Student application guidelines

# 2023

Enrollment in April 2023
Enrollment in October 2022
[General admission examination]
[Special admission examination for international students]

# Graduate School of Pharma-Medical Sciences
(Master's Course)

Graduate Program of Pharmaceutical Science and Technology
Graduate Program of Applied Natural Medicine
Graduate Program of Cognitive and Emotional Neuroscience
Graduate Program of Medical Design

June 2022

University of Toyama

In the event of an unexpected situation, such as the spread of novel coronavirus infection, the contents of the student application guidelines, including the examination schedule, may be changed. If it is necessary to make such changes, we will inform you on our website, and please be sure to check the latest information.
https://www.u-toyama.ac.jp

# Table of Contents

For the Graduate Programs of “Pharmaceutical Science and Technology”, “Applied Natural Medicine”, “Cognitive and Emotional Neuroscience”, and “Medical Design” (Master's Courses) offered by The Graduate School of Pharma-Medical Sciences, the student recruitment (for entry in April 2023) will be implemented twice. If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.

The availability of the second recruitment will be announced on our website around November 2022.

**-To All Working Adults-**

**The Graduate School of Pharma-Medical Sciences welcomes working people to encourage recurrent education.**

**Although no special admission examination for working adults is prepared, the General Admission Examination is also suitable to working people.**

**In addition, special measures can be taken to enable persons currently in employment to study without leaving their jobs, by applying the “Special Measures for Educational Methods based on Article 14 of the Standards for Establishment of Graduate Schools.”**

## Overview of Selection for Admission to the Graduate School of Pharma-Medical Sciences (Master's Courses)

Number of students to be admitted in April 2023

| Program name | Number of students to be admitted | |
|---|---|---|
| | General Admission Examination | Admission Examination for International Students |
| Graduate Program of Pharmaceutical Science and Technology | 10 | A few |
| Graduate Program of Applied Natural Medicine | 8 | A few |
| Graduate Program of Cognitive and Emotional Neuroscience | 9 | A few |
| Graduate Program of Medical Design | 10 | A few |

(Note 1) The Graduate School of Pharma-Medical Sciences uses the admission quota of 8 persons for “Studies in Medicine and Pharmaceutical Sciences of the Graduate School of Medicine and Pharmaceutical Sciences” and 29 persons for “Studies in Science and Engineering of the Graduate School of Science and Engineering.”

(Note 2) The number of students to be admitted to each program is an approximate number.

Number of students to be admitted in October 2022

| Program name | Number of students to be admitted | |
|---|---|---|
| | General Admission Examination | Admission Examination for International Students |
| Graduate Program of Pharmaceutical Science and Technology | A few | A few |
| Graduate Program of Applied Natural Medicine | A few | A few |
| Graduate Program of Cognitive and Emotional Neuroscience | A few | A few |
| Graduate Program of Medical Design | A few | A few |

Schedules related to admission examination

| Items | Graduate School of Pharma-Medical Sciences (Graduate Programs of Pharmaceutical Science and Technology, Applied Natural Medicine, Cognitive and Emotional Neuroscience, and Medical Design) | |
|---|---|---|
| | Enrollment in April 2023 [First recruitment] and Enrollment in October 2022 General admission examination and Admission examination for international students | Enrollment in April 2023 [Second recruitment] General admission examination and Admission examination for international students |
| Deadline for inquiry about Examination of Eligibility for Application (Only for relevant applicants) | Thursday, June 30, 2022 | Friday, December 2, 2022 |
| Notification of the examination results of eligibility for application (Only for relevant applicants) | By Thursday, July 14, 2022 | By Friday, December 16, 2022 |
| Application period | Friday, July 15 to Friday, July 22, 2022 | Monday, December 19 to Friday, December 23, 2022 |
| Dispatch of Examination Tickets (Mailing) | Friday, August 5, 2022 (scheduled) | Friday, January 13, 2023 (scheduled) |

| | | |
|---|---|---|
| Examination date | Thursday, August 25, 2022 | Wednesday, February 1, 2023 |
| Announcement of successful applicants | Friday, September 9, 2022 | Monday, February 13, 2023 |
| Admission Procedure (Deadline date) | (Enrollment in October 2022)<br>Friday, September 16, 2022<br>(Enrollment in April 2023)<br>Wednesday, March 8, 2023<br>(Scheduled) | Wednesday, March 8, 2023<br>(Scheduled) |

(Note)If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.
The availability of the second recruitment will be announced on our website around November 2022.

# I. Admission Policy

**Admission Policy of the Graduate School of Pharma-Medical Sciences**

Based on its purpose and policy on completion certification and degree conferment (diploma policy), the Graduate School of Pharma-Medical Sciences welcomes the persons who have strong interest and basic ability in the research field of Pharmaceutical Science and Technology, Applied Natural Medicine, Cognitive and Emotional Neuroscience or Medical Design, have logical thinking ability and creativity, and have the will to contribute to the development of human and environmental health culture.

Therefore, as a basic policy of our enrollment selection, we offer various kinds of admission examinations which provide multiple admission opportunities to diversified applicants.

**Admission Policy of Graduate Program of Pharmaceutical Science and Technology**

Based on its purpose of human resource development shown in the policy of completion certification and degree conferment (diploma policy), Graduate Program of Pharmaceutical Science and Technology welcomes the persons who aim to be researchers and engineers rich in creativity with good comprehensive judgment and desire to learn the basis of medicine discovery and pharmaceutical preparation.

**[Basic policy on selection (admission examination types and their evaluation methods)]**

**General Admission Examination**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Special Admission Examination for International Students**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Admission Policy of the Graduate Program of Applied Natural Medicine**

Based on its purpose of human resource development shown in the policy of completion certification and degree conferment (diploma policy), Graduate Program of Applied Natural Medicine welcomes the persons who aim to be researchers, educators and engineers rich in creativity with good comprehensive judgment and desire to learn the basis of applied natural medicine.

**[Basic policy on selection (admission examination types and their evaluation methods)]**

**General Admission Examination**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Special Admission Examination for International Students**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Admission Policy of Graduate Program of Cognitive and Emotional Neuroscience**

Based on its purpose of human resource development shown in the policy of completion certification and degree conferment (diploma policy), the Graduate Program of Cognitive and Emotional Neuroscience welcomes the persons who aim to be researchers and engineers rich in creativity with good comprehensive judgment and desire to learn the basis of Cognitive and Emotional Neuroscience.

**[Basic policy on selection (admission examination types and their evaluation methods)]**

**General Admission Examination**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Special Admission Examination for International Students**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Admission Policy of Graduate Program of Medical Design**

- The Program seeks those who are interested in medical and welfare engineering, and are motivated to acquire basic and advanced knowledge of: medicine; pharmacy; medical practice; welfare; and science and engineering.
- The Program seeks those who are willing to contribute to society in various fields such as medical practice, welfare, and healthcare as highly specialized professionals and researchers who have majored in medical engineering.
- The program seeks those who have the basic abilities necessary to carry out advanced research and development in the fields of medical practice, welfare, and healthcare.

**[Basic policy on selection (admission examination types and their evaluation methods)]**

**General Admission Examination**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

**Special Admission Examination for International Students**

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

# II General Admission Examination

## 1. Summary of Admissions Selection Schedule

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Program | Application period | Examination date | Date of announcement of successful applicants | Admission procedures (deadline date) |
|---|---|---|---|---|
| Graduate Program of Pharmaceutical Science and Technology<br>Graduate Program of Applied Natural Medicine<br>Graduate Program of Cognitive and Emotional Neuroscience<br>Graduate Program of Medical Design | Friday, July 15 to Friday, July 22, 2022 | Thursday, August 25, 2022 | Friday, September 9, 2022 | (Enrollment in October 2022)<br>Friday, September 16, 2022<br>(Enrollment in April 2023)<br>Wednesday, March 8, 2023 (Scheduled) |

Enrollment in April 2023 (The second recruitment)

| Program | Application period | Examination date | Date of announcement of successful applicants | Admission procedures (deadline date) |
|---|---|---|---|---|
| Graduate Program of Pharmaceutical Science and Technology<br>Graduate Program of Applied Natural Medicine<br>Graduate Program of Cognitive and Emotional Neuroscience<br>Graduate Program of Medical Design | Monday, December 19 to Friday, December 23, 2022 | Wednesday, February 1, 2023 | Monday, February 13, 2023 | Wednesday, March 8, 2023 (Scheduled) |

(Note)If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.
The availability of the second recruitment will be announced on our website around November 2022.

## 2 Number of Students to be Admitted

| Program name | Enrollment in April 2023 Number of students to be admitted | Enrollment in October 2022 Number of students to be admitted | Remarks |
|---|---|---|---|
| Graduate Program of Pharmaceutical Science and Technology | 10 | A few | The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students. |
| Graduate Program of Applied Natural Medicine | 8 | A few | The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students. |
| Graduate Program of Cognitive and Emotional Neuroscience | 9 | A few | The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students. |
| Graduate Program of Medical Design | 10 | A few | The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students. |

**(Note) Applicants for admission should consult with the relevant academic advisors in the field of their choice in advance regarding the direction of education, research, etc. You cannot apply if you have not decided who you want to be your academic advisor.**

## 3. Eligibility for Application

Applicants must fulfill any of the following requirements:

(1) A person who graduated (or is expected to graduate prior to admission to the graduate school) from a Japanese university.
(2) A person who was granted or is expected to be granted a bachelor's degree prior to admission to the graduate school by the National Institution for Academic Degrees and Quality Enhancement of Higher Education under the provisions of Article 104, paragraph 7 of the School Education Act.
(3) A person who has completed or is expected to complete prior to admission to the graduate school a 16-year school education course in a foreign country.
(4) A person who has completed a 16-year school education course of a foreign country by taking classes in Japan through distance education conducted by a foreign school or is expected to complete it prior to admission to the graduate school.
(5) A person who has completed a 16-year school education course of a foreign country and has completed a course designated by the Minister of Education, Culture, Sports, Science and Technology in Japan (herein after referred to as MEXT) and operated by an educational institution that offers courses of a foreign university under the school education system of the relevant foreign country, or is expected to complete it prior to admission to the graduate school.
(6) A person who was granted a degree equivalent to a bachelor's degree by completing a course, studying for three or more years at a foreign university or another foreign school (limited to schools that have been evaluated with regard to the overall status of their educational and research activities, etc. by a party certified by the government or a governmental organization of the foreign country, or schools designated as being equivalent thereto by the Minister of MEXT), or is expected to be granted such a degree prior to admission to the graduate school. In the above "completing a course" includes: the completion of the course by taking classes in Japan through distance education operated by a foreign school; or the completion of the course operated by an educational institution positioned under the school education system of the foreign country as well as designated in the preceding paragraph.
(7) A person who has completed (or is expected to complete prior to admission to the graduate school) a specialized course operated by an advanced vocational school (limited to courses that take four or more years to complete and satisfy other criteria specified by the Minister of MEXT) and designated by the Minister of MEXT on or after the day specified by the Minister of MEXT.
(8) A person designated by the Minister of MEXT (Public notice No. 5 of the Ministry of Education, 1953).
(9) A person who was admitted to another graduate school according to the provisions of Article 102, paragraph (2) of the School Education Act, and is admitted to our graduate school on the condition that the person is recognized by the Graduate School of Pharma-Medical Sciences as having academic ability suitable for receiving postgraduate education.
(10) A person who has been recognized by the Graduate School of Pharma-Medical Sciences as having academic ability equivalent to or higher than that of university graduates through an individual examination of eligibility for application for this graduate school, and will have turned 22 years old at the time of admission.
(11) A person who will have been enrolled in a university for three or more years as of the end of month prior to admission to the graduate school, and has been recognized by the Graduate School of Pharma-Medical Sciences as having acquired the designated credits with an excellent academic record.

(Note) A person who intends to file an application in accordance with the Eligibility of Application (9) to (11) is required to undergo an individual Examination of Eligibility for Application in advance. See "3. Examination of Eligibility for Application" on page 20, and follow the prescribed procedure.

## 4. Use of External English Test

For the General Admission Examination, no written foreign language (English) test is conducted, and the applicant's proficiency is judged based on the score of the submitted external English test,

which will be converted on a 100-point scale basis.

If you have taken two or more English tests, use one with a higher converted score.

Only the scores of the tests taken on and after September 1, 2020 are valid and acceptable.

Score conversion method

- TOEFL-iBT
  - 70 or more = 100 points
  - If less than 70
    - Converted point = 100 x (TOEFL-iBT score)/70
- TOEFL-ITP
  - 525 or more = 100 points
  - If less than 525
    - Converted point = 100 x {(TOEFL-ITP score) -310}/215,
  - 310 or less = 0 point
- TOEIC L&R, TOEIC L&R-IP
  - 730 or more = 100 points
  - If less than 730
    - Converted point = 100 x (TOEIC score)/730

## 5. Selection Method for Admission to Graduate Program of Pharmaceutical Science and Technology

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 9), oral examination and academic transcript.

(1) Written examination

Short essay and aptitude test

- The aptitude test requires basic knowledge of your desired field.

(2) Oral examination

- Questions such as motivation for applying to the graduate school and enthusiasm for research are asked.

(3) Examination Date and Venue

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 11:00 to 12:00 | Short essay and aptitude test | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 11:00 to 12:00 | Short essay and aptitude test | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

## 6. Selection Method for Admission to Graduate Program of Applied Natural Medicine

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 9), oral examination and academic transcript.

(1) Written examination

Short essay and aptitude test

- The aptitude test requires basic knowledge of your desired field.

(2) Oral examination

- Questions such as motivation for applying to the graduate school and enthusiasm for research are asked.

(3) Examination Date and Venue

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 11:00 to 12:00 | Short essay and aptitude test | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 11:00 to 12:00 | Short essay and aptitude test | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

## 7. Selection Method for Admission to Graduate Program of Cognitive and Emotional Neuroscience

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 9), oral examination and academic transcript.

(1) Written examination

Short essay and aptitude test

- The applicants will be asked about their motivation, research plan, interests in cognitive and emotional neuroscience, and ethics.

(2) Oral examination

- Based on the answers from the written examination, the applicants will be asked in an interview about their reasons for application, their plans on how they will use what they have learned so far for the development of their research of cognitive and emotional neuroscience, future research plans, hopes after completion of the course, and the ideal researcher they aspire to become, etc.

(3) Examination Date and Venue

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 11:00 to 12:00 | Short essay and aptitude test | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 11:00 to 12:00 | Short essay and aptitude test | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

## 8. Selection Method for Admission to Graduate Program of Medical Design

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 9), oral examination and academic transcript.

(1) Written examination

Short essay and aptitude test

- You will be asked about your motivation for applying to the program and how you want to contribute to society after completion of the program.

(2) Oral examination

- You will be asked about what you have studied so far, your research plan, etc.

(3) Examination Date and Venue

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 11:00 to 12:00 | Short essay and aptitude test | Gofuku Campus, University of Toyama 3190 Gofuku, Toyama City, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 11:00 to 12:00 | Short essay and aptitude test | Gofuku Campus, University of Toyama 3190 Gofuku, Toyama City, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

# III Special Admission Examination for International Students

## 1. Summary of Admissions Selection Schedule

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Program | Application period | Examination date | Date of announcement of successful applicants | Admission procedures (deadline date) |
|---|---|---|---|---|
| Graduate Program of Pharmaceutical Science and Technology<br>Graduate Program of Applied Natural Medicine<br>Graduate Program of Cognitive and Emotional Neuroscience<br>Graduate Program of Medical Design | Friday, July 15 to Friday, July 22, 2022 | Thursday, August 25, 2022 | Friday, September 9, 2022 | (Enrollment in October 2022)<br>Friday, September 16, 2022<br>(Enrollment in April 2023)<br>Wednesday, March 8, 2023 (Scheduled) |

Enrollment in April 2023 (The second recruitment)

| Program | Application period | Examination date | Date of announcement of successful applicants | Admission procedures (deadline date) |
|---|---|---|---|---|
| Graduate Program of Pharmaceutical Science and Technology<br>Graduate Program of Applied Natural Medicine<br>Graduate Program of Cognitive and Emotional Neuroscience<br>Graduate Program of Medical Design | Monday, December 19 to Friday, December 23, 2022 | Wednesday, February 1, 2023 | Monday, February 13, 2023 | Wednesday, March 8, 2023 (Scheduled) |

(Note)If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.
The availability of the second recruitment will be announced on our website around November 2022.

## 2. Number of Students to be Admitted

| Program name | Number of students to be admitted | Remarks |
|---|---|---|
| Graduate Program of Pharmaceutical Science and Technology | A few | This admission quota is included in that for general admission examination. |
| Graduate Program of Applied Natural Medicine | A few | This admission quota is included in that for general admission examination. |
| Graduate Program of Cognitive and Emotional Neuroscience | A few | This admission quota is included in that for general admission examination. |
| Graduate Program of Medical Design | A few | This admission quota is included in that for general admission examination. |

**(Note) Applicants for admission should consult with their academic advisors in the field of their choice in advance regarding the direction of education, research, etc. You cannot apply if you have not decided who you want to be your academic advisor.**

## 3. Eligibility for Application

Those who have foreign nationality and satisfy any of the following requirements are eligible to apply.

(1) A person who has completed or is expected to complete prior to admission to the graduate school a 16-year education course by school education in a foreign country.
(2) A person who was granted a degree equivalent to a bachelor's degree by completing a course, studying for three or more years at a foreign university or another foreign school (limited to

schools that have been evaluated with regard to the overall status of their educational and research activities, etc. by a party certified by the government or a governmental organization of the foreign country, or schools designated as being equivalent thereto by the Minister of MEXT), or is expected to be granted such a degree prior to admission to the graduate school. In the above “completing a course” includes: the completion of the course by taking classes in Japan through distance education operated by a foreign school; or completion of the course operated by an educational institution positioned under the school education system of the foreign country as well as designated in the preceding paragraph.

(3) A person who has been recognized by the Graduate School of Pharma-Medical Sciences as having academic ability equivalent to or higher than that of university graduates through an individual examination of eligibility for application for this graduate school, and will have turned 22 years old at the time of admission.

(4) A person who was admitted to another graduate school according to the provisions of Article 102, paragraph (2) of the School Education Act, and is admitted to our graduate school on the condition that the person is recognized by the Graduate School of Pharma-Medical Sciences as having academic ability suitable for receiving postgraduate education.

(Note) A person who intends to file an application in accordance with the Eligibility of Application (3) and (4) is required to undergo an individual Examination of Eligibility for Application in advance. See “3. Examination of Eligibility for Application” on page 20, and follow the prescribed procedure.

### 4 Use of External English Test

For the Graduate Program of Medical Design, no written foreign language (English) test is conducted, and the applicant’s proficiency is judged based on the score of the submitted external English test, which is converted on a 100-point scale basis.

For the Graduate Programs of Pharmaceutical Science and Technology, Applied Natural Medicine and Cognitive and Emotional Neuroscience, no written foreign language (English) examination is conducted on a person who has submitted a score of the external English test, and the applicant’s proficiency is judged based on the score of the submitted external English test, which is converted on a 100-point scale basis. For a person, who cannot submit the score of the external English tests, a written language (English) examination is conducted.

If you have taken two or more English tests, use one with a higher converted score.

Only the scores of the tests taken on and after September 1, 2020 are valid and acceptable.

Score conversion method

- TOEFL-iBT
  - 70 or more = 100 points
  - If less than 70
    - Converted point = 100 x (TOEFL-iBT score)/70
- TOEFL-ITP
  - 525 or more = 100 points
  - If less than 525
    - Converted point = 100 x {(TOEFL-ITP score) -310}/215
  - 310 or less = 0 point
- TOEIC L&R, TOEIC L&R-IP
  - 730 or more = 100 points
  - If less than 730
    - Converted point = 100 x (TOEIC score)/730

### 5. Selection Method for Admission to Graduate Program of Pharmaceutical Science and Technology

For admission selection, the applicant’s motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) graduating from a 4-year undergraduate school are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to “4. Use of external English test” on page 14), oral examination and academic transcript.

(1) Written examination
Short essay and aptitude test
- The aptitude test requires basic knowledge of your desired field.
Foreign language (English) examination
*1 If you use an external English test, you will not be required to take a written foreign language (English) examination.

(2) Oral examination
- Questions such as motivation for applying to this graduate school and enthusiasm for research are asked.

(3) Examination Date and Venue
Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 9:30 to 10:30 | Foreign language (English) *1 | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 11:00 to 12:00 | Short essay and aptitude test | |
| | From 13:30 | Oral examination *2 | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 9:30 to 10:30 | Foreign language (English) *1 | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 11:00 to 12:00 | Short essay and aptitude test | |
| | From 13:30 | Oral examination *2 | |

*2 The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

## 6. Selection Method for Admission to Graduate Program of Applied Natural Medicine

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) graduating from a 4-year undergraduate school are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 14), oral examination and academic transcript.

(1) Written examination
Short essay and aptitude test
- The aptitude test requires basic knowledge of your desired field.
Foreign language (English) examination
*1 If you use an external English test, you will not be required to take a written foreign language (English) examination.

(2) Oral examination
- Questions such as motivation for applying to this graduate school and enthusiasm for research are asked.

(3) Examination Date and Venue
Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 9:30 to 10:30 | Foreign language (English) *1 | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 11:00 to 12:00 | Short essay and aptitude test | |
| | From 13:30 | Oral examination *2 | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 9:30 to 10:30 | Foreign language (English) *1 | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 11:00 to 12:00 | Short essay and aptitude test | |
| | From 13:30 | Oral examination *2 | |

*2 The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

## 7. Selection Method for Admission to Graduate Program of Cognitive and Emotional Neuroscience

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 14), oral examination and academic transcript.

(1) Written examination

Short essay and aptitude test

- The applicants will be asked about their motivation, research plan, interests in cognitive and emotional neuroscience, and ethics.

Foreign language (English) examination

*1 If you use an external English test, you will not be required to take a written foreign language (English) examination.

(2) Oral examination

- Based on the answers from the written examination, the applicants will be asked in an interview about their reasons for application, their plans on how they will use what they have learned so far for the development of their research of cognitive and emotional neuroscience, future research plans, hopes after completion of the course, and the ideal researcher they aspire to become, etc.

(3) Examination Date and Venue

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 9:30 to 10:30 | Foreign language (English) *1 | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 11:00 to 12:00 | Short essay and aptitude test | |
| | From 13:30 | Oral examination *2 | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 9:30 to 10:30 | Foreign language (English) *1 | Sugitani Campus (Medicine and Pharmaceutical) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture |
| | From 11:00 to 12:00 | Short essay and aptitude test | |
| | From 13:30 | Oral examination *2 | |

*2 The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

## 8. Selection Method for Admission to Graduate Program of Medical Design

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) graduating from a 4-year undergraduate school are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of external English test" on page 14), oral examination and academic transcript.

(1) Written examination

Short essay and aptitude test

- You will be asked about your motivation for applying to the program and how you want to contribute to society after completion of the program.

(2) Oral examination

- You will be asked about what you have studied so far, your research plan, etc.

(3) Examination Date and Venue

Enrollment in April 2023 (The first recruitment) and Enrollment in October 2022

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Thursday, August 25, 2022 | From 11:00 to 12:00 | Short essay and aptitude test | Gofuku Campus, University of Toyama<br>3190 Gofuku, Toyama City, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

Enrollment in April 2023 (The second recruitment)

| Examination date | Time | Examination subjects, etc. | Examination venue |
|---|---|---|---|
| Wednesday, February 1, 2023 | From 11:00 to 12:00 | Short essay and aptitude test | Gofuku Campus, University of Toyama<br>3190 Gofuku, Toyama City, Toyama Prefecture |
| | From 13:30 | Oral examination* | |

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we send you the examination admission card.

# IV General Procedure of Application and Admission

## 1. Application Period

| Category | | Application Period |
|---|---|---|
| Enrollment in October 2022 | General Admission Examination<br>Special Admission Examination for International Students | Friday, July 15 to Friday, July 22, 2022 at 16:00 |
| Enrollment in April 2023 (The first recruitment) | General Admission Examination<br>Special Admission Examination for International Students | |
| Enrollment in April 2023 (The second recruitment) | General Admission Examination<br>Special Admission Examination for International Students | Monday, December 19 to Friday, December 23, 2022 at 16:00 |

If you hand in the documents in person to the University, they are accepted between 9:00 and 16:00 on weekdays.

If you mail them, they must reach the University by 16:00 on Application deadline. However, we will accept application documents even when they reach the University after the expiration of the application period on condition that they are delivered by registered express mail with a postmark before the day before the application deadline.

## 2. Application Procedure

(1) Procedure of application

Applicants for admission must complete payment of the “examination fee,” write the relevant information in red ink on the envelope according to the following category, and submit the application documents to the following address by the designated date.

When sending the application documents by mail, use the registered express mail.

| Program name | Address |
|---|---|
| Graduate Program of Pharmaceutical Science and Technology | Examination Section of Admissions Office, Academic and Student Affairs Division, Schools of Medicine, and Pharmacy and Pharmaceutical Sciences, University of Toyama, 2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan |
| Graduate Program of Applied Natural Medicine | |
| Graduate Program of Cognitive and Emotional Neuroscience | |
| Graduate Program of Medical Design | Admission Office (Educational Affairs Division) of the School of Engineering, University of Toyama, 3190 Gofuku, Toyama City, Toyama Prefecture, 930-8555, Japan |

For the payment method of “examination fee,” refer to “(3). Payment of the Examination Fee.”

<Information to be written on the envelope>

General admission examination:

“Application for General Admission Examination of (program name of your choice) is enclosed”

Special Admission Examination for International Students:

“Application for Special Admission Examination for International Students for (program name of your choice) is enclosed”

(2) Application Documents

| Documents, etc. | | Description |
|---|---|---|
| [1] | Application for Admission | The form designated by the university shall be used. |
| [2] | Certificate of graduation (Certificate of expected graduation) | The document shall be prepared by the president (dean) of the university the applicant graduated from. (Applicants who have graduated or are expected to graduate from University of Toyama do not need to submit it.) |

| | | |
|---|---|---|
| [3] | Academic Transcript | The document shall be prepared and sealed by the president or dean of the university the applicant graduated from.<br>However, no sealing is required when anti-counterfeiting and anti-copying paper is used. |
| [4] | Admission Card for examination, and Photo Card | The form designated by the university shall be used. A photo (4cm long, 3cm wide) taken within 3 months prior to the filing of the application, showing the upper body, without a hat, facing forward, and alone shall be attached to the photo field. |
| [5] | Certificate of Payment (Examination Fee) | After the payment of the examination fee, download a “Certificate of Payment of Examination Fee” from the examination fee payment website. Print and attach it in the designated area on the “Sheet for attaching Certificate of Payment of Examination Fee,” and then submit it to us. |
| [6] | Letter of approval for taking the examination | Students who are currently enrolled in other graduate schools, etc., or who are currently employed in government agencies, corporations, etc., are requested to attach an examination approval form from the dean or head of the relevant graduate school.<br>(Any form acceptable) |
| [7] | Copy of Certificate of Residence, etc. (Persons with foreign nationality only) | An applicant who has a foreign nationality and currently lives in Japan is requested to submit a copy of their residence certificate or residence card (with both sides copied) issued by the mayor of the city, town or village or the head of the special ward. |
| [8] | Envelope for sending back Admission Card for Examination | The envelope, a Chokei 3 (23.5 cm x 12 cm), is to be used for sending back your admission card for examination. Indicate your postal code, address, and name on the envelope, and affix postage stamps worth 344 yen (express delivery). |
| [9] | TOEFL and/or TOEIC Score Sheet (Original) (Only for relevant applicants) | Submit the original score sheet for one of the following tests. (The original score sheet will be copied at the University and returned to you in a return envelope.) If you are unable to submit your score sheet at the time of application, please submit a document indicating that you have taken or are planning to take the following examination (e.g. a copy of the examination admission card), and submit the score sheet (original one) before the day of the admission examination.<br>[1] Score Report for the applicant of TOEFL-iBT<br>[2] Score Report of TOEFL-ITP<br>[3] Official Score Certificate of TOEIC Listening & Reading<br>[4] Score Report of TOEIC L&R-IP<br>Only the score sheets of the tests taken on and after September 1, 2020 are valid and acceptable. |
| [10] | Pledge | The form designated by the university shall be used. Refer to “8. Security Export Control” on page 22. |

(Note) (1) The designated form shall be downloaded from our website and printed out in A4 size.
(2) For documents written in languages other than Japanese or English, attach Japanese or English translations to them.

(3) Payment of the Examination Fee

Pay the examination fee (30,000 yen) via the Examination Fee Payment Website in accordance with the Examination Fee Payment Procedure (page 25).

Examination Fee Payment Website: https://e-apply.jp/n/toyama-gs-payment/

Remarks

- All applicants must pay the administrative fee in addition to the examination fee.
- When making the payment, register the same “name,” “address,” and other personal information as those written in the Application for Admission.
- The examination fee are payable one week before the application period starts.

The examination fee, once paid, will not be refunded for any reason except in the following cases.

[1] The applicant has paid the examination fee but has not filed an application to the University of Toyama (e.g. he/she has failed to submit the application documents, etc. or his/her application documents have not been accepted)
[2] The applicant has paid the examination fee twice
[3] The applicant has paid more than the examination fee,

(Note) If you need to request a refund of the examination fee, the “Refund Claim for Examination Fee” (designated form) must be mailed to the University of Toyama with the Certificate of Payment of Examination Fee attached.
Send to: Accounting Group, Financial Affairs Division, University of Toyama, 3190

Gofuku, Toyama City, Toyama Prefecture 930-8555, Japan
Phone: 076-445-6053

## 3. Examination of Eligibility for Application

Each of applicants who intend to file their applications for the General Admission Examination (9) through (11) and the Special Admission Examination for International Students (3) and (4) will be individually examined in advance. In such cases, make an inquiry to the following section in advance and submit the requested documents by the due date.

[Inquiry and Submission]
Examination Section of Admissions Office, Academic and Student Affairs Division, Schools of Medicine, and Pharmacy and Pharmaceutical Sciences, University of Toyama
2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: (076) 434-7658

(1) Documents necessary for Examination of Eligibility for Application
[1] Application for Examination of Eligibility for Application (form designated by the University)
[2] Academic Transcript
Applicants eligible to apply for the General Admission Examination (11) are also requested to submit an education curriculum of the faculty in which the applicants have enrolled.
[3] Certificate of graduation (certificate of expected graduation)
[4] Copy of Certificate of Residence (Only applicants who have a foreign nationality and currently live in Japan)
[5] Curriculum Vitae (form designated by the University)
[6] Envelope (Chokei 3: 23.5 cm × 12 cm) for sending documents to the applicants (clearly indicate your name, address, and postal code on the envelope with stamps worth 344 yen attached).
[7] Other necessary documents
* The originals of each certificate must be submitted. Copies will not be accepted.
Documents written in foreign languages must be submitted with Japanese translation.

(2) Deadline for the submission of documents

| Category | Deadline |
|---|---|
| Enrollment in October 2022 | 16:00 on Thursday, June 30, 2022 |
| Enrollment in April 2023 (The first recruitment) | |
| Enrollment in April 2023 (The second recruitment) | 16:00 on Friday, December 2, 2022 |

As a rule, application documents shall be submitted by mail and must reach the University by the above-mentioned deadline.

If an applicant hands in the documents himself/herself to the university for some inevitable reason, we will accept them between 9:00 and 16:00 on weekdays. They will not be accepted after the deadline.

(3) Notification of the examination results

We will send the result of the preliminary examination to each applicant by the following date.

| Category | Notification |
|---|---|
| Enrollment in October 2022 | By Thursday, July 14, 2022 |
| Enrollment in April 2023 (The first recruitment) | |
| Enrollment in April 2023 (The second recruitment) | By Friday, December 16, 2022 |

## 4. Announcement of successful applicants

At the following date, March 15, 2022, the examinee's numbers of successful applicants will be posted on the website of the University of Toyama, and a Notification of Acceptance will be sent to the applicants by mail.

We will not respond to any inquiries by telephone or other means.

| Category | Announcement |
|---|---|
| Enrollment in October 2022 | 15:00 on Friday, September 9, 2022 |
| Enrollment in April 2023 (The first recruitment) | |
| Enrollment in April 2023 (The second recruitment) | 15:00 on Monday, February 13, 2023 |

## 5. Admission Procedure

The admission procedure is as follows. More details will be separately notified to the successful applicants.

(1) Admission procedure period

| Admission period | Deadline date |
|---|---|
| Enrollment in October 2022 | Friday, September 16, 2022 |
| Enrollment in April 2023 | Wednesday, March 8, 2023 (provisional) |

(2) Expenses required for the admission procedure

a. Enrollment fee: 282,000 yen (provisional)

(Note) [1] The enrollment fee shown above is still provisional. If it is revised at the time of enrollment, the new enrollment fee will apply.

[2] The paid enrollment fee will not be refunded.

b. Others

[1] Persons who find it difficult to pay the enrollment fee may be exempted or deferred from collection after deliberation.

[2] Tuition fees must be paid after enrollment. The exact amount of the tuition fee and detailed method of the payment will be announced at the time of the admission procedure.

<Reference> The tuition fee of academic year 2022: 535,800 yen.

[3] There is a scholarship system of Japan Student Services Organization.

[4] Other expenses include the fee for the Personal Accident Insurance for Students Pursuing Education and Research.

(3) Remarks

Persons who have not completed the admission procedure within the Admission procedure period will be considered to have declined the admission.

## 6. Policy on Personal Information Protection

Personal information possessed by University of Toyama will be handled based on the Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc., and University of Toyama Personal Information Protection Policy.

(1) Personal information (including name, address, etc.) of applicants that comes to the knowledge of the University through the application shall be used for [1] applicant selection procedure (application processing and selection), [2] announcement of successful applicants, [3] admission procedure, [4] survey/study of the selection method, and [5] operations associated with those purposes.

(2) Personal information of those who completed the admission procedure that comes to the knowledge of the University through the application shall be used for post-admission operations related to [1] academic affairs (registration, study guidance, etc.), [2] student support (health care, application for tuition exemption or scholarship, career support, etc.), [3] tuition collection work, and [4] statistical survey and data analysis.

(3) We may use only the successful applicants' numbers, names, and addresses for the purpose of contact from the University's relevant bodies, such as Alumni Association, Supporting Group and Cooperative Society.

(Note) Applicants who do not wish to be contacted by the above bodies are requested to inform the Examination Section of Admissions Office, Academic and Student Affairs Division of Medical and Pharmaceutical to that effect.

(4) University of Toyama may have contractors do some kind of university operations. When conducting the operations, all or part of the personal information obtained shall be provided to the contractor to the extent necessary to perform the operations; however, University of Toyama supervises the use of information to ensure compliance with confidentiality.

## 7. Notes on Application

(1) If any submitted application document is incomplete, the application may not be accepted.

(2) If the examination fee is not fully paid, the application will not be accepted.

(3) Accepted application documents will not be returned for any reason.

(4) Even after admission has been granted, if any discrepancy is found with the information in the submitted documents, the admission may be cancelled.

(5) For inquiries related to the application and other matters, contact the following section: Examination Section of Admissions Office, Academic and Student Affairs Division of

Medicine and Pharmaceutical, University of Toyama,
2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: 076-434-7658

## 8. Security Export Control

The University of Toyama has established the "University of Toyama Security Export Control Regulations" based on the "Foreign Exchange and Foreign Trade Act", and conducts strict screening for security export control in the perspective of providing technology and export of research equipment and materials. If applicants who fall under any of the regulated items, you may not be able to get the permission to enroll, and receive the desired education at the university. There may be restrictions on your desired research activities.

[Reference] “University of Toyama Regulations Concerning Security Export Control”
URL http://www3.u-toyama.ac.jp/soumu/kisoku/pdf/0110401.pdf

## 9. Preliminary Consultation for Applicants with Disabilities

Applicants with disabilities (visual impairment, hearing impairment, physical disability, sickness, injury, developmental disability, etc.) who may require special arrangements in their admission examinations or in class should contact the Academic and Student Affairs Division of Medicine and Pharmaceutical prior to application.

If necessary, the University may hold interviews with the applicant or his/her previous school’s staff members, who may represent him/her.

* Even if you apply for prior consultation, you are not obliged to apply to the University of Toyama.

(1) Consultation deadline

| Category | Deadline |
|---|---|
| Enrollment in October 2022 | 16:00 on Thursday, June 30, 2022 |
| Enrollment in April 2023 (The first recruitment) | |
| Enrollment in April 2023 (The second recruitment) | 16:00 on Friday, December 2, 2022 |

(2) Consultation method

Please download a Preliminary Consultation application form from the University's website or create an application form containing the following information and submit it together with a doctor's medical certificate (its copy is also acceptable) to the Examination Section of Admissions Office, Academic and Student Affairs Division of Medicine and Pharmaceutical Sciences.

[1] Name, gender, date of birth, address, telephone number and e-mail address
[2] Program of choice and category of admission examination
[3] Type and degree of disability
[4] What special considerations the applicant desires during the admission examination
[5] What special considerations the applicant desires during study
[6] Measures taken at the previous university, etc. (Comments of the applicant’s academic advisor)
[7] Situation of daily life
[8] Other matters for reference (Please also submit any reference materials to be used for consultation, e.g. a copy of Physical Disability Certificate, etc.)

(Reference) Preliminary Consultation Application Form page
(University’s Home Page) → “Admission exam information” → “Preliminary consultation for applicants with disabilities”

(3) Contact for consultation

Academic and Student Affairs Division of Medicine and Pharmaceutical, University of Toyama, 2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: 076-434-7658
FAX: 076-434-4545

(Note) If you wish to use hearing aids, crutches, wheelchairs, etc., used in your daily life, during the examination, arrangements may be required in the examination venue settings, etc., so please contact us beforehand.
Preliminary consultation is intended to inform applicants with disabilities about the current situation of the University in advance and to find a better or ideal way when they take an admission examination and/or lessons; it is not intended to restrict their admission and study.

(Reference) Please refer to the Guidelines for staff to eliminate discrimination on the basis of disability at University of Toyama (Home page) → “About the University of Toyama” → “Information”.

## 10. Requirements for Applicants in Association with Measures Against the Novel Coronavirus Infection

### (1) Precautions to prevent infection

Keep the prevention of infection in mind in everyday life, and measure the body temperature in the morning to check for changes in physical condition.

(Reference) For Examinees - Precautions for Preventing the Novel Coronavirus Infection -
https://www.mext.go.jp/content/20201218-mext_daigakuc02-000005144_1.pdf

### (2) Medical checkup at a medical institution

Examinees who have symptoms such as fever, coughs, etc. from approximately 2 weeks before the day of the admission examination are requested to have a medical checkup at a medical institution in advance.

### (3) Applicants who cannot be permitted to take the admission examination

Applicants who are infected by the Novel Coronavirus and hospitalized or under medical treatment at home or an accommodation facility on the day of the admission examination cannot be permitted to take the admission examination. Since a close contact person (a person who has been informed by the Public Health Center that “he/she is identified as a close contact person”) without symptoms such as fever, coughs, etc. he/she may be permitted to take the admission examination under certain conditions, contact the office below in advance.

Applicants who entered Japan from abroad to take the admission examination cannot be permitted to take the admission examination during the waiting period after entry into Japan.

Contact: Examination Section of Admissions Office, Academic and Student Affairs Division, Schools of Medicine, and Pharmacy and Pharmaceutical Sciences, University of Toyama
2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: 076-434-7658

### (4) Response on the day of the admission examination

- Examinees who have symptoms such as fever, coughs, etc. and a fever of 37.5°C or higher measured on the day of the admission examination will be requested not to take the admission examination. Examinees who have symptoms such as fever, coughs, etc. and a fever of 37.4°C or lower measured on the day of the admission examination will need to report the condition to the examination supervisors.
- Regardless of whether examinees have symptoms above mentioned, they will be requested to bring a mask (a plain, white or light color mask is recommended; if it is difficult to wear a mask for some reason, consult with the office below in advance) and wear it at all times except during the lunch time. Avoid contact and conversations with other examinees wherever possible during breaks, lunch time, and at the time of entering and leaving the admission examination venue. However, examinees may be instructed to remove their masks to check their identity during the admission examination.
- Be sure to bring plastic bags to put used masks etc. in.
- Examination supervisors and staff on the admission examination venue will also wear masks.

Contact: Examination Section of Admissions Office, Academic and Student Affairs Division, Schools of Medicine, and Pharmacy and Pharmaceutical Sciences, University of Toyama
2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: 076-434-7658

(5) Clothes or lunch on the day of the admission examination

On the day of the admission examination, there will be times when windows are opened to ventilate the admission examination rooms. Thus, be careful with air temperature of the day and bring warm clothes, such as a jacket. Since cafeterias or shops are not available on the admission examination venue on the day, examinees will be requested to bring their own lunch and eat it at their own desks within the designated time.

(6) Disinfection and disposal of garbage

Disinfectant solutions will be installed on each admission examination venue on the day of the admission examination. Examinee will be requested to disinfect their hands when entering or leaving the admission examination venue. Be sure to put used masks or tissues after blowing the nose in a plastic bag, seal it, and throw it in a trash can.

(7) Immunization

In order to reduce the risk of suffering infectious diseases, it is recommended that examinee should get appropriate vaccinations at their own discretion.

(8) Implementation of new lifestyle

In daily life, thoroughly implement basic measures against infectious diseases, including the avoidance of the 3 Cs, namely, closed spaces with poor ventilation, crowded places with many people nearby, and close-contact settings, as well as keeping distance between people, wearing a mask, and practicing hand and finger sanitization such as handwashing. In addition, keep in mind to manage own physical condition, such as taking well-balanced meals, doing moderate exercise, and getting enough rest and sleep.

(9) Report

Examinees who fall under “3 Applicants who cannot be permitted to take the admission examination” or who have a fever of 37.5°C or higher measured on the day of the admission examination will need to promptly report it to the office below. Examinees who are found to be in poor physical condition within 14 days after the admission examination will also need to report it to the office below.

Contact: Examination Section of Admissions Office, Academic and Student Affairs Division, Schools of Medicine, and Pharmacy and Pharmaceutical Sciences, University of Toyama
2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: 076-434-7658

(10) Waiting room

On the day of the admission examination, there will be no waiting room for examinees and their attendants.

(11) Download of the application

It is recommended to download the COVID-19 Contact-Confirming Application (COCOA) in advance.

Note that an examinee who receives notification from the application will not be immediately identified as a close contact person.

# Payment Flow of Entrance Examination Fee

Prepare an Email address, a computer that is connected to the Internet, and printer.

Your application is NOT complete until you have registered your information in the entrance examination fee payment website.
Send us the required documents and the examination fee payment certificate to University of Toyama.

Payment Website


## STEP 1 Go to the Entrance Examination Fee Payment Website

**The Entrance Examination Fee Payment Website**
**https://e-apply.jp/n/toyama-gs-payment/**
or
**Official Website of University of Toyama**
**https://www.u-toyama.ac.jp/admission/graduate-exam/graduate/**

Register

## STEP 2 Register Personal Information

1) Make sure you follow the screen procedures and important notices.
2) Choose the payment method of entrance examination fee.
3) Enter the required information and record the payment processing number.

Payment

## STEP 3 Pay Entrance Examination Fee

【Pay at the Convenience Store, Pay-easy ATM banks, Internet banking】

Make a payment at the convenience stores (Seven Eleven, Lawson, Ministop, Family Mart, Daily Yamazaki, and Seico Mart), Pay-easy ATMs of Post offices or Banks, and internet banking.
※Payment can not be made at stores outside Japan.

【Pay with Credit Card】

Make sure the card number, expiration date, card holder name, and security code, to pay the fee.

(Accepted Credit Cards)
VISA, Master, JCB, AMERICAN EXPRESS, MUFG Card, DC Card, UFJ Card, NICOS Card

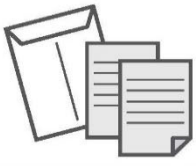
Print

## STEP 4 Print out the Certificate of Payment

The Entrance Examination Fee Payment Website
**https://e-apply.jp/n/toyama-gs-payment/**

Click on "Review" button to download and print out the Certificate of Payment. Cut along the dotted lines to get your certificate of payment, then paste it on its designated location in the application form.

Send



## STEP 5 Send all application documents

Send the form with pasted certificate of payment and all other application documents, via registered express mail at the post office, within the application submission deadline.
※See the details of each school/graduate school for application guide.

●Make sure the information you enter is correct, as you will not be able to revise/change any of this information after registration is complete. However you may re-register the correct information and "revise" the information this way, as long as it is before you have made the payment.

※Take notice that if you chose to pay with your credit card, the payment will be made as soon as you register your personal information.

## V. Overview of the Graduate School of Pharma-Medical Sciences

The Graduate School of Pharma-Medical Sciences offers the curriculums organized by the Graduate School of Medicine and Pharmaceutical Sciences and the Graduate School of Science and Engineering in collaboration.

The Graduate School of Pharma-Medical Sciences aims to contribute to the development of human and environmental health culture through collaboration and fusion among such different fields as medicine, pharmacy, science, and engineering. It teaches academic theories, research techniques, and applications in those fields to enable students to cultivate deep knowledge and superior skills for pursuing careers that require a high level of expertise.

Based on this objective, a degree will be granted to persons who have made academic achievements confirmed by this graduate school through acquisition of not only universal knowledge and skills in medicine, pharmacy, science, and engineering based on the fundamental abilities in a wide range of fields of education and research, but also the ability to think and act on their own to create something new based on the advanced specialized knowledge and ethics.

Please note that all graduate schools that will be reorganized in the 2022 academic year will adopt a four-term (quarter) system, and each course will be offered in principle on a single-term basis. Each term lasts for 8 weeks.

**Comparison of two-term (semester) and four-term (quarter) systems**

| | Name of each term | | | |
|---|---|---|---|---|
| Two-term (semester) system | First semester | | Second semester | |
| Four-term (quarter) system | First term | Second term | Third term | Fourth term |

## Overview of each program

### 1. Graduate Program of Pharmaceutical Science and Technology

#### (1) Purpose and Degree

The purpose of the Graduate Program of Pharmaceutical Science and Technology is to nurture people who can contribute to pharmaceutical development through specialized education focusing on medicine development process from discovery, synthesis, pharmacokinetics, safety tests, formulation to clinical trials. Also, the Program trains researchers and engineers who aim to play an active role in the field of pharmaceutical science based on the acquired knowledge and technology.

A master's degree (pharmaceutical sciences) will be awarded to persons who have completed this program.

#### (2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the “Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools.”

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

| | | |
|---|---|---|
| 1st Period 8:45 to 10:15 | 2nd Period 10:30 to 12:00 | 3rd Period 13:00 to 14:30 |
| 4th Period 14:45 to 16:15 | 5th Period 16:30 to 18:00 | |
| 6th Period 18:10 to 19:40 | 7th Period 19:50 to 21:20 | |

#### (3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master’s degree will be awarded to the person on condition that he/she is enrolled in the Master’s Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

#### (4) List of Research projects Conducted by Academic Advisors

See the attached Table I-1.

## 2. Graduate Program of Applied Natural Medicine

### (1) Purpose and Degree

Natural medicine has already played an important role in modern medical practice, and it is expected to be further utilized by clarifying new efficacy and scientific evidence. New medicine discovery research based on the natural medicines is a highly promising research area that can lead to therapeutic innovation in various diseases. In addition, research on natural medicine is directly linked to the advancement of preemptive preventive medicine and the elucidation of complex systems and pre-illness states of living organisms, and will greatly contribute to the realization of healthy life expectancy. In light of this potential for development, it is essential to form a virtuous cycle of expanding the base, developing and cultivating excellent people, and further increasing the social presence of this academic field.

This program is designed to provide students with a wide range of highly specialized knowledge and skills concerning natural pharmacology through an integrated education of medicine and science. The purpose is to foster people, such as researchers, educators, engineers, or reviewers (administrative officer) who can contribute to the development of medicines and human health, as well as to the advancement of academic research in the field of pharmaceutical science by developing innovative medicines from traditional ones such as natural pharmacology based on pre-illness research.

A master's degree (pharmaceutical sciences) will be awarded to persons who have completed this program.

### (2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the “Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools.”

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

| | | |
|---|---|---|
| 1st Period 8:45 to 10:15 | 2nd Period 10:30 to 12:00 | 3rd Period 13:00 to 14:30 |
| 4th Period 14:45 to 16:15 | 5th Period 16:30 to 18:00 | |
| 6th Period 18:10 to 19:40 | 7th Period 19:50 to 21:20 | |

### (3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master’s degree will be awarded to the person on condition that he/she is enrolled in the Master’s Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

### (4) List of Research projects Conducted by Academic Advisors

See the attached Table I-2.

## 3. Graduate Program of Cognitive and Emotional Neuroscience

### (1) Purpose and Degree

The purpose of this graduate program is to nurture people, in the field of brain science research, who have fundamental ability to support research and can collect information, think logically, spread information, understand theses in English, discuss research topics with others, and can also do so at academic communities in specialized research fields. Also, it provides the students with bioethics and researcher ethics to cultivate an ethical views that enable them to take appropriate actions in accordance with social norms.

A master's degree (neuroscience) will be awarded to persons who have completed this program.

### (2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the “Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools.”

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

| | | |
|---|---|---|
| 1st Period 8:45 to 10:15 | 2nd Period 10:30 to 12:00 | 3rd Period 13:00 to 14:30 |
| 4th Period 14:45 to 16:15 | 5th Period 16:30 to 18:00 | |
| 6th Period 18:10 to 19:40 | 7th Period 19:50 to 21:20 | |

### (3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master’s degree will be awarded to the person on condition that he/she is enrolled in the Master’s Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

### (4) List of Research projects Conducted by Academic Advisors

See the attached Table I-3.

## 4. Graduate Program of Medical Design

### (1) Purpose and Degree

In Japan, the population aging is picking up the pace, and the need for healthcare is increasing. Especially in non-metropolitan cities such as those in Toyama Prefecture, elderly people make up a large proportion of the population, and it has become an important issue to provide them with appropriate healthcare and extend their healthy life expectancy. On the other hand, Toyama Prefecture is home to a large number of companies in the fields of precision machinery, metal and resin processing, and these companies are aiming to enter the medical and welfare equipment or related service fields that enable them to produce higher-value-added products. If the development of medical and welfare equipment and services that accurately meet domestic needs is promoted by the local businesses in Toyama Prefecture, it will contribute to not only the enhancement of the good health and welfare of the people, but also the revitalization of the economy of Japan including Toyama Prefecture. From this perspective, the Graduate Program of Medical Design is working to develop such people who can connect the medical and welfare workplaces with businesses.

- Persons who can discover the needs of the medical treatment and welfare workplaces by exchanging opinions with patients and medical welfare workers and observing the behaviors of those people.
- Persons who can create the concept of development solutions to meet the needs.
- Persons who can put concepts into prototypes of a company's product, etc.
- Persons who can commercialize the prototype and introduce the product to society based on the approval by regulatory authorities such as the Pharmaceuticals and Medical Devices Agency, etc.

A master's degree (medical engineering) will be awarded to persons who have completed this program.

### (2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the "Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools."

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

| | | |
|---|---|---|
| 1st Period 8:45 to 10:15 | 2nd Period 10:30 to 12:00 | 3rd Period 13:00 to 14:30 |
| 4th Period 14:45 to 16:15 | 5th Period 16:30 to 18:00 | |
| 6th Period 18:10 to 19:40 | 7th Period 19:50 to 21:20 | |

### (3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master's degree will be awarded to the person on condition that he/she is enrolled in the Master's Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

### (4) List of Research projects Conducted by Academic Advisors

See the attached Table I-4.

Table I-1 List of Research projects Conducted by Academic Advisors (Pharmaceutical Science and Technology)

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Biopharmaceutics<br>Professor<br>HOSOYA Ken-ichi<br>(Sugitani Campus)<br>hosoyak@pha | ・Blood-retinal barrier transport function analysis and drug delivery to the retina<br>・Blood-retinal barrier cell reconstruction and analysis of interaction between cells<br>・Elucidation of biological function and transport function in in vivo barrier tissue |
| Biorecognition Chemistry<br>Professor<br>TOMOHIRO Takenori<br>(Sugitani Campus)<br>ttomo@pha | ・Chemical biology for efficient drug discovery: target identification,visualization, utilization, and manipulation<br>・Drug activity-based functional proteomics<br>・Synthetic multicomponent integration strategy toward chemical biology and drug discovery |
| Cancer Cell Biology<br>Professor<br>SAKURAI Hiroaki<br>(Sugitani Campus)<br>hsakurai@pha | ・Elucidation of the molecular mechanisms of tumor progression via inflammatory signaling pathways<br>・Study on the activation mechanisms of molecular targets in cancer therapy<br>・Study on the intracellular signals in malignant progression of melanoma |
| Chemical Biology<br>Associate Professor<br>CHIBA Junya<br>(Sugitani Campus)<br>chiba@pha | ・Chemical biology based on synthetic chemistry, particularly three projects in artificial DNA, protein control, and saccharide recognition |
| Synthetic and Medicinal Chemistry<br>Professor<br>MATSUYA Yuji<br>(Sugitani Campus)<br>matsuya@pha | ・Development of new organic reactions for drug discovery<br>・Search for novel seeds of new drugs and structure-activity relationship research<br>・Synthesis and structural optimization of bioactive compounds |
| Molecular Cell Biology<br>Professor<br>SO Takanori<br>(Sugitani Campus)<br>tso@pha | ・Elucidation of novel proinflammatory cytokine signaling mechanisms regulated by TRAF family molecules<br>・Elucidation of regulatory mechanisms of TNFR family molecules in CD4+ T cells<br>・Elucidation of molecular pathology of X-linked adrenoleukodystrophy |
| Synthetic and Biomolecular Organic Chemistry<br>Professor<br>YAKURA Takayuki<br>(Sugitani Campus)<br>yakura@pha | ・Development of environmentally benign organic reactions<br>・Synthesis of biologically active natural products<br>・Pharmaceutical chemical research in bioactive substances |
| Biointerface Chemistry<br>Professor<br>NAKANO Minoru<br>(Sugitani Campus)<br>mnakano@pha | ・Study of membrane lipid dynamics and elucidation of lipid transfer machinery<br>・Elucidation of lipid flip-flop mechanisms<br>・Biophysical research for interaction of amyloid beta with membranes<br>・Structural and functional investigation and pharmaceutical application of lipid nanoparticles |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Structural Biology<br>Professor<br>MIZUGUCHI<br>Mineyuki<br>(Sugitani Campus)<br>mineyuki@pha | ・Studies on the conformations of disease related proteins<br>・Structural basis for intracellular membrane trafficking<br>・Protein structure-based drug discovery |
| Pharmaceutical<br>Physiology<br>Professor<br>SAKAI Hideki<br>(Sugitani Campus)<br>sakaih@pha | Physiological, biochemical and pharmacological studies on normal and cancer cells to clarify<br>1) interactions between drugs and iontransporting proteins<br>2) transportsome functions<br>3) functional relations among iontransporting proteins |
| Pharmaceutical<br>Technology<br>Professor<br>ONUKI Yoshinori<br>(Sugitani Campus)<br>onuki@pha | ・Development of optimization techniques for designing pharmaceutical formulations and manufacturing processes<br>・Studies on pharmaceutical characteristics using time domain NMR |
| Bio-functional Molecule<br>Engineering<br>Professor<br>TOYOOKA Naoki<br>(Gofuku Campus)<br>toyooka@eng | The principal focus of this group is the development of the design and synthesis procedure of small molecules, as well as their biological evaluation as candidates in drug discovery |
| Engineering based on<br>Genetic Information<br>Professor<br>KUROSAWA Nobuyuki<br>(Gofuku Campus)<br>kurosawa@eng | ・Development of platform technology for the production of monoclonal antibodies against difficult antigens.<br>・Development of monoclonal antibodies for next-generation treatment and diagnosis |
| Biofunctional<br>Chemistry<br>Professor<br>IKAWA Yoshiya<br>(Gofuku Campus)<br>yikawa@sci | RNAs play versatile roles in biological systems because they not only serve as a genetic material but also act as functional molecules. We study the molecular basis of naturally occurring RNAs with catalytic and receptor functions. Another interest of our group lies in the artificial generation of RNAs with desirable functions through rational and evolutional approaches. |
| Biomaterial Designing<br>and Engineering<br>Associate Professor<br>NAKAJI-HIRABAYASHI<br>Tadashi<br>(Gofuku Campus)<br>nakaji@eng | In our research field, the design of biomaterials and the construction of concept for the regenerative medicine are conducted in based on protein engineering, polymer science, cell biology, and molecular biology. Especially, we aim to construct functional biomaterials such as screening devices for various diseases and supporting materials for cell transplantation to cure otherwise intractable disorders. |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Protein System Engineering<br>Associate Professor<br>INOBE Tomonao<br>(Gofuku Campus)<br>inobe@eng | Proteins are necessary for virtually every activity in the human body. Our goal is to understand how proteins are produced and degraded in the cell in terms of protein science and biophysics. Based on the above knowledge, we also aim to develop novel technologies that can regulate the lifespans of proteins for various practical applications. |
| Computers and Applied Chemistry<br>Associate Professor<br>ISHIYAMA Tatsuya<br>(Gofuku Campus)<br>ishiyama@eng | The recent rapid development of computer technology has enabled us to analyze and predict various chemical reactions and molecular dynamics based on computational chemistry.<br>This class summarizes the basic theory of ab initio electronic structure calculations, such as molecular orbital and density functional methods. |
| Biomolecular Chemistry<br>Associate Professor<br>SAKONO Masafumi<br>(Gofuku Campus)<br>msakono@eng | Organic chemistry has been vigorously applied to molecular biology. Our objectives are to reveal the properties of biomolecules using various methods based on chemical biology. We also engage in the development of new techniques for the analysis of intermolecular interactions, such as protein-protein interactions. |
| Synthetic and Medicinal Chemistry<br>Professor<br>ABE Hitoshi<br>(Gofuku Campus)<br>abeh@eng | This field focuses on creation of novel “functional organic molecules” based on the advanced synthetic organic chemistry. The newly designed organic molecules possess some potential to contribute to various fields of science such as discovery of novel medicines and agrichemicals. Research in our group is primarily aimed toward the development of catalytic reactions and methods for organic synthesis for the functional organic molecules. |
| Pharmacology<br>Associate Professor<br>TAKASAKI Ichiro<br>(Gofuku Campus)<br>takasaki@eng | ・Elucidation of the mechanisms of chronic pain/pruritus, neuropsychiatric disorders, cancer, etc.<br>・Drug discovery of novel small-molecule therapeutics<br>・Pharmacological analysis of the new small-molecule compounds |

Table I-2 List of Research projects Conducted by Academic Advisors (Applied Natural Medicine)

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Neuromedical Science<br>Professor<br>TOHDA Chihiro<br>(Sugitani Campus)<br>chihiro@inm | ・Elucidation of the molecular mechanism of restoring the neuronal network, and crosstalk between the central nervous system and peripheral organs to activate neural function.<br>・Traditional medicine research for developing fundamental therapeutic drugs for Alzheimer’s disease, spinal cord injury, cervical spondylosis myelopathy, glaucoma, and sarcopenia.<br>・Clinical study aiming to develop new botanical drugs and new usage of Kampo formulas.<br>・Clinical study to analyze factors affecting physical and mental health and to identify biomarkers of wellbeing.<br>・Consilienceology for Wakan-yaku 1) Diagnosis for functional mental diseases based on the Wakan-yaku response, and clarification of molecular mechanisms for the diseases<br>2) Development of novel Wakan-yaku prescriptions to prevent lethal recurrence of heart failure |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Host Defences<br>Professor<br>HAYAKAWA<br>Yoshihiro<br>(Sugitani Campus)<br>haya@inm | ・Study of NK cell biology and its roles in immunity<br>・Role of innate immune responses in cancer progression<br>・Immunological study of inflammatory & allergic diseases<br>・Modulation of immune responses and immunological diseases by Kampo medicines<br>・Study to regulate cancer progression & metastasis<br>・Elucidation of novel actions of kampo medicines and food factors on the basis of modulation of intraluminal bile acid metabolism in gastrointestinal tract |
| Natural Products<br>& Drug Discovery<br>Professor<br>MORITA Hiroyuki<br>(Sugitani Campus)<br>hmorita@inm | ・Studies on biosynthesis of naturally occurring bioactive compounds<br>・Structural basis for secondary metabolite enzymes<br>・Enzyme engineering for novel drug development<br>・Isolation of bioactive compounds from plants, microorganisms, and marine organisms<br>・Investigation of Asia's natural resources not fully utilized<br>・Discovery of natural anticancer agents from medicinal plant resources by employing a novel antiausterity screening strategy<br>・Chemical investigation of medicinal plants and search for novel bioactive secondary metabolites<br>・Investigation of the structure-activity relationship of the active natural compounds and their mechanism of action against cancer cell survival pathways<br>・Discovery of metabolomics biomarkers associated with cancer cells by utilizing FT-NMR and MS strategy |
| Complex Biosystem<br>Research<br>Professor<br>NAKAGAWA Yoshimi<br>(Sugitani Campus)<br>ynaka@inm | ・Functional analysis of transcription factors that regulate glucose and lipid metabolism<br>・Study for nutrient metabolism regulation by cell-cell and tissue-tissue interaction<br>・Study for the molecular mechanism of improvement of lifestyle-related diseases by Wakan-yaku<br>・Study for the mechanism of lifestyle-related diseases caused by sleep disorders<br>・Establishment of information science analysis using integrated omics analysis |
| Presymptomatic<br>Disease<br>Professor<br>KOIZUMI Keiichi<br>(Sugitani Campus)<br>kkoizumi@inm | ・Understanding of the fluctuation of biometric information and its medical applications.<br>・Development of the glutaminase inhibitor and its medical applications.<br>・Elucidation of the function of immunostimulatory nanoparticles and nucleotide degradant discovered by traditional Japanese medicine (Kampo formula) and their medical applications.<br>・Elucidation of the pathological mechanism and the search for new seeds of medicine for medical applications in enteric immune diseases. |
| Kampo Diagnostics<br>Professor<br>SHIBAHARA<br>Naotoshi<br>(Sugitani Campus)<br>shiba1@inm | ・Pharmacological effects of Kampo medicines and their herbal components, as well as their mechanisms of action<br>・Search for indicators of clinical pathology of Kampo medicine and "sho" |
| Clinical<br>Pharmaceutics<br>Professor<br>KATO Atsushi<br>(Sugitani Campus)<br>kato@med | ・Drug seed discovery research and evaluation of drugs targeting diabetes, allergic disorders, and other illnesses centered on glycomimetic alkaloids and herbal medicine-derived compounds<br>・Biochemical research concerning glucolipid metabolic disorders focused on the properties of glycoproteins, glycohydrolases, and glycosyltransferases |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Bio-functional Molecule Engineering<br>Professor<br>TOYOOKA Naoki<br>(Gofuku Campus)<br>toyooka@eng | The principal focus of this group is the development of the design and synthesis procedure of small molecules, as well as their biological evaluation as candidates in drug discovery |
| Engineering based on Genetic Information<br>Professor<br>KUROSAWA Nobuyuki<br>(Gofuku Campus)<br>kurosawa@eng | ・Development of platform technology for the production of monoclonal antibodies against difficult antigens.<br>・Development of monoclonal antibodies for next-generation treatment and diagnosis |
| Synthetic and Medicinal Chemistry<br>Professor<br>ABE Hitoshi<br>(Gofuku Campus)<br>abeh@eng | This field focuses on creation of novel “functional organic molecules” based on the advanced synthetic organic chemistry. The newly designed organic molecules possess some potential to contribute to various fields of science such as discovery of novel medicines and agrichemicals. Research in our group is primarily aimed toward the development of catalytic reactions and methods for organic synthesis for the functional organic molecules. |
| Pharmacology<br>Associate Professor<br>TAKASAKI Ichiro<br>(Gofuku Campus)<br>takasaki@eng | ・Elucidation of the mechanisms of chronic pain/pruritus, neuropsychiatric disorders, cancer, etc.<br>・Drug discovery of novel small-molecule therapeutics<br>・Pharmacological analysis of the new small-molecule compounds |
| Biofunctional Chemistry<br>Professor<br>IKAWA Yoshiya<br>(Gofuku Campus)<br>yikawa@sci | RNAs play versatile roles in biological systems because they not only serve as a genetic material but also act as functional molecules. We study the molecular basis of naturally occurring RNAs with catalytic and receptor functions. Another interest of our group lies in the artificial generation of RNAs with desirable functions through rational and evolutional approaches. |
| Natural Products Chemistry<br>Associate Professor<br>MIYAZAWA Masahiro<br>(Gofuku Campus)<br>miyazawa@sci | Numerous bioactive organic compounds occur in nature, many of which possess complex structures with large numbers of asymmetrical carbon atoms. We are developing useful reactions for the synthesis of such complex-structured organic compounds, and applying these compounds to the synthesis of bioactive natural products. |
| Cell Biology<br>Professor<br>KARAHARA Ichirou<br>(Gofuku Campus)<br>karahara@sci | Studies on the mechanisms of plants' responses to various terrestrial / cosmic environmental factors at organ / tissue level using various morphological techniques including three-dimensional macroscopic / ultrastructural analyses |

Table I-3 List of Research projects Conducted by Academic Advisors (Cognitive and Emotional Neuroscience)

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Anatomy<br>Professor<br>ICHIJO Hiroyuki<br>(Sugitani Campus)<br>ichijo@med | Using the advantages of model animals and the idiosyncrasies of non-model animals, we study experience-dependent modification of neural circuits that regulate emotion and associated behavioral alterations, computational analysis and evolution of innate defensive behaviors, and the neural basis of left-right (right-handedness/left-handedness) behavior. |
| Physiology<br>Professor<br>TAMURA Ryoi<br>(Sugitani Campus)<br>rtamura@med | This century will be the era of brain sciences. "The mind" has long been regarded as one of the most enigmatic psychological processes. Recent technological advances have enabled us to approach the neural basis of the mind. The purpose of our research is to elucidate brain mechanisms of "learning and memory", one of the key members of the mind. For this, we mainly use laboratory animals such as monkeys and rats, record neural activities in the brain of the animals while they perform a behavioral (learning and memory) task or they are asleep subsequent to the task performance, and analyze the pattern of brain activities. |
| Brain Science<br>Professor<br>INOKUCHI Kaoru<br>(Sugitani Campus)<br>inokuchi@med | Recently it has been clarified that neurons in the brain are active even when animals sleep or rest, denoted as “idling brain state”. Idling activity of the brain appears to play important roles in information processing than previously thought. In our laboratory, we aim to clarify the role played by idling brain by making full use of molecular biology, biochemistry, cell biology, histochemistry, electrophysiology,behavioral pharmacology, optogenetics, and live-imaging. |
| Systems Function and Morphology<br>Professor<br>ITO Tetsufumi<br>(Sugitani Campus)<br>itot@med | We do not sense the world as it is, but do collect the information which is important for our survival and recognize the sensory objects which are further selected by both unconscious and conscious processes. For the selection, which is essential for survival, animals possess sensory organs and neuronal circuitry which are optimized for their circumstances. Our laboratory mainly focuses on the hearing system, and study the mechanisms which allow to detect and sense the meaningful information for survival from environmental sounds. Using various techniques, we would like to investigate functional and morphological basis of the brain which allows the coding of sensory information, especially sounds, and the sensory perception. |
| Molecular Neuroscience<br>Professor<br>MORI Hisashi<br>(Sugitani Campus)<br>hmori@med | We focus on molecular basis of brain function and dysfunction. To develop the novel methods for diagnosis and cure of neurodegenerative and neurodevelopmental disorders, we have used molecular biological approaches to generate new mouse models of such disorders and new probes to detect functional change in the brain. |
| Neuropsychiatry<br>Professor<br>SUZUKI Michio<br>(Sugitani Campus)<br>suzukim@med | Recent advances in brain imaging techniques have enabled us to explore brain structure and function non-invasively in vivo. However pathophysiology and mechanisms of mental disorders are still remain elusive. In our department, clinical and basic researches are being performed to elucidate pathophysiology of severe mental illnesses such as schizophrenia and to develop innovative and optimized approaches for diagnosing and treating patients for the purpose of improving their long-term outcome. |
| Neurosurgery<br>Professor<br>KURODA Satoshi<br>(Sugitani Campus)<br>skuroda@med | 〔Research content〕<br>Neurosurgical aspects of basic and clinical research are included in this course.<br>〔Guidance content〕<br>(1) Stem cell research<br>(2) Molecular and stem cell research of malignant glioma<br>(3) Angiogenesis of cerebrovascular disorders<br>(4) Cognitive function in neurosurgical disorders<br>(5) Electrophysiological analysis<br>(6) Epidemiological analysis of stroke |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Clinical and Cognitive Neuroscience<br>Professor<br>HAKAMATA Yuko<br>(Sugitani Campus)<br>hakamata@med | We aim at understanding the neurobiological mechanisms underlying emotional dysregulation associated with distorted cognitions, and using this understanding to develop novel, effective psychological interventions for anxiety and depressive disorders. We address these questions from the integrative view including psychology, cognitive behavioral science, endocrinology, immunology,genetics, and neuroscience. |
| Behavioral Physiology<br>Professor<br>TAKAO Keizo<br>(Sugitani Campus)<br>takao@cts | "Mind" is one of many brain functions. The brain receives and processes various types information necessary for the emergence of mind. An individual's behavior is the final output of brain function. Even with today's technology, it is difficult to directly study "mind", but analyses of brain and behavior contribute to elucidate the principles of "mind". Our laboratory aims to resolve the cellular and molecular mechanisms of "mind", including memory, learning, and emotion, using behavioral genetics, optogenetics, and pharmacologic and physiologic techniques. With these techniques, we also aim to resolve the pathophysiology of neuropsychiatric disorders and to develop treatments for these diseases. In addition, we are working to develop mouse models of nervous system diseases, and new reproductive technologies. |
| Physiology<br>Associate Professor<br>NISHIMARU Hiroshi<br>(Sugitani Campus)<br>nishimar@med | The amount of information processed in our brain in our daily life is estimated to be about 10 billion bits per second. These processes are carried out by the neural networks in the brain which are thought to be a real-time massive parallel processing system. Unraveling the mechanisms and principles of these networks is crucial for understanding how our brain works and also provides us a hint to live through the modern highly information-oriented society. To this end, we utilize neurophysiological and neuropsychological experimental approaches to elucidate higher brain functions including cognition of sensory information (input system), and behavioral manifestation based on sensory perception, memory, decision-making and motor control (output system). |
| Applied Pharmacology<br>Professor<br>KUME Toshiaki<br>(Sugitani Campus)<br>tkume@pha | ・Elucidation of pathogenesis mechanisms of neurodegenerative diseases, pruritus, pain and dysesthesia and search and development of preventive and therapeutic drugs for these disorders<br>・Establishment of novel animal models that exhibit the brain diseases and the sensory symptoms, such as itch, pain and dysesthesia<br>・Search for cytoprotective substances derived from foods and plants |
| Molecular Neurobiology<br>Associate Professor<br>TABUCHI Akiko<br>(Sugitani Campus)<br>atabuchi@pha | ・Elucidation of the molecular mechanisms underlying regulation of neuronal function and plasticity by gene expression and cellular communication between synapses and a nucleus<br>・Studies on neurological disorders caused by dysfunction of transcription factors and synaptic molecules<br>・Basic studies on transcription factors and synaptic molecules toward drug development targeted for neurological disorders |
| Pharmaceutical Therapy and Neuropharmacology<br>Professor<br>NITTA Atsumi<br>(Sugitani Campus)<br>nitta@pha | ・Behavioral pharmacological, molecular biological and cell biological studies to clarify the function of the novel molecules for the psychiatric diseases<br>・Study for the clarification of the mechanisms of establishment of addiction of nicotine, THC and methamphetamine<br>・Development of clinical markers for additions |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Regulatory Biology<br>Professor<br>MOCHIZUKI Takatoshi<br>(Gofuku Campus)<br>mochizuk@sci | Molecular neurobiology and genetic approach for sleep regulations, circadian rhythms and photoperiodism in mammals. |
| Regulatory Biology<br>Professor<br>MATSUDA Kouhei<br>(Gofuku Campus)<br>kmatsuda@sci | Physiology and biochemistry on bioactive peptides and their receptor signaling system, and psychophysiology on instinct behavior in vertebrates |
| Biological Information Processing<br>Professor<br>TABATA Toshihide<br>(Gofuku Campus)<br>ttabata@eng | Neuroscience of learning and memory. We investigate cellular and molecular mechanisms regulating synaptic plasticity involved in cerebellar motor learning using advanced methods of electrophysiology, electrochemistry, fluorescence microscopy, and behavior measurement. |
| Artif icial Intelligence<br>Professor<br>Zheng Tang<br>(Gofuku Campus)<br>ztang@eng<br>Associate Professor<br>Shangce Gao<br>(Gofuku Campus)<br>gaosc@eng | We conduct education and research on the design, analysis, and evaluation of various artificial intelligent methodologies, including the artificial neural networks which are inspired by the human brain's architecture and information processing mechanisms, the deep learning which is able to learn by itself, particle swarm optimization, ant colony optimization, error back-propagation method, genetic algorithm, evolutionary strategy, and other machine learning technologies. |
| Brain and Neural Systems Engineering<br>Professor<br>KAWAHARA Shigenori<br>(Gofuku Campus)<br>kawahara@eng | With a biophysical insight into the rules underlying the brain and neural systems functioning, we investigate the network dynamics during learning and memory, using neural recording and pharmacological techniques, and conduct education and research on engineering applications of the neural network dynamics. |

Table I-4 List of Research projects Conducted by Academic Advisors (Medical Design)

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Measurement Systems Engineering<br>Professor<br>SUZUKI Masayasu<br>(Gofuku Campus)<br>suzukimy@eng | We conduct education and research on small and integrated measurement systems developed using advanced technologies in biotechnology and electronics, such as integrated miniature biosensors, biochips, and microarrayed chips for medical diagnostics and environmental monitors. |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Dynamical Systems and Robotics<br>Associate Professor<br>TODA Hideki<br>(Gofuku Campus)<br>toda@eng | Our education and research activities focus on dynamical systems, control and robotics. The topics include decentralized control, hybrid systems and networked control as well as autonomous mobile robots, bio-inspired robots, rehabilitation robots. |
| Computational Biophotonics<br>Professor<br>KATAGIRI Takashi<br>(Gofuku Campus)<br>katagiri@eng<br>Associate Professor<br>OSHIMA Yusuke<br>(Gofuku Campus)<br>oshima@eng | We conduct research and education aimed at creating basic principles of next-generation medical measurement and diagnostic technology and building an academic system by combining photon science, laser spectroscopy, optical communication technology and information science. |
| Medical Information Sensing<br>Professor<br>HASEGAWA Hideyuki<br>(Gofuku Campus)<br>hasegawa@eng | We conduct education and research on the theory and applications of noninvasive ultrasonic imaging and sensing of morphological and functional information of biological bodies. In particular, we develop advanced signal- and image-processing techniques, such as ultrasonic beamforming, target motion estimation, and tissue viscoelasticity estimation, for ultrasonic measurements. |
| Biological Information Processing<br>Professor<br>TABATA Toshihide<br>(Gofuku Campus)<br>ttabata@eng | We focus on both basic and applied neuroscience of learning and memory. We investigate cellular and molecular mechanisms underlying learning and memory using advanced methods of electrophysiology, electrochemistry, fluorescence microscopy, and behavior measurement. Based on the results of these studies, we devise brain-tech gadgets such as a mobile device for episodic memory performance training. |
| Mechanical Information and Instrumentation<br>Professor<br>SASAKI Tohru<br>(Gofuku Campus)<br>tsasaki@eng | Our aim is image-position measuring of large-scale environments and force sensing for micro-handling. We conduct education and research on the development of new measuring methods, systems, and sensors. We also focus on robotic vision systems including 3D measurement and object recognition based on image processing. |
| Mechanical Information and Instrumentation<br>Associate Professor<br>TERABAYASHI Kenji<br>(Gofuku Campus)<br>tera@eng | ・Image understanding of circulating tumor cells for diagnostic and prognostic analysis<br>・Analysis of CT data for fixation of hand fracture |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Bioelectronics and Bioelectrical Engineering<br>Professor<br>SHINOHARA Hiroaki<br>(Gofuku Campus)<br>hshinoha@eng | Research and education concerning the interdisciplinary region between bioscience and electrochemical or electrical engineering are conducted. Enzyme sensors and cell-based biosensors for medical diagnostics and pharmaceutical tests are studied. Basic and applied research of various electrical. treatments of microorganisms and mammalian cells are also studied. |
| Brain and Neural Systems Engineering<br>Professor<br>KAWAHARA Shigenori<br>(Gofuku Campus)<br>kawahara@eng | With a biophysical insight into the rules underlying the brain and neural systems functioning, we investigate the network dynamics during learning and memory, using neural recording and pharmacological techniques, and conduct education and research on engineering applications of the neural network dynamics. |
| Biomedical Engineering for regenerative medicine<br>Professor<br>NAKAMURA Makoto<br>(Gofuku Campus)<br>maknaka@eng | We are conducting education and research on advanced tissue engineering and regenerative medicine based on biomaterial, biomedical engineering and other multi-disciplinary approaches. We are particularly focusing on the development<br>of advanced methodologies for organ engineering and organ regeneration |
| Human-Computer Interaction<br>Professor<br>NOZAWA Takayuki<br>(Gofuku Campus)<br>nozawa@eng | We conduct education and research on the analysis and evaluation of human cognition and social interaction, and on the design of information technologies that support people's intellectual activities in real life. For this purpose, we use a combination of multimodal measurement of brain, psychological, physiological, and behavioral activities with data science and artificial intelligence techniques. |
| Materials Plasticity Engineering<br>Professor<br>AIDA Tetsuo<br>(Gofuku Campus)<br>aida@sus | For various industrial materials, we conduct education and research on molding methods, plastic working deformation behavior and applications of molding materials controlled by advanced processing technology |
| Digital Contents<br>Associate Professor<br>TSUJIAI Hidekazu<br>(Takaoka Campus)<br>tsujiai@tad | We conduct education and research on digital content including 3D, fulldome and projection mapping, AR and VR environment construction, and image processing. |
| Design of visual environment<br>Professor<br>AKIZUKI Yuki<br>(Gofuku Campus)<br>akizuki@edu | We conduct education and research on visual environment design based on the characteristics of light sources, spatial factors, visual targets, as well as human vision mechanism. The topics include lighting planning of medical and nursing spaces, creation of skin samples for pathological conditions, and support for disaster relief medical activities at night. |

| Educational area<br>Responsible teacher<br>Contact address | Research contents |
|---|---|
| Diabetes and metabolism, rheumatic and respiratory diseases<br>Professor<br>TOBE Kazuyuki<br>(Sugitani Campus)<br>tobe@med | ・Dissection of the pathogenesis of type 2 diabetes and metabolic syndrome. Development of the methods to treat and prevent them.<br>・Dissection of genetic factors of type 2 diabetes, rheumatoid arthritis and asthma.Development of tailor-made therapy.<br>・The role of Sirtuin family proteins, longevity genes, in the development of metabolic syndrome and type 2 diabetes.<br>・Dissection of the pathogenesis of lung and rheumatic diseases.<br>・The development of methods to detect lung cancers at an earlier stage.<br>・Regulatory mechanisms for gut microbiome on glucose metabolism. |
| Internal Medicine<br>Professor<br>KINUGAWA　Koichiro<br>(Sugitani Campus)<br>kinugawa@med | Cardiovascular diseases have been increasingly popular in Japan along with aging society. Ischemic heart disease due to atherosclerosis with uncontrolled multiple risk factors, valvular disease in aged population, heart failure as a terminal figure of all heart disorders, and a number of arrhythmias modifying their clinical course are common. It is crucial to find out the underlying mechanisms of them, and to explore the therapeutic and preventive strategies for them. Also, renal diseases are closely related with cardiovascular diseases, and the relationship has been called as cardio-renal syndrome. Not only primary kidney disease such as nephritis, but also secondary renal dysfunction caused by heart failure should be an important target for investigation |
| Urology<br>Professor<br>KITAMURA Hiroshi<br>(Sugitani Campus)<br>hkitamur@med | Our medical staffs in the department have dedicated themselves to better care for patients having urological diseases. We are conducting basic and translational research for providing various strategies for treatment of the diseases that patients are satisfied with. We are enthusiastic about studying basic science of urology that will lead to a future innovative treatment. |
| Comprehensive Oral Sciences<br>Professor<br>NOGUCHI Makoto<br>(Sugitani Campus)<br>mnoguchi@med | Oral and maxillofacial region is composed of several important organs for articulation, mastication and deglutition, which are essential for human life. Several disturbances of these functions may lead to decreasing quality of life.<br>Early detection and early treatment of oral disease could contribute to keep up the social activity as well as to improve patient's prognosis. Our research programs address for better understanding pathogenesis of oral disease and developing of novel treatment modalities based on the basic research. Further,studies on rehabilitation of oral function and the functional reconstruction are being pushed along. |
| Internal Medicine<br>Professor<br>SATO Tsutomu<br>(Sugitani Campus)<br>tsutomus@med | With the advancement of an aging society, patients who have hematological malignancies have been steadily increasing. Since hematological malignancies are highly sensitive to chemotherapy, progress of chemotherapy has been accompanied by that of hematology. Hematopoietic stem cell transplantation was an answer reached by an extreme line of thought that the more chemotherapeutic agent was administered, the more cancer cells were killed. However, there were limits to that therapy, that is, severe side effects and multidrug resistance in tumor cells. Molecularly-targeted therapy and preventing side effects of chemotherapy is modern trends today. To meet such social needs, bench-to-bed research has been conducted in our department. |

・A portion of email address is listed in the contact address. Please use it for preliminary consultations with the relevant academic advisor in the field of your choice. Please add ".u-toyama.ac.jp" after the address.

Example) abc@def　→　abc@def.u-toyama.ac.jp