Professor Toshiaki Kume   | ・Elucidation of pathogenesis mechanisms of neurodegenerative diseases, pruritus, pain and dysesthesia and search and development of preventive and therapeutic drugs for these disorders.  
                              |                              | ・Establishment of novel animal models that exhibit the brain diseases and the sensory symptoms, such as itch, pain and dysesthesia  
                              |                              | ・Search for cytoprotective substances derived from foods and plants |
| Biorecognition Chemistry     | Professor Takenori Tomohiro| ・Chemical biology for efficient drug discovery: target identification, visualization, utilization, and manipulation  
                              |                              | ・Drug activity-based functional proteomics |
| Cancer Cell Biology          | Professor Hiroaki Sakurai | ・Elucidation of the molecular mechanisms of tumor progression via inflammatory signaling pathways.  
                              |                              | ・Study on the activation mechanisms of molecular targets in cancer therapy  
                              |                              | ・Study on the intracellular signals in malignant progression of melanoma |
| Chemical Biology             | Professor Masahiko Inouye,  
                              | Associate Professor Junya Chiba | ・Chemical biology based on synthetic chemistry, particularly three projects in artificial DNA, protein control, and saccharide recognition |
| Synthetic and Medicinal Chemistry | Professor Yuji Matsuya   | ・Development of new organic reactions for drug discovery  
                              |                              | ・Search for novel seeds of new drugs and structure-activity relationship research  
                              |                              | ・Synthesis and structural optimization of bioactive compounds |
| Molecular Neurobiology       | Associate Professor Akiko Tabuchi | ・Elucidation of the molecular mechanisms underlying regulation of neuronal function and plasticity by gene expression and cellular communication between synapses and a nucleus  
                              |                              | ・Studies on neurological disorders caused by dysfunction of transcription factors and synaptic molecules.  
<pre><code>                          |                              | ・Basic studies on transcription factors and synaptic molecules toward drug development targeted for neurological disorders. |
</code></pre>
<table>
<thead>
<tr>
<th>Field</th>
<th>Position</th>
<th>Professors</th>
<th>Research Areas</th>
</tr>
</thead>
</table>
| Gene Regulation               | Associate Professor | Yutaka Hirose                                  | ・ Study on the molecular mechanism of transcription initiation by RNA polymerase II  
                                |                   |                                                 | ・ Study on the role of mammalian Mediator complex in controlling gene expression  
                                |                   |                                                 | ・ Study on the regulatory mechanism of pre-mRNA processing coordinated with transcription  
                                |                   |                                                 | ・ Study on pathogenic mechanisms of human diseases caused by misregulation of gene expression program |
| Molecular Cell Biology        | Professor         | Takanori So                                    | ・ Elucidation of novel pro-inflammatory cytokine signaling mechanisms regulated by TRAF family molecules  
                                |                   |                                                 | ・ Elucidation of regulatory mechanisms of TNFR family molecules in CD4+ T cells  
                                |                   |                                                 | ・ Analysis of structure and function of ABC protein subfamily D  
                                |                   |                                                 | ・ Elucidation of molecular pathology of X-linked adrenoleukodystrophy and development of therapeutic agents |
| Medicinal Bioresources        | Associate Professor | Futoshi Taura                                  | ・ Comprehensive elucidation of biosynthetic pathways producing secondary metabolites in medicinal plants  
                                |                   |                                                 | ・ Relationship between structures and catalytic activities of biosynthetic enzymes of natural products  
                                |                   |                                                 | ・ Application of biosynthetic genes for synthetic biology |
| Synthetic and Biomolecular Organic Chemistry | Professor | Takayuki Yakura                                | ・ Development of environmentally benign organic reactions  
                                |                   |                                                 | ・ Synthesis of biologically active natural products  
                                |                   |                                                 | ・ Pharmaceutical chemical research in bioactive substances |
| Biointerface Chemistry        | Professor         | Minoru Nakano                                  | ・ Study of membrane lipid dynamics and elucidation of lipid transfer machinery  
                                |                   |                                                 | ・ Elucidation of lipid flip-flop mechanisms  
                                |                   |                                                 | ・ Biophysical research for interaction of amyloid beta with membranes  
                                |                   |                                                 | ・ Structural and functional investigation and pharmaceutical application of lipid nanoparticles |
| Pharmaceutical Physiology     | Professor         | Hideki Sakai                                   | Physiological, biochemical and pharmacological studies in epithelial cells to clarify  
                                |                   |                                                 | 1) interactions between drugs and ion-transporting proteins  
                                |                   |                                                 | 2) transportosome functions  
                                |                   |                                                 | 3) functional relations among ion-transporting proteins |
| Pharmaceutical Technology     | Professor         | Yoshinori Onuki                                | ・ Development of optimization techniques for designing pharmaceutical formulations and manufacturing processes  
                                |                   |                                                 | ・ Studies on pharmaceutical characteristics using molecular imaging techniques |
| Pharmacognosy                 | Professor         | Katsuko Komatsu                                | ・ Pharmacognostical study on medicinal plants and herbal drugs by molecular systematic, chemical and pharmacological approaches  
                                |                   |                                                 | ・ Study on quality standardization of herbal drugs as well as health supplements  
                                |                   |                                                 | ・ Field investigation on herbal drug resources and traditional medicine around the world  
                                |                   |                                                 | ・ Chemometric profiling of multiple components in crude drugs and Kampo formula  
<pre><code>                            |                   |                                                 | ・ Discovery of bioactive natural compounds from traditional medicines |
</code></pre>
<table>
<thead>
<tr>
<th>Area</th>
<th>Name</th>
<th>Research</th>
</tr>
</thead>
</table>
| Natural Products Chemistry    | Professor Hiroyuki Morita     | • Studies on biosynthesis of naturally occurring bioactive compounds  
                                 |                                                                               | • Structural basis for secondary metabolite enzymes  
                                 |                                                                               | • Enzyme engineering for novel drug development  
                                 |                                                                               | • Isolation of bioactive compounds from plants, microorganisms, and marine organisms  
                                 |                                                                               | • Investigation of Asia’s natural resources not fully utilized                     |
| Pathogenic Biochemistry       | Professor Yoshihiro Hayakawa  | • Study of NK cell biology and its roles in immunity  
                                 |                                                                               | • Role of innate immune responses in cancer progression  
                                 |                                                                               | • Immunological study of inflammatory & allergic diseases  
                                 |                                                                               | • Modulation of immune responses and immunological diseases by Kampo medicines  
                                 |                                                                               | • Study to regulate cancer progression & metastasis                                |
| Neuromedical Science          | Professor Chihiro Tohda       | • Integrative elucidation of the molecular mechanism of restoring the neuronal network in the central nervous system.  
                                 |                                                                               | • Traditional medicine research seeking fundamental therapeutic drugs for Alzheimer’s disease, spinal cord injury or depression.  
                                 |                                                                               | • The molecular mechanism of recovery of neurodegenerative diseases based on the glial cell-neuron interaction.  
                                 |                                                                               | • Drug development for skeletal muscle atrophy.  
                                 |                                                                               | • Proof of concept in humans aiming to develop new botanical drugs and new Kampo formulas. |
| Nutritional Biochemistry      | Associate Professor Shiro Watanabe | • Elucidation of novel actions of kampo medicines and food factors on the basis of modulation of intraluminal bile acid metabolism in gastrointestinal tract. |
| Natural Drug Discovery        | Associate Professor Suresh Awale | • Discovery of natural anticancer agents from medicinal plant resources by employing a novel anti-austerity screening strategy.  
                                 |                                                                               | • Chemical investigation of medicinal plants and search for novel bioactive secondary metabolites.  
                                 |                                                                               | • Investigation of the structure-activity relationship of the active natural compounds and their mechanism of action against cancer cell survival pathways.  
                                 |                                                                               | • Discovery of metabolomic biomarkers associated with cancer cells by utilizing FT-NMR and MS strategy. |

※ The Graduate School of Medicine and Pharmaceutical Sciences (Ph.D. Program in the Department of Pharmaceutical Sciences) has the laboratory specified below in addition to the laboratories listed above.  
Gastrointestinal Pathophysiology
The site of examination: Faculty of Medicine and Pharmaceutical Sciences, Sugitani Campus, University of Toyama

Transportation to the Faculty of Medicine and Pharmaceutical Sciences, Sugitani Campus, University of Toyama

- **By Bus**
  - About 30-minute ride on Toyama Local Loop Bus “University Hospital of Toyama University” (bus stop No.3 departing in front of Toyama Station). Take off at “University Hospital of Toyama University”.

- **Others**
  - About 20 minutes by car from “Toyama kitokito Airport”
  - About 5 minutes by car from “Toyama Nishi IC” on Hokuriku Expressway

Access to the Faculty of Medicine and Pharmaceutical Science, Sugitani Campus. University of Toyama

Inquiries about the Guidelines for Recruitment of Students, admission exam, and preliminary consultation for applicants with physical disabilities

*The applicant should make inquiries on his or her own unless absolutely necessary.

The Examination Section of the Admissions Office for Educational Affairs Division(Sugitani Campus), University of Toyama
Address: 2630 Sugitani, Toyama City, Japan 930-0194
TEL: 076-434-7658