2022年度 (令和4年度)

大学院医学系研究科生命医科学専攻 (修士課程)

Course of Biomedical Sciences in Graduate School of Medicine (Master's Program)

学生募集要項

Admission Guidelines

新型コロナウイルス感染症の状況により、選抜方法が変更となる可能性があり ますので、本学ホームページで最新情報を確認してください。

Depending on the situation, Owing to COVID-19 infections, Selection Method might be changed. Please visit our website for the latest Admission information.



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Admission Policy of Gunma University

We seek applicants who have academic skills and capabilities required by the graduate schools or institutes according to their programs or specialties. Applicants should be motivated to contribute to the development of society through research and practice.

Admission Policy for Course of Biomedical Sciences in Graduate School of Medicine, Gunma University (Master's Program)

< Aims in Human Resources Development >

Our program aims to cultivate scientists who will pursue medical science, medical ethics, and medical skills. We hope our graduates will integrate these pursuits and contribute to the progress of medical research and education, and become leaders in health care and medical science.

< Attributes of Desired Candidate >

We will accept students who wish to gain knowledge and skills in biomedical sciences through our program, and become highly-skilled professionals or researchers. Specifically, we will accept those who:

- 1. strive to gain the ability to perform research independently based on high ethical values and profound academic knowledge.
- 2. strive to contribute to the society in medical science, health care and welfare filed as highlyskilled professionals by making use of the knowledge and skills they acquired.
- 3. strive to further develop the knowledge and skills they acquire, and continue to the PhD program to become researchers and/or educators in Biomedical Sciences field.

< Screening Process >

In order to enroll candidates consistent with our admission policy, we will comprehensively evaluate the results of the entrance examination (English test and interview) and undergraduate academic transcripts. We offer October admission in addition to the traditional April admission to increase educational opportunity.

1 Number of Students to be Admitted

Basic Medicine	Clinical	Medicine	Cooperative Department and Joint Department	
Anatomy		Radiation Oncology		
Anatomy and Cell Biology	(Internal Medicine) Cardiovascular Medicine	Diagnostic Radiology and Nuclear Medicine	(University Hospital)	
Molecular and Cellular Neurobiology	Respiratory Medicine Gastroenterology and	Psychiatry and Neuroscience	Clinical Trials and Regulatory Science Medical Informatics	
Biochemistry	Hepatology	Anesthesiology	Medical mormatics	
Integrative Physiology	Endocrinology and Metabolism	Emergency Medicine		
Neurophysiology and Neural Repair	Nephrology and Rheumatology	General Practice Medicine	(Institute for Molecular and Cellular Regulation)	
Pharmacology	Hematology Neurology	Rehabilitation Medicine	Molecular Traffic Laboratory of Epigenetics	
Genetic and Behavior Neuroscience		Clinical Laboratory Medicine	and Metabolism Molecular Membrane	
Bacteriology		Human Pathology	Biology Laboratory of Metabolic	
Infectious Diseases and Host Defense	(General Surgical Science) Cardiovascular Surgery	Diagnostic Pathology	Regulation and Genetics Molecular Endocrinology	
Public Health	General Thoracic Surgery Gastroenterological Surgery	Pediatrics	and Metabolism Developmental Biology	
Legal Medicine	Breast and Endocrine	Obstetrics and Gynecology	and Metabolism Diabetes and Metabolic Disorders Mucosal Ecosystem	The number of students to be admitted is 15
Medical Philosophy and Ethics	Surgery Hepatobiliary and Pancreatic Surgery	Urology		
/	Pediatric Surgery	Neurosurgery	Design Genome Sciences	
		Ophthalmology	Metabolic Signaling	
	/	Otolaryngology-Head and NeckSurgery	(Heavy Ion Clinical Medicine) Medical Physics and Biology	
		Dermatology	for Heavy Ion Therapy	
		Plastic Surgery	Heavy Ion Clinical Medicine	
		Orthopaedic Surgery	(Center for Food Science and Wellness)	
		Clinical Pharmacology and Therapeutics	Food Science and Wellness	
		Oral and Maxillofacial Surgery	(Center for Mathematics	
		Quality and Safety in Healthcare	and Data Science) Mathematics and Data Science	
			(Takasaki Advanced Radiation Research Institute, National Institutes for Quantum and Radiological Science and Technology) Quantum Biology	

Notes: 1 . Inquiries about admission should be made directly to supervisors in desired Field of Study prior to the actual application process. Major Department can be changed at the end of the first semester of the first year.

Spe		Medical Physics Course
Cial		International Training Program for Experts in Medical Physics
Cou		Radiation Biomedical Science Course
Medicine and Engineering Collaborative Course		Medicine and Engineering Collaborative Course

2 Qualifications for Application (A person who is applicable under any of the following provisions or a person who will be applicable to by March 31, 2022.)

- (1) A person who has graduated from a university.
- (2) A person who has been conferred a bachelor's degree under the provisions of Article No. 104-7 of the School Education Act (Act No. 26 of 1947).
- (3) A person who has completed a 16-year course of school education in a foreign country.
- (4) A person who has completed a 16-year course of foreign school education by taking class subjects in Japan through correspondence courses run by the foreign country.
- (5) A person who has completed a foreign country's university course at an educational institution in Japan (limited to the person who has completed a 16-year course of the said foreign school education) which is designated as having a foreign university's curriculum in the said foreign country's education system and separately designated by the Minister of Education, Culture, Sports, Science and Technology.
- (6) A person who has completed three or more years of study at a foreign university, or foreign educational institution (including a person who, while residing in Japan, has completed the program of education provided by a foreign university or foreign educational institution through correspondence or distance education courses) and who received a degree certificate that is recognized by the Japanese Ministry of Education, Culture, Sports, Science and Technology.
- (7) A person who has completed a specialized course separately designated by the Minister of Education, Culture, Sports, Science and Technology at a vocational school on or after the date specified by the Minister of Education, Culture, Sports, Science and Technology (limited to the vocational school with the school term of four years or more meeting the other standards specified by the Minister of Education, Culture, Sports, Science and Technology).
- (8) A person designated by the Minister of Education, Culture, Sports, Science and Technology (Notification No.5 of the Ministry of Education, 1953).
- (9) A person who entered a graduate school other than our Graduate School based on the provisions of Article 102-2 of the School Education Act (Act No. 26 of 1947) and who has been recognized by our Graduate School as having academic abilities appropriate for receiving graduate school education.
- (10) A person who has been recognized by our Graduate School as having academic abilities equivalent or superior to a person who has graduated a university based on the results of individual screening of the applicant's qualifications, and who will be 22 years of age.
- (11) A person who has been enrolled at a university for 3 years or more (including an equivalent person specified by the Minister of Education, Culture, Sports and Technology), and who has been recognized by Gunma University as having acquired the required units with excellent results.

3 Screening etc. for "Qualifications for Application" (Only if applicable)

- (1) A person who intends to apply under the provisions of Qualifications for Application (9) or (10) must undergo the screening of requirements for admission of our Graduate School before applying under the following conditions, and the only person who is proved that they has Qualifications for Application can apply.
 - The result of the qualification screening will be notified to each applicant by August 4 (Wed.), 2021.
 - (a) Application period

July 7 (Wed.), 2021

- (b) Application documents
 - 1 In the case of the screening concerning Qualifications for Application (9):
 - I Application for the screening of admission requirements (The form attached to our admission guidelines must be used. [Form-7])
 - II Academic transcript (faculty results and the document showing the curriculum of the faculty (e.g. syllabus))

- II Certificate of student status (issued by the president of the university (graduate school) you are in and with the date of your entrance). If you completed or quit the graduate school, submit the document with the date of your entrance (e.g. the transcript from the graduate school).
- IV Published academic papers etc. on research achievements, if any.
- 2 In the case of the screening concerning Qualifications for Application (10):
 - I Application for the screening of admission requirements (The form attached to our admission guidelines must be used. [Form-7])
 - II Certificate of Research Activities (The form attached to our admission guidelines must be used. [Form-8])
 - II Published academic papers etc. on research achievements or other remarkable achievements, if any.
 - IV Graduation Certificate or Completion Certificate issued by the final educational institution (including a junior college, an advanced vocational school or a vocational school, etc.) from which the applicant graduated.
 - V Academic transcript issued by the final educational institution (including a junior college, an advanced vocational school or a vocational school, etc.) from which the applicant graduated.
- (c) Mailing Address for Application documents:

Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University, 3-39-22 Showa-machi, Maebashi City, Gunma 371-8511, JAPAN TEL. +81-27-220-7797

(2) A person who intends to apply under the provisions of Qualifications for Application (11) must inquire at the office described in (1)-(c) before applying.

4 Acceptance of Application

(1) Acceptance Period of Application

August 5 (Thu.), to August 11 (Wed.), 2021. (so that it will reach us by August 11 (Wed.),)

(2) Submission Procedures of Application documents

Application documents must be submitted only by postal mail within the application period. Bringing Application documents in person or by proxy, that is not acceptable.

When mailing the documents, be sure to use registered mail and write "Application form for Graduate School of Medicine enclosed" in red on the front of the envelope and send it to Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University described in (3).

Notes:

- Application documents will not be accepted after the designated application period. The documents should be sent by Express Mail Service (EMS) etc., / mailing period into consideration. When special circumstances need to be taken into consideration, please contact "Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University described in (3) by August 5 (Thu.), 2021. at 4:00 p.m. (Japan time)"
- 2. If the application documents are sent by ordinary mail, Gunma University will not be responsible for it no matter what happens to the documents.
- (3) Mailing address

Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University, 3-39-22 Showa-machi, Maebashi City, Gunma 371-8511, JAPAN TEL. +81-27-220-7797

(4) Application Documents, etc. (The form is also available through the website of the Graduate School of Medicine and the Faculty of Medicine, Gunma University. (https://www.med.gunma-u.ac.jp/))

	Documents	Outline
1	Application Form and Curriculum Vitae [Form-1]	Fill out the form attached to our admission guidelines or obtained from the website. Only the person who has graduated or will graduate from a school in foreign countrie must fill in their curriculum vitae.
2	Statement of Purpose [Form-2]	A statement written by the applicant describing reasons for applying. (The number of characters is not limited.)
2		
		 [Concerning the refund of the entrance examination fee (Common notes to both remittances)] **In principle, the entrance examination fee will not be refunded, except the following cases according to the designated procedures. ①When an application is not made after paying the entrance examination fee. ②When the entrance examination fee is paid twice, or more than the amount of fixed money accidentally. ③When application documents are not accepted after submission. Please send the declaration form in which the following 1~4 are described to admission section in Showa campus of Gunma University. We will refund the entrance examination fee later.

Documents		Outline			
3 Entrance Examination Fee		 Declaration of claiming back the Entrance Examination Fee (Master's Program) The reason why you would like to request the application fee refund, 			
4	Sheet for Certificate of Transfer Receipt or Certificate of Payment [Form-3]	Paste the "Certificate of Transfer Receipt" or "Certificate of Payment" in space.			
5	Photograph Verification Card [Form-4] Examination Admission Card [Form-5]	Write your name on the back of the photograph (waist-up, full-face and uncovered head [L4 cm x W3 cm]) taken within three months prior to the application and paste it on the prescribed column in the Photograph Verification Card. Photograph Verification Card and Examination Admission Card must be submitted while still attached (do not cut them apart).			
6	Certificate of Graduation (or expected graduation)	The certificate issued by the president of the university or the graduate school from which you graduated. However, those who have passed the screening of admission requirements by our Graduate School under Qualifications for Application (10), and who have graduated from the Faculty of Medicine of Gunma University are not required to submit it.			
7	Certificate of Bachelor's Degree	The certificate proved by the institution which conferred the bachelor's degree. Attach the academic record supporting conferment of the said degree. (Note) This item 7 applies only to a person who falls under "Qualifications for Application (2)".			
8	Certificate of Bachelor's Degree	Attach the diploma or other certificate of Bachelor's Degree which is conferred from the university of educational establishment. This item 8 applies to a person who falls under "Qualifications for Application (6)"			
9	Academic transcript	The transcript issued by the presidents of the university and the graduate school from which you graduated and sealed. However, those who have passed the screening of admission requirements by our Graduate School under Qualifications for Application (9) or (10), and who have graduated from the Faculty of Medicine of Gunma University are not required to submit it.			

	Documents	Outline	
10	Name and Address Cards [Form-6]	Fill out the form attached to the Admission Guidelines or obtained from the website.	
11	Self-addressed envelope (larger than 120mm×235mm)	The self-addressed envelope with the applicant's name, postal code and for ± 374 (JPY 374) stamped. Furthermore, an applicant from overseas is not required to submit it.	
12	Certificate confirming "Qualifications for Application" (The copy is acceptable.)	A person who has undergone the screening of admission requirements conducted by our Graduate School about whether they falls under Qualifications for Application (9) or (10) before applying and has also been proved to have qualifications for application must submit it.	
13	Score report in TOEFL, TOEIC Listening & Reading Test or IELTS (Academic Module)	Refer to the section 6 Selection Method, and then a person who desires to use any score report and certificate must submit them with other application documents.	

Notes: 1. Alteration to the contents of the application documents will not be accepted after the acceptance of the application documents.

2. Whatever the reason, the application documents accepted will not be returned.

3. When it turns out that matters described in the application documents do not agree with the facts, the success in the examination and the admission may be revoked.

4. An applicant may be requested to submit additional documents other than those listed in the above if our University deems it necessary to confirm the qualifications for application.

5. When your former name is used in each certificate, an official document (family register, etc.) to prove the relation between your current name and former name must be attached.

(5) Sending of Examination Admission Card etc.

Examination Admission Card etc. will be sent to the applicant after paperwork following the acceptance of Application documents. If you don't receive your Examination Admission Card etc. by August 24 (Tue.), 2021, (It might except for overseas applicants) inquire to the to Admissions Section, Educational Affairs Office, Administration Division, Showa Campus (TEL. +81-27-220-7797, E-mail:kk-mgakumu5@ jimu.gunma-u.ac.jp).

5 Preliminary Consultation for Applicants with Disabilities etc.

Gunma University provides academic support to students with disabilities etc.

When you have a disability and need consideration in examination and your study, prior to an application, please consult with our university beforehand.

(1) When to consult

As due date of consultation is July 7 (Wed.), 2021, please consult as soon as possible.

Please note that we may not be able to accommodate the consultation after the deadline.

(2) How to consult

Please submit a consultation document (its format is optional) by attaching required documents including a doctor's certificate.

When necessary, the interview with the persons concerned with the school from which an applicant graduated, or their family etc. who can speak for the applicant or their position is performed in our university.

(3) Mailing Address for Consultation document:

Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University, 3-39-22 Showa-machi, Maebashi City, Gunma 371-8511, Japan TEL, +81-27-220-7797

1 EL. +81-27-220-7797

6 Selection Method

The judgement of acceptance is made by comprehensive ability of English, Oral Examination of your major field and the academic transcripts etc., which are submitted by the applicants. Furthermore, we will held TOEIC Listening & Reading IP Test (computer-scored answer sheet examination) as the Foreign Language examination on September 5 (Sun.),

(1) About Foreign Language examination

When applying, it is converted to Foreign language (English) examination score which is submitted any of the following test score report, TOEFL-ITP (TOEFL Institutional Testing Program), TOEFL-iBT (internet Based Test, including Home Edition), TOEIC Listening & Reading Test (including TOEIC IP Test (except for TOEIC IP Online)) or IELTS (Academic Module (including Computer-delivered IELTS Academic)). Furthermore, if the applicant who submits those score reports, they also can take the foreign language (English) test in conjunction with the conversion scores. In that case, the better result is adopted as one of the judgment of acceptance.

The valid score report is issued within five years.

In addition, we only accept the original score reports (, and do not accept the copied ones). TOEIC IP Online score report is unacceptable. It will be returned with your Examination card.

- (2) About oral examination
 - ① For applicants with difficulty in coming to Showa Campus, Gunma University for oral examination, we may use the results of the interview on the Internet for evaluation.
 - ② Date of examination

The examination is detarmined to be scheduled for the interview on the Internet individually.

- ③ Applicants must contact the supervisor they would like to study with for the Oral examination and confirm how it is to be implemented certainly.
- ④ In principal, the oral examination of the international student entrance examination is held in English. Subsequently, we may ask some questions about Japanese proficiency.
- (3) Messages for the applicants

Contact the supervisor you would like to study with prior to the application and make sure to consult them on your research plan at Gunma University.

7 Date and Locations for Examination

Date	Time	Examination Subject	Location
September 5 (Sun.),	10:00 - 12:30 13:30 - 15:00	Foreign Language (English) Oral Examination of Desired Major Field	Showa Campus, Graduate School of Medicine, Gunma University etc.

Examinees must enter the predetermined test room by 9:50 a.m.(Japan Time) certainly since receiving explanations etc, regarding the examination.

8 The Aim of Each Examination Subject

Foreign Language (English) The comprehension of English documents and English composition
ability will be examined.
Oral Examination of Desired Major Field Basic academic ability necessary for engaging in studies in
major field and willingness to study will be examined.
*The oral examination will be held by supervisors of major field of
your first choice.

9 Exam Instructions

- (1) Bring Examination Admission card with you on the examination day.
- (2) Examinees must enter the predetermined test room by 9:50 a.m.. If you are late, you are rejected to take the TOEIC IP Test.
- (3) Examinees must take all tests on the examination subjects assigned, or they will be disqualified.
- (4) When the public transportation you take becomes delay on the examination day, please make a phone call to : Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University

(TEL. +81-27-220-7797)

(5) If unexpected incidents (a disaster, an accident, etc.) happen on the day of examination, visit our website (https://www.med.gunma-u.ac.jp/) for your reference. In principle, we will not conduct supplementary examinations.

10 Announcement of Selection Results

Letters of acceptance will be mailed to successful applicants on September 29 (Wed.), 2021. At the same time, successful applicant's numbers will be posted on the website of "the Graduate School of Medicine and the Faculty of Medicine, Gunma University" after 10:00 a.m. (Japan Time) to the date for admission procedures. Notice about the announcement of selection results will not be posted in Gunma University campus.

Additionally, any inquiries about selection results will not be accepted.

11 Admission Procedures

The successful applicant is required to read the "admissions guide" enclosed with "the letter of acceptance" carefully and must prepare (1) fees and documents for admission procedures, (3) during the period of the admission procedures, and submit them to the (4) Mailing address only by postal mail.

(1) Fees and documents for admission procedures

① Admission fee: ¥282,000 (JPY 282,000)

Notes: (a) Any revisions to admission fee on admission during enrollment shall be applied.

- (b) Methods for payment of the admission fee will be informed separately.
- (c) Admission fee paid shall not be refunded under any circumstances.
- ② Examination admission Card
- ③ Any additional documents instructed in the admissions guide.
- (2) Fees for after entrance.

Tuition fee: (first-semester) ¥267,900 (JPY 267,900) (Annual tuition fee: ¥535,800 (JPY 535,800))

Notes: (a) Any revisions to tuition fees during enrollment shall be applied.

- (b) Methods for payment of the tuition fee will be informed separately.
- (c) Tuition fee including the tuition fee second-semester can be paid at the time of paying the tuition fee for first-semester according to the successful applicant's wishes.
- (d) If a person who completes the admission procedures declines the admission by March 31 (Thu), 2022, the amount equivalent to the tuition fee paid shall be refunded based on their request by following the prescribed procedures.
- (3) Period of Admission Procedures

OBy mail: The necessary documents must arrive at the university no later than October 15 (Fri.), 2021.

Note: Whether they will be regarded as a person who declines the admission if the admission procedures have not been completed by the above deadline.

(4) Mailing address

Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University, 3-39-22 Showa-machi, Maebashi City, Gunma 371-8511, JAPAN

12 Additional successful applicants

When the number of persons who complete the admission procedures by October 15 (Fri.), 2021 does not reach the number of students to be admitted, Gunma University can fill vacancies by additional successful applicants.

The notification of acceptance will notify by E-mail after 5:00 p.m. (Japan time) on October 18 (Mon.), 2021.

13 Exemption and Postponement of Admission Fee and Tuition Fee

The admission fee or the tuition fee may be exempted for admitted students who have difficulty paying due to special circumstances.

Also, the collection of admission fee or tuition fee can be postponed for a certain period for students who have difficulty paying by the specified deadline.

Inquiries:

Education and Student Support Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University TEL. +81-27-220-7796

14 Scholarship

There is the scholastic loan and benefit system for learning support provided by Japan Student Services Organization (JASSO) for a person who has difficulty in paying the tuition fee, and who has their great academic performance as well as a fine personality.

Inquiries:

Education and Student Support Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University TEL. +81-27-220-7792

15 Disclosure of Admission Information

Admission Information will be disclosed in the following way:

(1) Disclosed on the website of the Graduate School of Medicine and the Faculty of Medicine, Gunma University on and after May 6 (Fri.), 2022. (https://www.med.gunma-u.ac.jp/)

The above information contains number of applicants, number of examinees, number of successful applicants, number of newly enrolled students, the number of men and women in the newly enrolled students.

(2) Disclosed by the examinee's request in written form.

The said examinee's totaled scores on the entrance examination will be disclosed in written form.

OPeriod for acceptance of disclosure request

From May 6 (Fri.), to May 31 (Tue.), 2022

Admissions Section, Educational Affairs Office, Administration Division, Showa Campus of Gunma University TEL. +81-27-220-7797

16 Special Provisions for Education Methods

We will begin the Day/Evening course system in some major fields from April, 2022 in Course of Biomedical Sciences (Master's Program), Graduate School of Medicine. It based on the special divisions on education methods by Article 14 of the Standards Act for Establishment of Graduate School and conducts the selection. Regarding the major fields which are able to accept the students, ticked off them "*" on page 38.

Furthermore, the day/evening course system will be implemented during evening hours, on weekdays, weekends, national holidays and during summer holidays on Gunma University.

17 Protection of the Personal Information about the Applicants for Admission etc.

Gunma University will acquire the personal information about the applicants etc. through the application documents submitted and the personal information about the examinees by carrying out the entrance examination, but the personal information described above will be used only for the following operations based on "Act on the Protection of Personal Information Held by National University Corporation Gunma University".

- (1) For the operations (including subordinate operation, such as statistical treatment) concerning the selection of newly enrolled students.
- (2) For the operations concerning the student advising, the student support, and the tuition fee collection after enrollment as the data on the newly enrolled student in the case of a person who completes the admission procedures.
- (3) For the operation concerning the surveys and research for the purpose of university management (This

includes improvement of entrance examinations, survey and analysis of application trends, and preparation of various statistical data.)

Moreover, in the case of investigation, research presentation using the said personal information, it processes so that an individual cannot be specified.

Access to Admission Section

\bigcirc Address

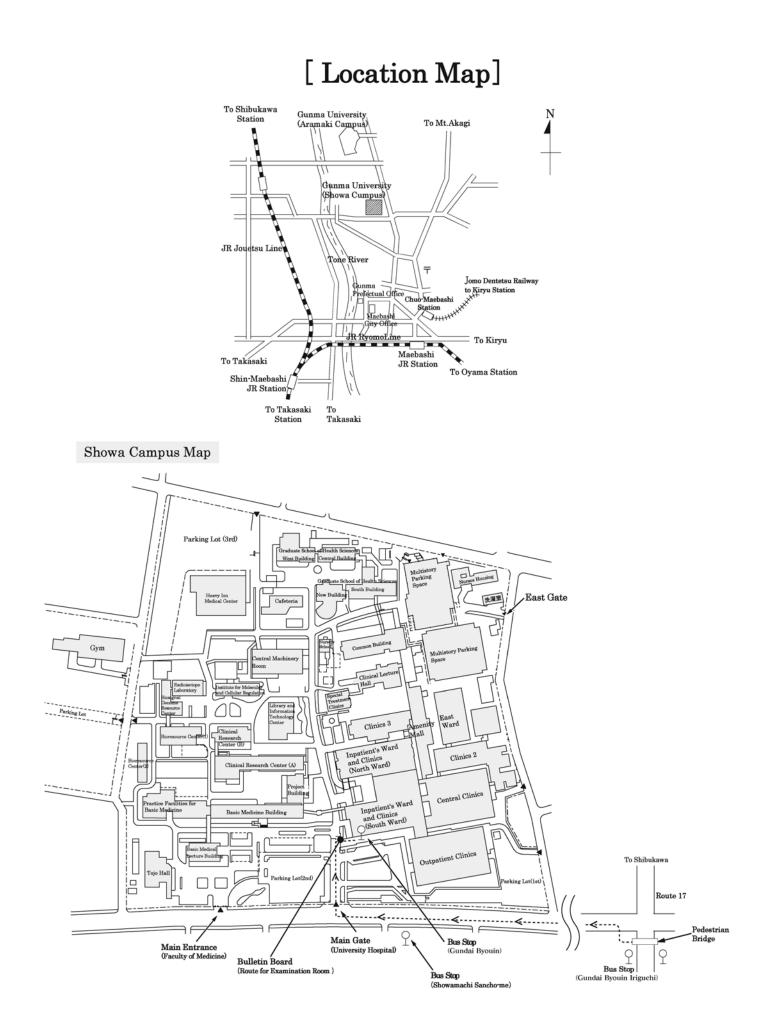
Gunma University Course of Medical Sciences in Graduate School of Medicine 3-39-22 Showa-machi, Maebashi City, Gunma 371-8511, Japan TEL. +81-27-220-7797 (Admissions Section, Educational Affairs Office)

\bigcirc Public Transepotation

Bus Stop (getting on)		Distinations	Bus Stop (getting off)	Expected time required	Notes
		 Bound for Gunma University Hospital Bound for Aramaki Campus via Gunma University Hospital (including via Nankitsudanchi) 	Gundai Byouin	about 15min	Kan-etsu Transportation
JR Ryomo Line Maebashi station, North Exit	Line via Gunma University Aramaki Maebashi Bus Stop 2 Campus) station, · Shibukawa City Circular Bus Bound		Gundai Byouin Iriguchi	about 13min by bus and 6min by walk	Kan-etsu Transportation
JR Jouetsu Line front of Shibukawa Station		 Bound for Maebashi station (including Shibukawa City Circular Bus, via Gunma University Aramaki Campus) 	Gundai Byouin Iriguchi	about 30min by bus and 6min by walk	Kan-etsu Transportation

% There are not any public transportation from JR Gunmasouja Station and JR Shinmaebashi Station.

* Please come to your examination place with time to spare at a specified time, after checking the latest information.



GUNMA UNIVERSITY

How to make Payment of Examination Fee at Convenience Store or by Credit Card

Now you can transfer funds to pay for your entrance examination - 24 hours a day from your nearest Lawson, Ministop, FamilyMart, Seven-Eleven or Credit Card

Advance Web Application

Attach Your (Certificate of Pay

time for the application period.

Station) will be at 3pm.

check our website.

₩Wh

ent) to the Applic

During payment periods and application periods mentioned in the

Please confirm from application documents and complete payment in

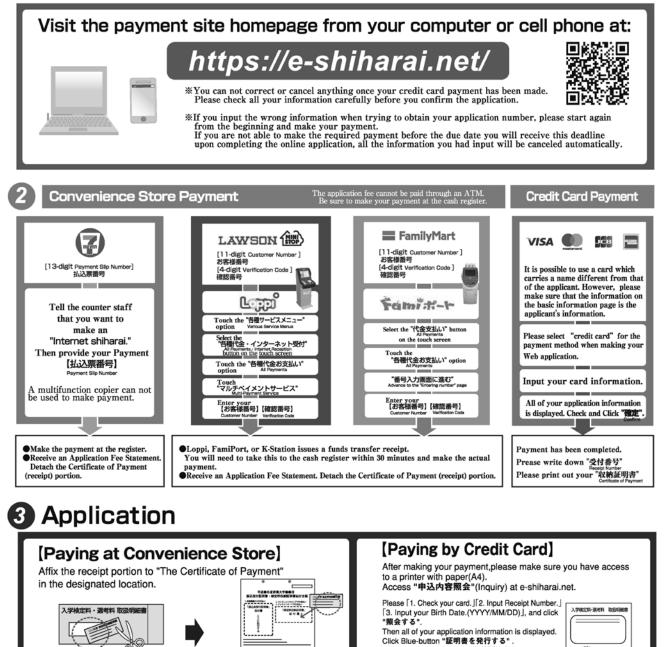
On the last date of the payment period, the web application will be closed at 2:30pm, and

the final deadline for the information terminal at convenience stores (Loppi, Fami Port, or K

When attaching the certificate of payment, be sure to use glue which is suitable for use with thermal paper and pressure-sensitive paper. Please check the glue label.

application documents, you can make a payment anytime.

#In the case that you have made your payment at Convenience Store, it is not necessary to enclose a bank receipt of any kind.



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Please note that refund is not possible once you have made a payment of Entrance examination fee.

In the case that you have made your payment using a credit card, it is not necessary to enclose a bank receipt of any kind.

Affix the cutting portion of "収納証明書"(The Certificate

Enclose in an envelope with all other necessary

of Payment) in the designated location.

application documents.

- ●A fee is added to Examination fee. For further info, please visit our website
- •Please directly contact the credit card company if your card is not accepted.
- It will be announced on our website if either the convenience stores which handle payments or the methods of payment, are changed.

Outline of the Biomedical Sciences Course (Master's Program)

1 Purpose of setting up the course and specific educational aims

Recent advances in life sciences and information sciences have opened up abundant prospects for applying the achievements of basic research within bio-related industries and new medical services, including drug discovery and regenerative medicine. At the same time, there is a need to solve many challenges, such as medical ethics and information security that are associated with advanced medical technology, and community healthcare support in our aging society, which are opening up a wide range of potential roles for medical researchers and health professionals. Many doors are being opened to non-medical school graduates and trained researchers, educators, and/or highly skilled workers who can exercise leadership in the life sciences and medical fields. However, there is a looming shortage of researchers/educators able to respond to the needs of society and who can take an active role in Biomedical Sciences, this new interdisciplinary field between life sciences and medicine.

There is also a growing number of non-medicine, non-veterinary, and non-dentistry graduates who are hoping to pursue their interest in life science research or medical fields; however, before these graduates can enter a graduate school of medicine to take a PhD course, they either need to have obtained a Master's Degree or must have more than two years' research experience at a university or research institute. Gunma University Graduate School of Medicine has been shifting its focus of interest to new interdisciplinary fields. For example, in 2003, we re-organized our Medical Sciences Course (Doctoral Program) and our research and educational system into a basic plus clinical integrated style, and established a PhD program in health sciences, now being run by the Graduate School of Health Sciences. The implementation of a day/evening course system for both programs allowed us to offer the course to mature students not from only the medical and health science fields, but also from related fields. However, we were still unable to accept graduates from facilities other than medicine, veterinary, or dentistry directly to our medical sciences course.

In response to increasing demand, and to broaden our intake of graduates from other faculties, we have established a Biomedical Science Course (Master's program) within the Graduate School of Medicine. This program aims to educate non-medical school graduates in the fundamental knowledge and skills needed to engage in the type of independent research that increasingly underpins medical and life sciences, and to foster leadership in medical-related fields on the part of health professional experts.

2 Academic discipline and research targets

Biomedical Sciences is a general term for the life sciences field, which overlaps medicine, life sciences, and other medical interdisciplinary fields. The Biomedical Sciences Course is designed to draw together life sciences and traditional basic medicine/clinical medicine (anatomy, physiology, biochemistry, cell biology, molecular biology, genetics, pharmacology, neuroscience, microbiology, parasitology, pathology, forensic medicine, hygiene, public health, medical ethics, medical informatics, internal medicine, surgical medicine, obstetrics and gynecology, otorhinology, rehabilitation medicine, clinical laboratory medicine, nuclear medicine, oncology, radiology, clinical pharmacology, pediatrics, psychiatry, etc.) as educational and research subjects to promote the elucidation of biological processes from a medical perspective and to establish Biomedical Sciences as a discipline that is aimed at the creation of new medical care: not only diagnosis and treatment, but also the promotion of health and improvement of quality of life.

We extended our research targets to medical physics, a field of growing importance, in academic year 2009, and will continue to promote broader biomedical science research.

3 Curriculum

- 1) Class subjects are divided into three subdivisions: basic subjects, practical subjects, and subjects suitable for research.
- 2) Of the basic subjects needed to be taken in the first year, fundamental knowledge of life sciences/medicine and basic techniques of the type required for biomedical science research will be acquired in the required subjects. This will place all students on the same footing. Basic factors within Biomedical Sciences that are needed in

multiple major field will be acquired in the elective subjects. Students who do not decide on a major field on beginning the course will be able to gain an understanding of current problems in medical-related fields, and make their decision based on their specialties, abilities and wishes by the end of the first semester of the 1st year while taking these basic subjects.

- 3) Of the practical subjects offered, elective subjects can be selected that are appropriate to the student's research project or career options after earning their Master's Degree. These subjects will advance the understanding of the applicable and practical knowledge required to pursue Biomedical Science research in research area and/or to further improve expertise.
- 4) Research subjects designed to promote the acquisition of knowledge needed to propose and implement a research project, and techniques for presentation of research results.

4 Others

Educational courses in Biomedical Sciences promote specialization in the following subjects.

Medical Physics Course

In this course, established in 2009, we train medical physics professionals who will be able to expand the development of highly-advanced medical technologies such as heavy particle radiotherapy using high-energy carbon ion beams and intensity-modulated radiation therapy using X-rays.

International Training Program for Experts in Medical Physics

This course is designed for prospective leaders in medical physics. The International Training Program for Cooperative Experts in Clinical Oncology, applied by the University of Tsukuba, was selected as a Promotion Plan for the Platform of Human Resource Development for Cancer, launched by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2012. In this course, we use unique teaching methods that employ e-learning strategies.

Radiation Biomedical Science Course

It provides basic knowledge of radiation science by studying linkage subjects in cooperation with Gunma Prefectural College of Health Sciences.

Medicine and Engineering Collaborative Course

This course is open since April 2019 for students who have previously studied natural sciences, engineering, and related fields. The mission of this course is to foster persons who will be able to lead and initiate work combining aspects of medicine and engineering in various sectors of academia, industries, medical institutions, and governmental institutions. Students can engage a wide area of expertise and conduct biomedical research under collaboration with the Graduate Schools of Science and Engineering.

Program for Cultivating Global Leaders in Heavy Ion Therapeutics and Engineering for Doctoral Courses

This Program selected as "Leading Program in Doctoral Education" by MEXT (It was launched in 2011). After enrollment of PhD program at Graduate School of Medicine, graduates of Biomedical Sciences Course may register this program. If application is approved, it is possible to complete the Doctoral Course in three years.

List of supervisors of each major field

*The Day/Evening course will be begun. (It based on the special divisions on education methods by Article 14 of the Standards Act for Establishment of Graduate School and conducts the selection.)

Region	Major Field	Supervisor
	Anatomy *	Hirohide Iwasaki
	Anatomy and Cell Biology *	Toshiyuki Matsuzaki
	Molecular and Cellular Neurobiology Biochemistry *	(Under the process of selection) Yoji Andrew Minamishima
ne	Integrative Physiology *	Norivuki Koibuchi
dici	Neurophysiology and Neural Repair *	Hirokazu Hirai
Basic Medicine	Pharmacology *	Hiroshi Kawabe
icl	Genetic and Behavioral Neuroscience	(Under the process of selection)
3as	Bacteriology *	Haruyoshi Tomita
	Infectious Diseases and Host Defense*	Wataru Kamitani
	Public Health*	Kei Hamazaki
	Legal Medicine * Medical Philosophy and Ethics *	Yoshihiko Kominato
	(Internal Medicine)	Kenji Hattori
	Cardiovascular Medicine	(Under the process of selection)
	Respiratory Medicine	Toshitaka Maeno (Associate Professor)
	Gastroenterology and Hepatology *	Toshio Uraoka
	Endocrinology and Metabolism *	Masanobu Yamada
	Nephrology and Rheumatology *	Keiju Hiromura
	Hematology *	Hiroshi Handa (Associate Professor)
	Neurology * (General Surgical Science)	Yoshio Ikeda
-	Cardiovascular Surgery *	Tomonobu Abe
-	General Thoracic Surgery	Ken Shirabe
	Gastroenterological Surgery *	Hiroshi Saeki
	Breast and Endocrine Surgery	Takaaki Fujii (Associate Professor)
	Hepatobiliary and Pancreatic Surgery *	Ken Shirabe
a l	Pediatric Surgery	Ken Shirabe
	Radiation Oncology Diagnostic Radiology and Nuclear Medicine *	Tatsuya Ohno Yoshito Tsushima
dic	Psychiatry and Neuroscience *	Masato Fukuda
Clinical Medicine	Anesthesiology *	Shigeru Saito
al	Emergency Medicine	Kiyohiro Oshima
inic.	General Practice Medicine	(Under the process of selection)
D D	Rehabilitation Medicine *	Naoki Wada
	Clinical Laboratory Medicine *	Masami Murakami
	Human Pathology * Diagnostic Pathology *	Hideaki Yokoo Tetsunari Oyama
	Pediatrics	(Under the process of selection)
	Obstetrics and Gynecology *	Akira Iwase
	Urology*	Kazuhiro Suzuki
	Neurosurgery	Yuhei Yoshimoto
	Ophthalmology *	Hideo Akiyama
	Otolaryngology-Head and Neck Surgery *	Kazuaki Chikamatsu
	Dermatology Plastic Surgery	Sei-ichiro Motegi Satoshi Yokoo
	Orthopaedic Surgery	Hirotaka Chikuda
	Clinical Pharmacology and Therapeutics *	Koujiro Yamamoto
	Oral and Maxillofacial Surgery	Satoshi Yokoo
	Healthcare Quality and Safety *	Yasuhiro Komatsu
	(University Hospital)	
-	Clinical Trials and Regulatory Science * Medical Informatics *	Tetsuya Nakamura Yuichiro Saito (Associate Professor)
	(Institute for Molecular and Cellular Regulation)	T uchiro Satto (Associate Professor)
	Molecular Traffic	Ken Sato
	Laboratory of Epigenetics and Metabolism *	Takeshi Inagaki
ent	Molecular Membrane Biology	Miyuki Sato
E L	Laboratory of Metabolic Regulation and Genetics *	Takashi Nishimura
bar	Molecular Endocrinology and Metabolism	Tetsuro Izumi
Jer	Developmental Biology and Metabolism * Diabetes and Metabolic Disorders *	Yoshio Fujitani Iun Shirakawa
e I	Mucosal Ecosystem Design *	Nobuo Sasaki
ti.	Genome Sciences*	Izuho Hatada
Cooperative Department	Metabolic Signaling	Tadahiro Kitamura
do	(Heavy Ion Clinical Medicine)	
ŭ	Medical Physics and Biology for Heavy Ion Therapy	Akihisa Takahashi (Medical Biology)
	Heavy Ion Clinical Medicine *	Mutsumi Tashiro (Associate Professor)(Medical Physics) Hidemasa Kawamura
	(Center for Food Science and Wellness)	THUEHIASA KAWAHIUFA
	Food Science and Wellness*	Seiji Torii
	(Center for Mathematics and Data Science)	
	Mathematics and Data Science *	Takayuki Asao
ent	(Takasaki Advanced Radiation Research Institute, National Institutes for Q	
Joint Department		Yasuyuki Ishii
Jepa	Quantum Biology	Yasuhiko Kobayashi Tomoo Funayama
		1011100 1 unayania

Contact Information and Main contents (contact number: +81-27-220-the extension number)

Region	Major Field	Contact Information	key words		
	Anatomy	Hirohide Iwasaki Ext. 7910 h-iwasaki@gunma-u.ac.jp	[Keywords] Neuronal circuit, connectome, synapse remodeling, development, vesicle transport, imaging technology, light microscopy, electron microscopy		
	Anatomy and Cell Biology	Toshiyuki Matsuzaki Ext. 7900 matoshi@gunma-u.ac.jp	[Keywords] cell membrane, water channels, transporters, microscopy, immunohistochemistry, electron microscopy		
_	Molecular and Cellular Neurobiology	Yoshihiko Kominato Ext. 8030 kominato@gunma-u.ac.jp	[Keywords] neural stem cells, neuronal precursor cells, glial precursor cells, glialcells, vascular cells, regenerative medicine		
	Biochemistry	Yoji Andrew Minamishima Ext. 7940 minamishima@gunma-u.ac.jp	[Keywords] Hypoxic response, energy metabolism, DNA damage & repair, cell cycle, cellular senescence, lipid mediators, proteomics, metabolomics, and lipidomics http://biochemistry.med.gunma-u.ac.jp/en/		
_	Integrative Physiology	Noriyuki Koibuchi Ext. 7920 nkoibuch@gunma-u.ac.jp	[Keywords] hormone, development, plasticity, regeneration, environmental factors, endocrine disruption		
tine	Neurophysiology and Neural Repair	Hirokazu Hirai Ext. 7930 hirai@gunma-u.ac.jp	[Keywords] memory; learning; motor control; regenerative medicine; viral vector; neurodegenerative disease; marmoset; non-human primate model; aging; stem cell therapy; gene therapy; patch clamp.		
Basic Medicine	Pharmacology	Hiroshi Kawabe Ext. 8050 kawabe@gunma-u.ac.jp	[Keywords] Ultrastructure of Synapses, Superresolution Microscopy, Psychiatric and Neurological Disorders, Cytoskeleton, Posttranslational Modification, Protein Degradation		
Η	Genetic and Behavioral Neuroscience	Shigeo Miyata (Assistant Professor) Ext. 8042 s_miyata@gunma-u.ac.jp	[Keywords] neurotransmitter, GABA, knockout mice, transgenic rats, neuropsychi- atric disorders, model mouse		
	Bacteriology	Haruyoshi Tomita Ext. 7990 tomitaha@gunma-u.ac.jp	[Keywords] multi-drug resistant bacteria, VRE, MDRP, enterococcus, bacteriocir conjugative plasmid, transposon		
	Infectious Diseases and Host Defense	Wataru Kamitani Ext. 8020 wakamita@gunma-u.ac.jp	[Keywords] Coronavirus, Molecular biology, Reverse genetics of Virus, Host- Pathogen interracton, Malaria, Infectious immunity		
-	Public Health	Kei Hamazaki Ext. 8010 kei.hamazaki@gunma-u.ac.jp	[Keywords] micronutrient, maternal and child health, lifestyle related diseases, public health nutrition, epidemiological studies		
-	Legal Medicine	Yoshihiko Kominato Ext. 8030 kominato@gunma-u.ac.jp	【Keywords】 legal medicine, personal identification, ABO blood group, enhancer		
	Medical Philosophy and Ethics	Kenji Hattori Ext. 4755 hattorik@gunma-u.ac.jp	[Key words] clinical ethics, medical ethics, philosophy of medicine, medical ethics education		
	Cardiovascular Medicine	Yoshiaki Kaneko (Associate Professor) Ext. 8142 kanekoy@gunma-u.ac.jp	[Keywords] Cardiology, Clinical electrophysiology, Arrhythmia, Heart failure, Myocardial infarction, Catheter ablation, Device therapy, Antiarrhythmic drug therapy		
icine	Respiratory Medicine	Toshitaka Maeno (Associate Professor) Ext. 8000 mutoyu03@gunma-u.ac.jp	[Keywords] lung cancer, allergic respiratory disease, COPD, lung fibrosis, infectious lung disease		
Clinical Medicine	Gastroenterology and Hepatology	Toshio Uraoka Ext. 8148 uraoka@gunma-u.ac.jp	[Keywords] gastrointestinal tumor, endoscopy, esophageal motility disorder, inflam- matory bowel disease, hepatocarcinogenesis, non-alcoholic steatohepati- tis, hepatic fibrosis, viral hepatitis		
	Endocrinology and Metabolism	Masanobu Yamada Ext. 8120 myamada@gunma-u.ac.jp	[Keywords] lifestyle diseases, endocrine disorders, diabetes mellitus, molecular biol- ogy, gene mutation		
	Nephrology and Rheumatology	Keiju Hiromura Ext. 8166 hiromura@gunma-u.ac.jp	[Keywords] nephrology, glomerulonephritis, tubulointerstitial injury, rheumatology, lupus nephritis, vasculitic syndrome		

Region	Major Field	Contact Information	key words
	Hematology	Hiroshi Handa (Associate Professor) Ext. 8166 handahiroshi@gunma-u.ac.jp	[Keywords] hematologic malignancy, genome, epigenome, coagulation disorder, next generation sequencer
	Neurology	Yoshio Ikeda Ext. 8060 ikeday006@gunma-u.ac.jp	[Keywords] Alzheimer disease, dementia, amyotrophic lateral sclerosis (ALS), spinocerebellar ataxia (SCA), microsatellite-repeat
	Cardiovascular Surgery	Tomonobu Abe Ext. 8240 tomonobuabe@gunma-u.ac.jp	[Keywords] surgery, heart, brain, ischemia, reperfusion injury, organ protection
	General Thoracic Surgery	Ken Shirabe Ext. 8800 kshirabe@gunma-u.ac.jp	[Keywords] surgical oncology, mechanism of proliferation, invasion and metastasis, driver gene, diagnosis and treatment
	Gastroenterological Surgery	Hiroshi Saeki Ext. 8220 h-saeki@gunma-u.ac.jp	[Keywords] carcinogenesis and cancer progression, gastrointestinal motility, novel diagnostic method, development of novel diagnostic and therapeutic method, surgical education
	Breast and Endocrine Surgery	Takaaki Fujii (Associate Professor) Ext. 8224 ftakaaki@gunma-u.ac.jp	【Keywords】 breast cancer, biomarkers, lymph node metastasis, TILs, microRNA, PET
	Hepatobiliary and Pancreatic Surgery	Ken Shirabe Ext. 8800 kshirabe@gunma-u.ac.jp	[Keywords] cancer microenvironment, hepato-biliary and pancreatic cancer, sarcopenia, and laparoscopic surgery for hepato-biliary and pancreatic disease.
ine	Pediatric Surgery	Ken Shirabe Ext. 8800 kshirabe@gunma-u.ac.jp	[Keywords] surgical oncology, circulating tumor cells, minimally invasive surgery, gastro-intestinal motility, enterobacterial flora
Clinical Medicine	Radiation Oncology	Tatsuya Ohno Ext. 8380 tohno@gunma-u.ac.jp	[Keywords] Precision medicine, DNA repair, anti-tumor immunity, high precision radiotherapy, image-guided brachytherapy, carbon ion radiotherapy, multidisciplinary cancer treatment
Cli	Diagnostic Radiology and Nuclear Medicine	Yoshito Tsushima Ext. 8400 yoshitotsushima@gunma-u.ac.jp	[Keywords] diagnostic radiology, nuclear medicine, CT, MRI, US, SPECT, PET, interventional radiology
	Psychiatry and Neuroscience	Masato Fukuda Ext. 8180 fukuda-psy@gunma-u.ac.jp	[Keywords] psychiatric disorder, neuroimaging, stress, mental illness, brain function
	Anesthesiology	Shigeru Saito Ext. 8450 shigerus@gunma-u.ac.jp	[Keywords] anesthesia, neuroimaging, consciousness, pain, brain function
	Emergency Medicine	Kiyohiro Oshima Ext. 8541 kiyohiro@gunma-u.ac.jp	[Keywords] cardiopulmonary arrest, cardiopulmonary resuscitation, severe trauma, reperfusion injury, coagulation
	General Practice Medicine	Keiko Kowase (Associate Professor) Ext. 8666 kowasek@gunma-u.ac.jp	【Keywords】 General medicine, Primary care, community medicine, atherosclerosis, Japanese oriental medicine, diagnostic inference
	Rehabilitation Medicine	Naoki Wada Ext. 8655 nwada@gunma-u.ac.jp	[Keywords] rehabilitation medicine, disability studies, motion analysis, autonomic nervous system, virtual reality
	Clinical Laboratory Medicine	Masami Murakami Ext. 8550 murakam@gunma-u.ac.jp	[Keywords] Clinical laboratory medicine, gene analysis, diabetes mellitus, thyroid disease, atherosclerosis, infectious diseases, sports medicine, lifestyle- related disease, infection control and prevention
	Human Pathology	Hideaki Yokoo Ext. 7970 hyokoo@gunma-u.ac.jp	[Keywords] neuropathology, brain tumor, molecular and cytogenetics of tumor, glial cells, translational research

Region	Major Field	Contact Information	key words		
	Diagnostic Pathology	Tetsunari Oyama Ext. 7980 oyama@gunma-u.ac.jp	[Keywords] cancer morphology, multi-step carcinogenesis, oncogene, tumor suppressor gene, protein expression		
_	Pediatrics	Takumi Takizawa (Associate Professor) Ext. 8479 takizawt@gunma-u.ac.jp	[Keywords] allergic diseases, neurodegenerative disorder, acute leukemia, nephros inflammatory bowel diseases.		
	Obstetrics and Gynecology	Akira Iwase Ext.8420 akiwase@gunma-u.ac.jp	【Keywords】 Reproductive medicine and biology, Reproductive endocrinology, Gynecologic oncology, Perinatal medicine, Endometriosis, Minimally invasive surgery		
	Urology	Kazuhiro Suzuki Ext. 8300 kazu@gunma-u.ac.jp	[Keywords] urological tumor, prostate cancer, androgen dependency, screening		
	Neurosurgery	Yuhei Yoshimoto Ext. 8510 yyoshimo@gunma-u.ac.jp	[Keywords] micro-neurosurgery, interventional radiology, endoscopic neurosurgery, intraoperative imaging, intraoperative neurophysiology		
Clinical Medicine	Ophthalmology	Hideo Akiyama Ext. 8338 akiyamah47@gunma-u.ac.jp	[Keywords] hematologic malignancy, genome, epigenome, coagulation disorder, HIV, next generation sequencer		
	Otolaryngology Head and Neck Surgery	Kazuaki Chikamatsu Ext. 8350 tikamatu@gunma-u.ac.jp	[Keywords] head and neck cancer, immunosuppression, cancer immunotherapy, tumor microenvironment		
	Dermatology	Sei-ichiro Motegi Ext. 8284 smotegi@gunma-u.ac.jp	【Keywords】 Skin, skin sclerosis, cutaneous malignant tumors, wound healing, hereditar skin diseases		
	Plastic Surgery	Takaya Makiguchi (Associate Professor) Ext. 8484 tmakiguchi@gunma-u.ac.jp	[Keywords] reconstruction, free flap, wound healing, breast reconstruction		
	Orthopaedic Surgery	Hirotaka Chikuda Ext. 8260 chikudah@gunma-u.ac.jp	[Keywords] osteoarthritis, spondylotic deformans, joint arthroplasty, sports injury, musuclo-skeletal tumor		
	Clinical Pharmacology and Therapeutics	Koujirou Yamamoto Ext. 8743 koujirou@gunma-u.ac.jp	[Keywords] clinical pharmacology, pharmacokinetics, genetic polymorphisms, individualization of drug therapy		
	Oral and Maxillofacial Surgery	Satoshi Yokoo Ext. 8480 syokoo@gunma-u.ac.jp	[Keywords] oral mucous wound healing, oral and maxillofacial reconstruction, oral cancer, salivary gland, jaw deformity		
	Healthcare Quality and Safety	Yasuhiro Komatsu Ext. 8767 komayasu@gunma-u.ac.jp	[Keywords] healthcare quality, patient safety, quality indicator, shared decision making, interprofessional collaboration		
)epartment Hospital)	Clinical Trials and Regulatory Science	Tetsuya Nakamura Ext. 8740 nakamurt@gunma-u.ac.jp	[Keywords] clinical research, study design, statistics		
Cooperative Department (University Hospital)	ScienceHakamurt@gumma-u.ac.jpMedicalYuichiro SaitoInformaticsExt. 8771saitoyui@gunma-u.ac.jp		[Keywords] medical information, health care, hospital information system		
t ment Regulation)	Molecular Traffic	Ken Sato Ext. 8840 sato-ken@gunma-u.ac.jp	[Keywords] membrane trafficking, secretion, metabolism, development, model animal		
Cooperative Department Institute for Molecular and Cellular Regulation)	Laboratory of Epigenetics and Metabolism	Takeshi Inagaki Ext. 8880 inagaki@gunma-u.ac.jp	【Keywords】 Epigenetics and Metabolism, Obesity, Diabetes, Energy Metabolism, Transcription Factors, Chromatin Conformation, Histone Modifications		
Coop. (Institute fo	Molecular Membrane Biology	Miyuki Sato Ext. 8865 m-sato@gunma-u.ac.jp	[Keywords] <i>C. elegans,</i> organelle, autophagy, endocytosis, mitochondria, maternal inheritance		

Region	Major Field	Contact Information	key words
(u	Laboratory of Metabolic Regulation and Genetics	Takashi Nishimura Ext. 8892 t-nishimura@gunma-u.ac.jp	[Keywords] Drosophila, metabolic homeostasis, sugar metabolism, insulin signaling, inter-organ communication, growth regulation
Regulatio	Molecular Endocrinology and Metabolism	Tetsuro Izumi Ext. 8856 tizumi@gunma-u.ac.jp	[Keywords] insulin granule exocytosis, membrane trafficking, fat accumulation, immune cell interaction, genetically mutated mouse, live cell imaging
partment Cellular	Developmental Biology and Metabolism	Yoshio Fujitani Ext. 8855 fujitani@gunma-u.ac.jp	[Keywords] diabetes, glucose metabolism, developmental biology, pancreatic beta cells, genetically engineered mice, beige adipocyte, zinc biology, zinc transporter
ative Del cular and	Diabetes and Metaboloc Disorders	Jun Shirakawa Ext. 8820 jshira@gunma-u.ac.jp	[Keywords] human islets, biomarkers, organ networks, diabetes, fatty liver, adipose tissue inflammation
Cooperative Department (Institute for Molecular and Cellular Regulation)	Mucosal Ecosystem Design	Nobuo Sasaki Ext. 8830 nosasaki@gunma-u.ac.jp	[Keywords] Adult tissue stem cell, Organoid, Human development, Gut microbiota, Symbiosis, Infection disease
(Institute	Genome Sciences	Izuho Hatada Ext. 8057 hatada@gunma-u.ac.jp	[Keywords] epigenetics, epigenome, DNA methylation, microarray, genome-wide analysis, ageing
	Metabolic Signaling	Tadahiro Kitamura Ext. 8845 kitamura@gunma-u.ac.jp	[Keywords] diabetes, obesity, metabolic syndrome, transcription factor, knockout mouse, insulin, glucagon
Cooperative Department (Heavy Ion Medical Center (Research Institute))	Medical Physics and Biology for Heavy Ion Therapy	Akihisa Takahashi Ext. 7917 a-takahashi@gunma-u.ac.jp (Medical Biology) Mutsumi Tashiro (Associate Professor) Ext. 8378 tashiro@gunma-u.ac.jp (Medical Physics)	[Keywords] radiotherapy, heavy ion radiotherapy, medical physics, accelerator, radiation biology, space environmetal medicine
Coo (Heavy Ion Me	Heavy Ion Clinical Medicine	Hidemasa Kawamura Ext. 8378 kawa@gunma-u.ac.jp	[Keywords] heavy ion radiotherapy, multimodality, cancer therapy, biological response, high LET, hypofractionation, imageguided adaptive radiotherapy
Cooperative Department (Center for Food Science and Wellness)	Food Science and Wellness	Seiji Torii Ext. 8946 storii@gunma-u.ac.jp	[Keyword] cancer, metabolism, endocrine, cell biology, peptide hormones, insulin, reactive oxygen species, ferroptosis
Cooperative Department (Center for Mathematics and Data Science)	Mathematics and Data Science	Takayuki Asao Ext. 8353 asao@gunma-u.ac.jp	【Keywords】 Medical devices, PMDA, Database, Natural language processing, Artificial intelligence, Robotic Process Automation. Python
Joint Department	Quantum Biology	Takasaki Advanced Radiation Research Institute, National Institutes for Quantum and Radiological Science and Technology Yasuyuki Ishii Yasuhiko Kobayashi Kazuo Funayama Contact to Admissions Section, Educational Affairs Office	[Keywords] ion beam, microbeam, micro-PIXE, single-ion hit, irradiation of targeted cell, radiomicrosurgery, bystander effect





様式 1 (Form-1)

2022年度群馬大学大学院医学系研究科生命医科学専攻(修士課程) 入学願書

Admission for 2022 Course of Biomedical Sciences in Graduate School of Medicine, Gunma University (Master's Program) Application Form

受験番号 Examinee's Number	*		志望専攻分野の指導 Did you contact your supervisor	導教員に出願の内諾 and get their consent before sub		ולע Yes	・ いいえ No
フリガナ 氏名 Name					性 別 Sex	男 Male	・女 Female
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国籍 Nationality 現住所 (入試に関する確実な連絡先) Current Address (Contact address for receiving information about entrance examination without fall)	⊤ Postal Code	_		(Fill in the name o TEL 携帯 Cell Phone E-mail	of a country if yo — —		
出身大学又は学位取得年月日等 (出願資格に該当する大学・学部名等を記入) University etc. graduated	国立 National 公立 Public 私立 Private	ne of the university	University 大学	Department 学部	Subject (西 学科 A.	暦) Year .D. 年	Month Graduation 月 卒業 (卒業見込み)
(Fill in a university department name corresponding to an application qualification)	学位を授与され Name of the insutut 機関名	た機関の名称及び取得年月 ion	引日 The name of an institu	ution conferred a degree on	(西	date (暦) Year . D. 年	Month Graduation 月 卒業 (卒業見込み)
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〔記入上の注意〕

[Notes on filling in]

 必要事項は、青又は黒のボールペンを用いて楷書で正確 に記入してください。

- 2 有職者の方は、職歴欄に勤務先及び職業を詳細に記入してください。
- 3 現住所は、通知・照会等を確実に受けとることができる 場所を記入してください。

4 ※欄は記入しないでください。

5 学歴欄には研究生、専攻生等の履歴も記入してください。

6 志望する専攻分野名の第一希望は、必ず記入してください。

1 Fill in the above application form in the block style and accurately by using a blue or black ball-point pen.

2 Fill in your working place and occupation minutely if you are a working person.

3 Fill in the current address where notice and inquiry, etc. can be received without fail.

4 Do not fill in the "*box."

5 Fill in the "Educational Background box" with your background such as research student, post-graduate student, etc.

6 Write your first choice in the Desired Major Field.

履歴 書 (Curriculum Vitae)

Educational background (学歴)

外国の学校を卒業又は卒業見込みの者は記入

Educational backgroun	d(字歴)	The person who has graduated or will graduate from a school in foreign countries.			
	Name and Address of School (学校名及び所在地)	Year and Month of Entrance and Completion (入学及び卒業年月)	Duration of Attendances (修学年数)	Diploma or Degree awarded, Major Subject,Skipped years/levels (学位・資格・専門科目、 飛び級の状況)	
Elementary Education (初等教育)	Name (学校名)	From (入学)	Years (年)		
Elementary School (小学校)	Address (所在地)	To (卒業(見込み))	and months (月)		
Secondary Education (中等教育)	Name (学校名)	From (入学)	Years (年)		
Lower Secondary School (中学)	Address (所在地)	To (卒業(見込み))	and months (月)		
Upper Secondary School	Name (学校名)	From (入学)	Years (年)		
(高校)	Address (所在地)	To (卒業(見込み))	and months (月)		
Higher Education (高等教育)	Name (学校名)	From (入学)	Years (年)	*-1	
Undergraduate Level (大学)	Address (所在地)	To (卒業(見込み))	and months (月)		
Graduate Level	Name (学校名)	From (入学)	Years (年)		
(大学院)	Address (所在地)	To (卒業(見込み))	and months (月)		
	Total number of years of the afor (以上を通算した全学校 As of April 1, 2022 (2022年4月1日現在)	8	Years (年)		

Employment History (Begin with the most recent employment history,if applicable.) (職歴)

	10		
Name and Address of Employer (勤務先及び所在地)	Period of Employment (在職期間)	Position (役職名)	Type of Work (職務内容)
	From		
	То		
	From		
	То		

*If the blanks above have not sufficient space to be filled in, write on another appropriate sheet and attach it. ((注) 上欄に書き切れない場合には、適当な別紙に記入して添付すること。)

- Notes: 1. Exclude kindergarten education or nursery school. (幼稚園・保育所教育は含まれない。)
 - 2. Preparatory education for university admission is included in upper secondary school.
 - (いわゆる「大学予備教育」は中等教育に含まれる。)
 - 3. If the applicant has passed the university entrance qualification examination, indicate this in the blank with *-1. (「大学入学資格試験」に合格している場合には、その旨を*-1欄に記入すること。)

4. Any school years or levels skipped should be indicated in the fourth column (Diploma or Degree awarded, Major Subject, Skipped years and levels). (Example : Graduated from high school in two years, etc.)
(いわゆる「飛び級」をしている場合には、その旨を該当する教育課程の「学位・資格、専門科目、飛び級の状況」欄に記載すること。)
(例:高校3年次を飛び級により短期卒業))

日付 (Date)

出願者名前(Name)

出願者署名 (Signature)

様式 2 (Form-2)

2022年度群馬大学大学院医学系研究科生命医科学専攻(修士課程) 志 願 理 由 書

Admission for 2022 Course of Biomedical Sciences in Graduate School of Medicine, Gunma University (Master's Program)

Statement of Purpose

※欄は記入しないでください Do not fill in the "※box."

フ	リガ	ナ	受験番号	Examinee's Number
氏		名	*	
	Name			

志願理由書 2/2 Statement of Purpose

Admission for 2022 Course of Biomedical Sciences in Graduate School of Medicine, Gunma University (Master's Program) Sheet for Certificate of Transfer Receipt

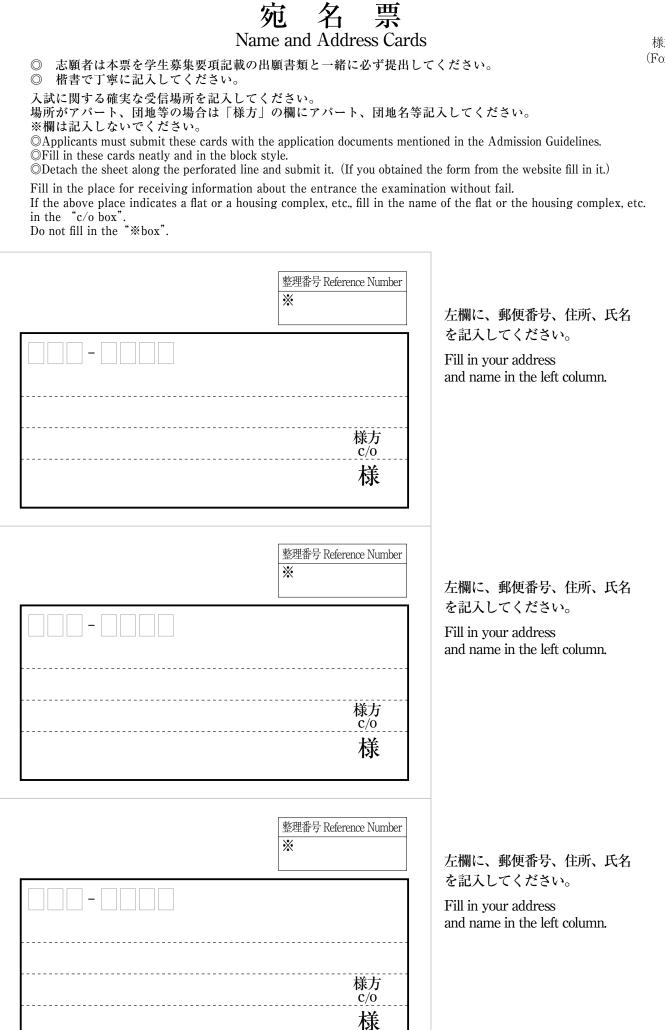
1. Convenience Store Payment	3. Remittance from abroad
2. Payment by Credit card	
Certificate of Payment	Certificate of Transfer Receipt
Please attach "Certificate of Payment" above.	
If you are receiving the Japanese Government (MEXT) Scholarship at the time of application, the examination fee payment is not required. Please submit the document certifying that you are the recipient of the scholarship.	
I am receiving the Japanese Government (MEXT) Scholarship at the time of application. (Fill in a circle in the square. The recipient of the scholarship doesn't have to pay the examination fee.)	Please attach "Certificate of
I am the sufferer from Great East Japan earthquake and applying for exemption of the examination fee. (Fill in a circle in the square. The applicant doesn't have to pay the examination fee.)	payment" here.

Please select one from the following three payment methods.

1. Convenience store payment (make sure that you have a personal computer or cell phone nearby).

- (1) Refer to the page 35 when you pay at a convenience store. Payment commissions must be borne by the person who pays the fees.
- (2) After payment, receive the "Application Fee Statement", detach the "Certificate of Payment" (receipt) portion from it, and attach it on the prescribed place in the "Sheet for Certificate of Transfer Receipt" [Form 3].
- (3) Payment period: July 26 (Mon.), to 3:00 p.m. (Japan time) of August 11 (Wed.), 2021. When you make payment via the web site, you have to pay 30 minutes before the end of payment period.
- 2. Payment by credit card (make sure that you have a personal computer or cell phone connected to a printer with A4 nearby).
- (1) Refer to the page 35 when you pay by credit card. Payment commissions must be borne by the person who pays the fees.
- (2) After payment, print the "Application Fee Statement", detach the "Certificate of Payment" (receipt) portion from it, and attach it on the prescribed place in the "Sheet for Certificate of Transfer Receipt".
- (3) Payment period: July 26 (Mon.), to 3:00 p.m. (Japan time) of August 11 (Wed.), 2021.
- 3. Remittance from abroad
 - (1) Transfer payment period: July 26 (Mon.), to 3:00 p.m. (Japan time) of August 11 (Wed.), 2021.
 - (2) Do not make a remittance by ATM (Automated Teller Machine), cell phone or personal computer.

- (renorated mue)		Ω K	- 3. 「志望専攻分野」の 第一志望は必ず記入し 切 てください。 	[Notes when filling in the cards] 1. Necessary matters must be filled in accurately and in the block style by using a	blue or black ball-point pen. 2. Do not fill in the "%box." 3. Write your first choice in the Desired Major Field	Ĕ J S
-1)	受験番号 ※ Examinee's Number	フリガナ	氏 名 Name	第一志望 The first choice 些。	専攻分野 Desired Major Field 第二志望 The second choice	 【受験上の注意】 1. 受験者は、必ず受験票を携帯してください。 2. 受験者は、必ず受験票を携帯してください。 2. 受験者は、9時50分までに誤験室に集合してください。 3. 試験室では受験番号と同じ番号の席に着席し、受験票を机上右上隅に置いて ください。 4. 集合時刻に運刻した場合、TOEIC IPテストは受験できません。 5. その他、受験に関する細部の注意事項は、試験室において指示します。 (Notes when taking the examination] 1. Examinee must carry their examination admission card 2. Examinees must assemble in the examination room by 950 a.m. 3. In the examination admission card on the top right corner of the desk. 4. If you are late, you are rejected to take the TOEIC IP test. 5. Other detailed notes about the examination will be directed at the examination room.
	Ex		ţţ			ビーマック そう ビーマック すい ドート それ こ (Don't cut off he
切J切J	*			第一志望The first choice	第二志望The second choice	年一人 一日 一日 一日 一日 一日 一日 一日 一日 一日 一日
22年度群馬大学大 mission for 2022 aduate School of 写写	受験番号 Examinee's Number	フリガナ	氏 Name	+12+ 5 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 1 5 1 5 1 1 1 5 1 1 5 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 1 5 1	ple	



様式 6 (Form-6) (群馬大学大学院医学系研究科生命医科学専攻(修士課程) 2022年度用)

(Admission for 2022 Course of Biomedical Sciences in Graduate School of Medicine, Gunma University (Master's Program))

様式 7

(Form-7)

H

Dav

群馬大学長 殿

To President of Gunma University

氏	名	(Name)					
生年月	日	(Birth Date)	(西暦) A.D.	年 Year	月 Month	日生 Day	
現 住	所	(Current Address)					
郵便番	号	(Postal Code)		_			
電話番	号	(TEL)		_		_	
E-mail							

入学資格審查申請書(Application for the screening for admission requirements)

)

)

私は、2022年度群馬大学大学院医学系研究科生命医科学専 攻(修士課程)入学試験を受験したいので、下記により入学 資格審査をお願いします。

記

- 該当する入学資格審査 1 次のいずれに該当するか(あるいは2022年3月末までに 該当見込みである)について、当該項目の番号を○で囲ん でください。
 - (1) 学校教育法(昭和22年法律第26号)第102条第2項の 規定により本大学院以外の大学院に入学した者であって、 本大学院において、大学院における教育を受けるにふさ わしい学力があると認めたもの
- (2) 本大学院において、個別の入学資格審査により、大学 を卒業した者と同等以上の学力があると認めた者で、22 歳に達するもの
- 希望する専攻分野名 2

第1志望(

第2志望(添付書類 3

- 本申請書に添付した書類の番号を〇で囲んでください。 (1) 上記(1)の該当者
 - ア 成績証明書(出身大学(学部)の成績証明書と当該 大学の教育課程が明記されている書類(履修手引等) を併せて提出のこと)
 - イ 在学証明書(在学中の大学院の長が作成したもので、 入学年月日が明記されたもの。なお、大学院を修了又 は退学している者は、入学年月日の明記された書類(出 身大学院の成績証明書等)を提出のこと)
 - ウ 研究業績がある場合は、その業績(論文等) I その他の書類
 - (
- (2) 上記(2)の該当者
 - ア 研究歴証明書(本要項添付の用紙(様式8)により ます。)
 - イ 研究業績又はその他顕著な業績がある場合は、その 業績 (論文等)
 - ウ 最終学校(短期大学、専修学校又は各種学校等)の 卒業又は修了証明書
 - エ 最終学校(短期大学、専修学校又は各種学校等)の 成績証明書
 - その他の書類 オ (

履歴書も記入すること

I would like to take the entrance examination for the Course of Biomedical Sciences in Graduate School of Medicine, Gunma University in Admission for 2022 and request the screening of admission requirements the following conditions.

年.

Year

月

Month

- Description
- The screening of admission requirements that fall under the applicant who will be applicable to by March 31, 2022. Circle the applicable number of the items described below.
- A person who entered a graduate school other than our Graduate School based on the provisions of Article 102-2 of the School Education Act (Act No. 26 of 1947) and who has been recognized by our Graduate School as having academic abilities appropriate for receiving graduate school education.
- (2)A person who has been recognized by our Graduate School as having academic abilities equivalent or superior to a person who has graduated a university based on the results of individual examination of the applicant's qualifications, and who will be 22 years of age.
- Desired Major Field 2 First choice
- Second choice (3 Attached documents

Circle the number of the document attached to this pplication.

- Applicant who falls under the above (1)
- Academic transcript (faculty results and the а. document showing the curriculum of the faculty (e.g. syllabus)) b. Certificate of student status (issued by the president
- of the university (graduate school) you are in and with the date of your entrance). If you completed or quit the graduate school, submit the document with the date of your entrance (e.g. the transcript from the graduate school).
- c. Published academic papers etc. on research achievements, if any. d. Other documents (
- (2) Applicant who falls under the above (2)
 - a. Certificate of Research Activities (The form attached
 - to our admission guidelines must be used. [form-8]) b. Published academic papers etc. on research achievements or other remarkable achievements, if any.
 - c. Graduation Certificate or Completion Certificate issued by the final educational institution (including a junior college, an advanced vocational school or a vocational school, etc.) from which the applicant graduated.
 - d. -Academic transcript issued by the final educational institution (including a junior college, an advanced vocational school or a vocational school, etc.) from which the applicant graduated. e. Other documents (
 - Fill out Curriculum Vitae.

履 歴 書 (Curriculum Vitae)

Educational background (学歴)

	Name and Address of School (学校名及び所在地)	Year and Month of Entrance and Completion (入学及び卒業年月)	Duration of Attendances (修学年数)	Diploma or Degree awarded, Major Subject,Skipped years/levels (学位・資格・専門科目、 飛び級の状況)
Elementary Education (初等教育)	Name (学校名)	From (入学)	Years (年)	
Elementary School (小学校)	Address (所在地)	To (卒業(見込み))	and months (月)	
Secondary Education (中等教育)	Name (学校名)	From (入学)	Years (年)	
Lower Secondary School (中学)	Address (所在地)	To (卒業(見込み))	and months (月)	
Upper Secondary School	Name (学校名)	From (入学)	Years (年)	
(高校)	Address (所在地)	To (卒業(見込み))	and months (月)	
Higher Education (高等教育)	Name (学校名)	From (入学)	Years (年)	*-1
Undergraduate Level (大学)	Address (所在地)	To (卒業(見込み))	and months (月)	
Graduate Level	Name (学校名)	From (入学)	Years (年)	
(大学院)	Address (所在地)	To (卒業(見込み))	and months (月)	
	Total number of years of the afor (以上を通算した全学校 As of April 1, 2022 (2022年4月1日現在)		Years (年)	s and months (月)

Employment History (Begin with the most recent employment history,if applicable.) (職歴)

	10		
Name and Address of Employer (勤務先及び所在地)	Period of Employment (在職期間)	Position (役職名)	Type of Work (職務内容)
	From		
	То		
	From		
	То		

*If the blanks above have not sufficient space to be filled in, write on another appropriate sheet and attach it. ((注) 上欄に書き切れない場合には、適当な別紙に記入して添付すること。)

Notes: 1. Exclude kindergarten education or nursery school. (幼稚園・保育所教育は含まれない。)

- 2. Preparatory education for university admission is included in upper secondary school.
 - (いわゆる「大学予備教育」は中等教育に含まれる。)
- 3. If the applicant has passed the university entrance qualification examination, indicate this in the black with *-1. (「大学入学資格試験」に合格している場合には、その旨を*-1欄に記入すること。)

4. Any school years or levels skipped should be indicated in the fourth column (Diploma or Degree awarded, Major Subject, Skipped years and levels). (Example : Graduated from high school in two years, etc.)
(いわゆる「飛び級」をしている場合には、その旨を該当する教育課程の「学位・資格、専門科目、飛び級の状況」欄に記載すること。)
(例:高校3年次を飛び級により短期卒業))

日付 (Date)

出願者名前(Name)

出願者署名 (Signature)

(群馬大学大学院医学系研究科生命医科学専攻(修士課程) 2022年度用) (Admission for 2022 Course of Biomedical Sciences in Graduate School of Medicine, Gunma University (Master's Program)) (

:

研究歷証明書

Certificate of Reserch Activities

国 籍 (Nationality)

氏 名 (Name)

生年月日(Birth Date)

上記の者は、下記のとおり研究歴を有することを証明する。

This is to certify that the above person has research history as follows.

記 (Description)

	-
在職した機関、部局名及び身分 (Institution and division for which he/shr worked and his/her then status)	
研 究 期 間 (Duration of Research)	年月日から年月日まで(年か月間) From:to:=() (Day)(Month)(Year) (Day)(Month)(Year) (Year) (Month)
研究題目及び研究内容 (Title and Outline of Research)	
指導教員 職 · 氏名 (Name and Position of the Academic Advisor)	
年月日(Date):	
	署 名
	(Signature) :
	氏 名 (Nama)
	(Name) :
	(Title of Position) :
	機関名
	(Institution) : 所在地
	(Address of Institution)

(注) 証明者は、機関の長等(例えば、学長又は学部長等)とします。ただし、本学出身者(在学者を含む)についての証明者は指導教員でもかまいません。
 Note: It defines a certifier as a head (e.g., President, Dean, or Director, etc.) of the organization. However, if the applicant is a graduate or a enrolled student of Gunma University, their supervisor also can be a certifier.



周囲は群馬県の象徴である名勝赤城、榛名、妙義の 上毛三山を浮彫りさせて大学を囲み、群馬大学の象 徴としています。

The above design of "大學 (kanji for university, called 'daigaku')" surrounded by the famous picturesque view of three carved mountains which comprise Mt. Akagi, Mt. Haruna, and Mt. Myogi and are called JOMO SANZAN symbolizing Gunma Prefecture is the emblem of Gunma University.