◆ Admission Policy

The Graduate School of Biomedical and Health Sciences seeks the following students with necessary basic academic ability, based on its diploma policy and curriculum policy:

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Those who sympathize with the philosophy of Hiroshima University, and who are willing to contribute to building a global community that embraces diversity, freedom and peace by challenging problems that human society is facing or may face in the future utilizing their culture, prominent knowledge and advanced skills in medicine, dentistry, pharmaceutical science and health science, and ability to take action

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diversified standpoints, with their broad culture, interdisciplinary and international viewpoints, and prominent knowledge and advanced research skills in medicine, dentistry, pharmaceutical science and health science, and who are willing to contribute to local and global communities by returning fruitful outcome from their study

外

Those who are willing to realize sustainable and inclusive society by acquiring deep understanding about diversity and global communic -level education and research environment and that attracts students from all over the world, including youth with full of curiosity and adults who are enthusiastic about learning again

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In order to admit such individuals, our graduate school selects applicants through a multifaceted and comprehensive evaluation process based on its own Diploma Policy and Curriculum Policy, using interviews, academic tests, and external examinations.

Division of Biomedical Sciences

Based on its diploma policy and curriculum policy, the Division of Biomedical Sciences seeks the following students:

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Those who are willing to be engaged in basic and clinical advanced research in the fields of medicine, dentistry, pharmaceutical science and radiation medical science

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Those who are willing to acquire basic and clinical knowledge widely in life science or radiation biology and medicine, beyond the current disciplinary borders of medicine, dentistry, pharmaceutical science and radiation medical science

Those who are willing to be engaged in highly advanced medical treatment

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Those who are willing to obtain high expertise and play an active role internationally in the fields of medicine, dentistry, pharmaceutical science and radiation medical science

Those who are willing to continue their career enhancement in a medical field and contribute to community health care as members of the society

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In order to admit such individuals, the program selects applicants through a multifaceted and comprehensive evaluation process based on its own Diploma Policy and Curriculum Policy, using interviews, academic tests, and external examinations.

2024 4

Graduate School of Biomedical and Health Sciences, Hiroshima University, is accepting Doctoral Course-seeking applicants (Division of Biomedical Sciences) for April 2024 enrollment in the following programs.

ourse offered at the Graduate School, but they should read each item of requirements carefully. Some items, including selection methods, can differ from those for applicants who completed a program in other graduate schools.

Admission Selection and Number of Students

Admission Selections	Candidates	Programs	Number of Students 4 Enrollment in April
General Selection	Including Master's degree holders who are advancing from a Graduate School of Biomedical and Health Sciences master's degree program.	Program of Medicine Program of Dental Sciences Program of Pharmaceutical Sciences Program of Radiation Biology and Medicine	87 87students
Special Selection for Students with Careers	Candidates who are employed at the time of application		
Special Selection for Senior Citizens	60 Candidates aged approximately 60 and over at the time of admission		
Special Selection for International Students	Candidates without Japanese citizenship (excluding those who graduated or are expected to graduate from a university or college in Japan)		

The above number of includes a few students to be accepted under Special Selection for Students with Careers, Special Selection for Senior Citizens and Special Selection for International Students.

Applicants must consult with a prospective academic supervisor before application

If you apply without the informal consent of your academic advisor, you are not eligible to take the examination.

Eligibility for Application

(1) 6

Those who have completed the maximum number of years needed for completion of a 6-year curriculum in medicine, dentistry, pharmaceutical science, or veterinary medicine at the faculties of medicine, dentistry, pharmaceutical science, or veterinary medicine of a university.

(2) 104 7 ( )

rom the National Institution for Academic Degrees and University Evaluation in accordance with the provision in Paragraph 7 of Article 104 of the Law.

(3) 18 ( )

Those who have completed an 18-year school curriculum education program (with the last field of study being medicine, dentistry, pharmaceutical science, or veterinary medicine) in an overseas country.

(4) 18 ( )

Those who have earned by earning the credit(s) of a correspondence course of education provided by a school of a foreign country in Japan and completed a 18 year school curriculum education program(with the last study field being medicine, dentistry, pharmaceutical science, or veterinary medicine).

(5) (18 ( ))

Those who have completed an undergraduate course at an educational institution in Japan that is deemed to have courses offered by an overseas university according to the educational system of that country, and courses are limited to courses whose graduates are regarded as having completed 18 years of school education in the respective foreign country [with the last study field being medicine, dentistry, pharmaceutical science, or veterinary medicine]).

(6) ( ) 5 ( ) ( )

n university/other foreign educational institution which have been accredited by the respective foreign government or a person who has obtained certification by the appropriate foreign governmental agency, or which has been designated by MEXT as the equivalent thereof. (This includes those who have completed the distance/online program offered by the appropriate school by taking courses while residing in Japan as well as one of those foreign educational programs at an appropriate educational institution positioned in the school education system of the said country and designated by said authorization described in the preceding Item

(7)

Those appointed by MEXT

7 388

Those who have studied medicine or dentistry at the medical or dentistry faculty of a university prescribed by the old University Ordinance (Imperial Ordinance No. 388 of 1918), and who have graduated from either of these faculties.

29 164

Those who have graduated from the National Defense Medical College according to the Act for Establishment of the Ministry of Defense (Act No. 164 of 1954).

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2 30 49 29

28 9 6 1

ool Education Law (No. 26 of 1947) and those who are eligible to receive a

zed as a two- -year doctoral course, who have undertaken at least 30 academic credits in addition to the required research guidance (including those falling under Article 6-1 of the Academic Degree Regulations [Education Ministry Ordinance No. 9, 1953] prior to amendment according to the Ministerial Ordinance on the Partial Amendment of the Academic Degree Regulations [Education Ministry Ordinance No. 29 of 1974]), and who are deemed by the Graduate School or relevant department to have academic ability equivalent or superior to that of a graduate of a university medicine, dentistry, or pharmaceutical science course, of which the main purpose is to develop practical skills regarding clinical fields or a graduate of a university veterinary medicine course.

6 16

2

Those who, after graduating from university (excluding those who have completed a 6-year program in medicine, dentistry,pharmaceutical science, or veterinary medicine) or completing 16 years of overseas curricular education, have undertaken at least two years of research at a university or research institute and are deemed by the Graduate School on the basis of their research accomplishments to have academic ability equivalent or superior to that of a graduate of a university medicine, dentistry, or pharmaceutical science course of which the main purpose is to develop practical skills regarding clinical fields or a graduate of a university veterinary medicine course.

(8) 102 2 ( )

In accordance with the provision in Paragraph 2 of Article 102 of the Law, individuals who have enrolled at a graduate school (only medicine, dentistry, pharmaceutical science, or veterinary medicine programs qualify), and who are recognized as having sufficient academic ability to study at the Graduate School.

(9) 24

Those who are recognized by the Graduate School as having academic ability equivalent or superior to those who have graduated from a university, and who have reached 24 years of age(such recognition is done on a case-by-case basis and is based on the qualifications of each applicants)

(10) 4 ( )

Those who enrolled at the faculties of medicine, dentistry, or veterinary medicine of a university, or have taken pharmaceutical science courses whose main purpose is to cultivate clinically related practical skills for at least four years (including those who received a designation by MEXT as individuals with similar qualifications), and have obtained credits stipulated by the Graduate School with excellent marks.

(11) 2024 3 31

Those who are expected to obtain one of the qualifications described above by March 31, 2024.

Note Those who enter the program under the above eligibility criterion (10) after having been enrolled in a university at least four years but not having graduated will be regarded as having left the university without graduation. a) Applicants must have earned more than 75% of all credits necessary for graduation from university by the end of the fourth year. b) Grades of more than 90% of all credits that applicants have earned

Different conditions will apply to 4th year students in our School of Medicine who are willing to enroll in the MD-PhD course in the Graduate School. (Please refer to Guidance for Admission to the joint MD-PhD Course in School of Medicine and Graduate School of Biomedical and Health Sciences, Hiroshima University)

		Web 20 Please note that applicants must pay the issuing fee for the Online Verification Report (2 / certificate) by themselves. Also be sure that there are 20 or more days left until the expiration date of the online verification at the time of its submission. (历证书电 备) / Online Verification Report of Higher Education Qualification Certificate / Expected (线验证报) / Online Verification Report of Student Record

Application Fee 30,000JPY

Applicants will pay Application Fee by Online Application System.

Payment is E e Japanese Government Scholarship students.

Application Methods

Applicants can apply through the following steps.

Online Application (All steps must be performed.)

Register with UCARO and obtain the necessary account to log in.

Enter your information into the online form.

Pay the application fee online.

Mail the required documents to Student Support Group (Graduate Students), Graduate School of Biomedical and Health Sciences, Hiroshima University. (See (6) Application documents to be mailed.)

Procedure of Online Application

The Online Application Page is only accessible via the Entrance Examination Information Web Site of Hiroshima University.

https://www.webshutsugan.com/hiroshima-u/portal/top/
Hiroshima University - Online Application - Home
https://www.webshutsugan.com/hiroshima-u-en/portal/top/

((5)

***For the Japanese Government Scholoarship students and E , st**
with an account created for the application procedure. To receive the account, please ask Student Support Group (Graduate Students), Graduate School of Biomedical and Health Sciences, Hiroshima University.

Postal Address for Submissions

734-8553 2 3

Student Support Group (Graduate Students), Graduate School of Biomedical and Health Sciences, Hiroshima University 1-2-3, Kasumi, Minami-Ku, Hiroshima, Japan (Zip 734-8553)
TEL: (082)257-1538 5051 E-mail: kasumi-gaku-g@office.hiroshima-u.ac.jp

Application documents to be mailed

5

Applicants must submit all the documents listed below to (5) Postal Address for Submissions within the above stated Application Period.

If the name on the submitted documents is different from the name on the passport due to a change of family name, etc., please attach a copy of the document showing the change.

	Documents	Contents
A	Confirmation Sheet	Please fill in the prescribed form. (Access the Hiroshima University Graduate School of Biomedical and Health Sciences website and download the form.) For international students, please enter your name as shown in your passport.
B	Academic Transcript	e dean or president of the university or college.
C	Certificate of Graduation, or Certificate of Expected Graduation	Must be issued by the dean or president of the university or college. *** It is not necessary to re-submit documents that have already been submitted during the preliminary evaluation for application eligibility.** * **E in the Graduate School of Biomedical and Health Sciences, Hiroshima University.**
D	**For foreign applicants only** Copy of Certificate of Residence or Certificate of Items Stated in Resident Register in Japan	Foreign applicants who currently reside in Japan must submit the Copy of Certificate of Residence or the Certificate of Items Stated in Resident Register. ***Submission is not required for those who are currently studying in our school.**
E	**For foreign applicants only** Copy of passport	1 Submit a copy of the page with your name, passport number, photo and expiration date.

(a) 1

March 31, 2024 (for the

April enrollment)

(b) 1

different topic from

(a)(b) Use the following format for both (a) and (b):

A4 3 5,000

A summary of about including charts and tables, on 3 sheets of A4 size paper, typed in horizontal writing using a word processor or PC

F

3 2.5 2

Margins should be no less than 3 cm on the top, 2.5 cm on the bottom, and 2 cm on the both sides.

3 2 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

All Programs

(P11) (P12)

Be sure to submit an original transcript of the External English language examinations that meets a score of A2 level or The CEFR Comparison Table 11) The English Language Proficiency Tests designated by the Graduate School of Biomedical and Health Science "(P12). **If you are unable to submit this document, you will not be eligible to take the examination.**

(P11)

(P12)

An original transcript of the External English language examinations that meets a score of A2 level or higher in The CEFR Comparison Table 11), or the standard of The English Language Proficiency Tests designated by the Graduate School of Biomedical and Health Science "(P12)

H

Note

Transcripts from online home examinations cannot be utilized.

Regardless of the specific expiration date set by the organization of each external English language examination, the original transcript which meet all the following requirements are valid.

1.External English language examinations which are conducted April 1,2021 or later
2.External English language examinations of which you can submit the original transcript by the deadline of the submission period

Please note that the submission documents will not be returned.

【Applicants who do not need to submit a transcript of an External English language examinations】

Special Selection for Senior Citizens

Those who have completed who apply within 5

The CEFR Comparison Table

The English Language Proficiency Tests designated by the Graduate School of Biomedical and Health Science

Division	Program	C□	C□
Doctoral Course（4 years） Division of Biomedical Sciences	Program of Medicine	over 500	over 500
	Program of Dental Sciences	over 500	over 500
	Program of Pharmaceutical Sciences	over 500	over 500
	Program of Radiation Biology and Medicine	over 500	over 500

Note1) If you are unsure, please contact us.

Note2) **Transcripts from online home examinations cannot be utilized.**

Note3) Regardless of the specific expiration date set by the organization of each external English language examination, the original transcript which meet all the following requirements are valid.

1.External English language examinations which are conducted April 1,2021 or later

2.External English language examinations of which you can submit the original transcript by the deadline of the submission period

Other

The certificates to be submitted must be the originals or certified photocopies. Uncertified copies will not be recognized as official certificates. However, e-mail submissions are accepted as long as the documents are later replaced by official certificates.

Any forgery or falsification of the documents and/or academic fraud will result in cancellation of acceptance even after passing the entrance examination or being accepted for admission to the Graduate School, Hiroshima University.

If applicants cannot graduate from their current university before the admission date, they will not be admitted to the Graduate School, Hiroshima University.

B C

Applicants who are unable to submit documents B and/or C for a special reason, please submit an alternative document.

1

2

Example 2: Complete Academic Transcript (or Certificate of Credits) from undergraduate and graduate schools (including a two-

Application method for applicants with disabilities

(5)

Applicants with disabilities, who require special considerations for taking the examination or studying, must submit the report for advance consultation (A4, no prescribed form), to the address for submission (See 4. Application Procedure (5) Postal Address for Submissions.):

Report must be submitted by **Friday, December 1, 2023**

Report must contain the following information:

Name, address, and telephone number

ating university or college

Name of a prospective academic supervisor

Considerations necessary for taking the examination

Considerations necessary for studying after admission

Considerations given to the applicants at the graduating university or college

Current situation of daily life

Student Selection Method (Academic Examinations)

Admission Selections	Written examinations Specialized subject (the field of study the applicants apply for)	Oral examination (the field of study the applicants apply for)
General Selection		
Special Selection for Students with Careers		
Special Selection for Senior Citizens		
Special Selection for International Students		
All Admission Selections **Those living outside Japan only**		Online interview (including the content of the written examinations)

Note: Those who enter the program directl ame as for General Selection.

Examination Date and Location

Date	Hours	Subjects		Venue
2 6 Tuesday, February 6	11:00 12:30	Written examinations	Specialized subject	2 3 Graduate School of Biomedical and Health Sciences, Hiroshima University 1-2-3, Kasumi, Minami-Ku, Hiroshima, Japan
	13:30	Oral examination		
All Admission Selections — **Those living outside Japan only**	Zoom Examinations shall be given through Zoom or other software. The date and time of the interview will be arranged within the university and each applicant will be contacted. **If you live in Japan, please visit Hiroshima University Kasumi Campus and take the examination.**			

Standard Criteria for Marking, Evaluation, and Acceptance

The results are comprehensively determined on the basis of the results of examinations, and academic transcript.

60

Applicants are not accepted if each score of written examinations is less than 60% of the average of all applicants.

The applicants shall be rejected with the lower score than 60% of the average of examinees in the relevant subject for each written examination.

A B 2 B

Applicants will be evaluated as A or B in Oral examination. Applicants are not accepted if the evaluation result of Oral examination is B, regardless of the result of written examination.

A: Those who are recognized as being eligible to enroll

B: Those who are not recognized as being eligible to enroll

Special Provision on Educational Method

14

14

14

Notes

(1)

Changes to application documents are not accepted after the original application documents have been received.

(2)

Application documents and fee cannot be returned/refunded for any reason.

(3)

Applicants must consult with a prospective academic supervisor before application.

(4) **Uploading Photographs for Online Application**

The uploaded photo, which will be used for identification at the examination, will be also used for your student ID card after enrollment and will be maintained in the un
graduation.

Therefore, please upload an appropriate photo for use after enrollment as well.

( ) 1,000

Once uploaded, your photo will not be allowed to be replaced. A fee of JPY 1,000 will be charged for changing the content of your student ID card (photo and your name) after enrollment.

(5)

m) upon admission procedure.

(6)

Details including precautions for examinations will be sent together with an examination ticket.

(7) 4

If applicants, who enrolled at the faculty of medicine, dentistry, or veterinary medicine in any university for four years and longer, have obtained credits stipulated by the Graduate School with excellent marks, their status w Therefore, such applicants must be warned that they will not be eligible for taking some national qualification tests and other examinations that require graduation from an undergraduate school.

(8) Long-841.92 595.3241155.5.32 reW* n502 456.34 17re5(i)5tid 23i

Others

(1) Privacy Policy

etc.) will be used for the purposes of selecting students, notifying, and processing their admission.

ips, tuition waiver, etc.), as well as investigation or study (such as investigation or analysis for potential improvements in admission examinations and application trend). Private information will not be used for other purposes or provided to people other than relevant staff of our school.

(2) Smoke-free campus

2020 1 2018 4

Smoking will be prohibited entirely in all HU campuses from January, 2020. *The Kasumi Campus has been smoke-free since April, 2018.

e and Foreign Trade Act, and conducts strict examinations for acceptance of international students, etc. Therefore, please be advised that International applicants may be unable to receive their desired education or conduct their desired research due to the restriction by the above regulations.

For Reference

(1) Fees

Admission Fee		282,000	282,000 JPY
Tuition fee	(Per half year)	267,900	267,900 JPY
	(Per year)	535,800	535,800 JPY

All fees paid are non-returnable.

2023 4

The above fees are correct as of April 2023. Any changes to the tuition fee will be applied if the tuition fee is changed during the enrollment procedure.

and academic criteria. More details will be sent separately. We will notify you of the relevant details.

(2) Hiroshima University Excellent Student Scholarship

Hiroshima University offers the second semester tuition exemption system to students with an excellent academic performance. These students will be selected based on their research results and other achievements during the program.

The Frontier Development Program for Genome Editing

2018
5 4 2

Hiroshima University has launched the Frontier Development Program for Genome Editing, which was selected as a WISE program by MEXT in 2018. This program consists of the Life Science Course (5-year curriculum) and the Medical Course (4-year curriculum), providing students with the opportunity to acquire basic and applied knowledge and to learn techniques of genome editing. This program aims to develop human resources that master genome editing technology and connect it directly to industry.

Admission

2024 4
URL

URL https://genome.hiroshima-u.ac.jp/recruitment/index.html

The Medical Course of the Frontier Development Program for Genome Editing is open to students who will be admitted to the Division of Biomedical Sciences (Doctoral Course) of Graduate School of Biomedical and Health Sciences in April 2024.
Those who wish to enroll in this program must apply for this program in addition to applying to the Graduate School. For details, please visit the website at the following URL.

* The prospective advisor of the applicant must be someone from the list of faculty members of the Frontier Development Program for Genome Editing.
* Students in this program must fulfill the requirements for both their major in the Graduate School and this program simultaneously.

URL https://genome.hiroshima-u.ac.jp/en/recruitment/index.html

1 **Financial Support for Students** *see Note 1

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6,700 16,200

Laboratories & Research Topics

*** If there is a description in the column of teachers scheduled to be instructed (scheduled to retire in March XX), you may not be able to receive guidance until the graduation. Be sure to consult with your desired academic advisor about retirement guidance.**

Program of Medicine

Professor	Contents of education and research
IKEGAMI Koji TEL 082-257-5110 FAX 082-257-5114 E-mail k-ikegami@hiroshima-u.ac.jp Department of Anatomy and Developmental Biology	1 New morphological changes of cilia in intercellular and inter-tissue communications 2 Discovery of novel extracellular vesicles, and histological and morphological analyses on their function 3 Morphological analyses on functional regulation of polar structures by post-translational modifications of cytoskeleton 4 Understanding biological evolution focusing on gametogenesis 5 Regionalization of the body wall and specification of the neuromuscular connectivity 6 Behavior of the lateral plate cells on the morphogenesis of body wall during chicken development
AIZAWA Hidenori TEL 082-257-5115 E-mail haizawa@hiroshima-u.ac.jp Department of Neurobiology	1 Animal model for depression 2 Neural substrate underlying behaviors to cope with social stress 3 Role of neural excitability in stroke and migraine 4 Neural circuit regulating transition between REM and non-REM sleep 5 Development and functional analysis of left-right asymmetry in the brain 6 Role of glial cells in psychiatric and neurological disorders
FUJIWARA Yuichiro TEL 082-257-5120 E-mail fujiwara-yuichiro@hiroshima-u.ac.jp Department of Physiology and Biophysics	1 Structure-function relationship of ion channels, receptors and transporters 2 Elucidation of the principle of operation of biomolecular sensors 3 Analysis of membrane protein-molecule interactions 4 Measurement by lipid bilayer reconstruction system and creation of artificial membrane proteins 5 Pathophysiology of channelopathy (including receptor and transporter diseases)

HASHIMOTO Kouichi

TAKESHIMA Yukio TEL 082-257-5150 FAX 082-257-5154 E-mail ykotake@hiroshima-u.ac.jp Department of Pathology	1 Biological and Pathological analysis of human cancers, especially malignant mesothelioma & lung cancer for accurate pathological diagnosis and adequate therapy 2 RNA MicroRNA expression and functional analysis of malignant mesothelioma & lung cancer 3 Analysis of apoptosis-related proteins and genes of mesothelioma cells 4 Development of new diagnostic antibodies and markers applicable at general pathology laboratories 5 Development of pathological diagnosis system and educational system for medical students and pathologists using virtual slide
SAKAGUCHI Takemasa TEL 082-257-5157 FAX 082-257-5159 E-mail tsaka@hiroshima-u.ac.jp Department of Virology 2026 3 Retirement at the end of March 2026 IRIE Takashi Associate professor E-mail tirie@hiroshima-u.ac.jp	1 Investigation of virus replication and pathogenicity 2 Investigation of virus assembly 3 Analysis of host factors involved in virus replication 4 Analysis of viral functions counteracting innate immunity 5 Study for improving viral vectors 6 Investigation of anti-viral agents and mechanism of viral inactivation 7 Exploitation of the evaluation methods of anti-viral agents
To be decided Department of Epidemiology, Infectious Disease Control and Prevention	
KUBO Tatsuhiko TEL 082-257-5165 FAX 082-257-5169 E-mail tkubo@hiroshima-u.ac.jp Department of Public Health and Health Policy	1 Disaster Public health, social systems including health policy and health administration to protect health during emergencies and disasters 2 Occupational Health, epidemiological study of shift work and other occupational exposures 3 Emergency Medical Team (EMT), Daily reporting by the EMT such as the WHO EMT Minimum Data Set

NAGAO Masataka TEL 082-257-5170 FAX 082-257-5174 E-mail nagao@hiroshima-u.ac.jp Department of Forensic Medicine 2026 3 Retirement at the end of March 2026	1 Noncholinergic mechanism of nerve agent 2 Rat having acquired resistance to paraquat 3 Analysis of paraquat resistant rat having head dysplasia 4 Medical toxicant immunoassay 5 DNA DNA polymorphism 6 Clinical forensic medicine 7 Development a new quick laboratory procedure to medical toxicant 8 Analysis of drug ingestion records 9 Identifying ingredients of poisonous plants
NAMERA Akira TEL 082-257- 5172 FAX 082-257-5172 E-mail namera@hiroshima-u.ac.jp Department of Forensic Medicine	1 / Development of new analytical methods and procedures by using a mass spectrometry 2 / Estimation of intaken drugs by a drug metabolite profiling 3 / Development of new quick laboratory procedures to medical toxicant 4 / Analysis of drug ingestion history 5 / Identifying of ingredients of poisonous plants
YASUDA Tomoharu TEL 082-257-5175 FAX 082-257-5179 E-mail yasudat@hiroshima-u.ac.jp Department of Immunology	1 The antigen receptor and mediated signals in the immune system 2 The regulation of immune cell division limit and hematological malignancy 3 The regulation of immune cell lifespan 4 The immune surveillance to viral infection and cancer 5 The allergic diseases and immune tolerance 6 The gene therapy of primary immunodeficiency
OKA Shiro TEL 082-257-5190 FAX 082-257-6220 E-mail oka4683@hiroshima-u.ac.jp Department of Gastroenterology	1 / Development of diagnostic and therapeutic methods for gastrointestinal neoplasia including endoscopic resection, local treatment, chemotherapy and molecular target therapy 2 / / /

HATTORI Noboru TEL 082-257-5195 FAX 082-255-7360 E-mail nhattori@hiroshima-u.ac.jp Department of Molecular and Internal Medicine 2026 3 Retirement at the end of March 2026 IWAMITO Hiroshi Associate professor E-mail hir@hiroshima-u.ac.jp	1 Molecular biology of respiratory diseases, such as lung cancer, pulmonary fibrosis, sarcoidosis, and bronchial asthma 2 Development of serological diagnostic procedures and novel therapeutic strategy for pulmonary fibrosis 3 Development of novel therapeutic strategy for lung cancer 4 Genomic diagnosis and treatment for respiratory diseases 5 Studies on respiratory physiology 6 Studies on tissue engineering and regenerative medicine of the lung 7 Studies on pathobiology and etiology of endocrine and metabolic diseases 8 Epidemiological studies on the association of environmental factors with lifestyle-related disease 9 Studies on mechanisms of the development of arteriosclerosis influenced by aldosterone
MARUYAMA Hirofumi TEL 082-257-5200 FAX 082-505-0490 E-mail hmaru@hiroshima-u.ac.jp Department of Clinical Neuroscience and Therapeutics	1 Molecular and biological research of neurological disorders 2 Clinical and biochemical research of the mechanism of involuntary movements 3 Clinico-pathological research of neurological disorders 4 Genetic and biochemical research of dementia 5 Study on diagnostic methods of cerebrovascular diseases 6 Electrophysiological study of peripheral nerve disorders 7 Study of ischemic neural damage and stress response 8 Clinoco-pharmacological study of neuroimmunological disorders 9 Molecular pathological study of muscle disorders 10 Diagnostic imaging of neurological disorders
OKAYAMA Yasumasa TEL 082-257-5205 FAX 082-257-5209 E-mail oy@hiroshima-u.ac.jp Department of Psychiatry and Neurosciences	1 Neuroscience Research on Mood Disorder 2 Molecular Biology Research on Mental Disorders 3 Clinical Research on Liaison Psychiatry 4 Clinical Research on Psychooncology 5 Clinical Research on Sleep Disorder 6 Clinical Research on Psychotherapy and Cognitive Behavioral Treatment 7 Psychopharmacology Research 8 Clinical Research on Child and Adolescent Psychiatry
OKADA Satoshi TEL 082-257-5210 FAX 082-257-5214 E-mail sokada@hiroshima-u.ac.jp Department of Pediatrics	1 Purification of hematopoietic stem cells 2 Differentiation of hematopoietic progenitor cells 3 Molecular analyses of pediatric hematologic malignancies 4 Pathophysiology of congenital bone marrow failure syndrome 5 Genetic and molecular analyses of primary immunodeficiency diseases 6 Multiomics based improvement of diagnostic yield in primary immunodeficiency diseases 7 Genome editing based development of gene therapy 8 Brain function of pediatric developmental disorders

TAKAHASHI Shinya
TEL 082-257-5215
FAX 082-257-5219
E-mail takahacv@hiroshima-u.ac.jp

Department of Surgery

1 Research of inflammatory bowel disease
2 Research of response for surgical infection
3 Genetic analysis of biliopancreatic cancer
4
5

HORIE Nobutaka TEL 082-257-5225 FAX 082-257-5225 E-mail horie@hiroshima-u.ac.jp Department of Neurosurgery	1 Verification of the outcome of endovascular treatment for extracranial artery stenosis 2 Verification of growth and shape change of unruptured cerebral aneurysm based on atherosclerotic changes 3 Natural history of unruptured vertebral basilar artery dissection: Temporal changes in imaging findings and contributory factors 4 small RNA circulating tumor DNA Establishment of brain tumor marker by liquid biopsy of small RNA/ circulating tumor DNA, and development of nucleic acids medicine for brain tumors 5 radiogenomics Radiogenomics research of brain tumors 6 Multicenter clinical trials targeting malignant brain tumors 7 Verification of remote EEG and the data analysis for screening of epilepsy 8 AI Development of AI programs for EEG analysis differentiating between epilepsy and dementia 9 Simultaneous recording of invasive EEG from insular cortex and MEG for development of technology visualizing the Kansei 10 The study of intravenous administration of autologous cranial bone derived mesenchymal stem cells for moderate or severe cerebral infarction patients needed decompressive surgery 11 II The Bevacizumab-alleviates-NF2 trial(BeatNF2 trial) 12 The study of the correlation between spinal alignment and outcome of spinal surgery 13 Efficacy of growth hormone replacement based on measuring higher brain functions 14 Development of new biomarkers which enable the diagnosis of hypothalamo-pituitary tumors using liquid biopsy
ADACHI Nobuo TEL 082-257-5230 FAX 082-257-5234 E-mail nadachi@hiroshima-u.ac.jp Department of Orthopaedic Surgery	1 Regenerative medicine (cartilage, bone, ligament, tendon, muscle) 2 microRNA MicroRNA, exosome and virus treatment for musculoskeletal disease 3 ACL/PCL reconstruction 4 Cartilage repair and Bone healing 5 Mechanical behavior of articular cartilage 6 Video analysis for sports injury 7 Anatomical investigation of arthropathy and neuropathy 8 Tissue engineering and Regenerative medicine (central nerve system) 9 Tissue engineering and Regenerative medicine (peripheral nerve system) 10 Electrophysiological assessments of pain perception in patients with knee and spinal osteoarthritis 11 The role of endoplasmic reticulum (ER) stress transducer for spinal cord regeneration 12 Detection of prognostic factors of bone & soft tissue tumors 13 Gene, exosome, oncolytic virus, molecular targeting therapy for bone & soft tissue tumors 14 Pathophysiology of avascular necrosis of the femoral head

TANAKA Akio TEL 082-257-5235 FAX 082-257-5239 E-mail akiotan@hiroshima-u.ac.jp Department of Dermatology	1 / Study on epidemiology and pathogenesis of urticaria and atopic dermatitis 2 / Elucidation of skin sensory mechanisms 3 / Elucidation of itching control mechanism in atopic dermatitis 4 / Analysis of skin microbiome from atopic dermatitis on skin immunity 5 / Development of new treatment method using mesenchymal stem cells for skin ulcers 6 / Research on the differentiation mechanism of sweat gland tissue
HINATA Nobuyuki TEL 082-257-5240 FAX 082-257-5244 E-mail hinata@hiroshima-u.ac.jp Department of Urology	1 Analysis of molecular mechanism underlying the loss of hormone dependency of prostate cancer and development of novel clinical application 2 Functional preservation after radical prostatectomy for prostate cancer 3 Prostate cancer and metabolic syndrome 4 Development of minimally invasive surgery for urological cancer 5 Development of personalized medicine for urological cancer based on the genome profile 6 Analysis of the role of microenvironment in urological cancer 7 Regeneration of urogenital organs 8 Analysis of resistant mechanism of anticancer drug in advanced urothelial cancer and development of new treatment approach
To be decided Department of Ophthalmology and Visual Science	

TAKENO Sachio
TEL 082-257-5250
FAX 082-257-5254
E-mail takeno@hiroshima-u.ac.jp
Department of Otorhinolaryngology, Head and Neck Surgery

1 Pathological analysis and treatment strategies for refractory middle ear infection and cholesteatoma
2 Molecular and genetic analysis of profound hearing loss. Development of novel sound conductive devices
3 Development of rehabilitation training for hearing loss patients
4 Regenerative and differentiative process of olfactory epithelium Development of treatment strategies for smelling disorders
5 Development, introduction and evaluation of objective biomarkers for intractable upper airway inflammation
6 Development of new scoring system and algorithm for assessing eosinophilic chronic rhinosinusitis
7 Pathophysiology of allergic rhinitis and development of novel treatment modalities based on objective parameters
8 Evaluation of swallowing disturbance and training strategies
9 Treatment modalities for voice disorders
10 Evaluation and development of novel treatment modalities for head and neck cancer
11 Research in effectiveness of novel molecular targeting anti-cancer drugs in head and neck cancer

AWAI Kazuo
TEL 082-257-5257
FAX 082-257-5259
E-mail awai@hiroshima-u.ac.jp

Department of Diagnostic Radiology
2026 3

KUDO Yoshiki TEL 082-257-5260 FAX 082-257-5264 E-mail yoshkudo@hiroshima-u.ac.jp Department of Obstetrics and Gynecology 2025 3 Retirement at the end of March 2025	1 Maternal-fetal transport of nutritional metabolism in human placenta 2 Immunological tolerance formation on maternal body to fetus 3 Study on cell fusion (syncytium)of placental villus cells 4 Study on hypoxic ischemic encephalopathy (HIE) in fetus and newborn 5 Vascular endothelial injury and dysfunction in pregnancy induced hypertension (PIH) 6 Basic clinical study of gynecology cancer chemotherapy 7 Tumor immunity of gynecologic cancer 8 Validity and side effects of the medicine treatment of endometriosis 9 Study on the role of inflammation in normal and abnormal pregnancy
TSUTSUMI Yasuo TEL 082-257-5267 FAX 082-257-5269 E-mail yasuo223@hiroshima-u.ac.jp Department of Anesthesiology and Critical Care	1 Epidemiology and cultivation of skeletal muscle cell for the experiment of Malignant Hyperthermia 2 Perioperative care management of enhanced recovery after surgery 3 Pain control research using the animal model 4 Developing monitoring system for perioperative management 5 Basic research for cardiac ischemia-reperfusion injury 6 Clinical study of vascular elasticity during anesthesia

NAKANO Yukiko
TEL 082-257-1543
FAX 082-257-1569
E-mail nakanoy@hiroshima-u.ac.jp

Department of Cardiovascular Medicine

SHIME Nobuaki TEL 082-257-5456 FAX 082-257-1600 E-mail nshime@hiroshima-u.ac.jp Department of Emergency and Critical Care Medicine	1 Development of a novel method to detect pathogens in respiratory samples using a next generation sequence method 2 C/EBP tion and function in sepsis 3 Metagenomic analysis on respiratory pathogens in acute respiratory failure 4 DAMPs Anti-inflammatory response via DAMPs during sepsis 5 Biomarkers in interstitial pneumonia 6 ECMO Pulmonary pathology in acute respiratory failure requiring extracorporeal membrane oxygenation 7 Prehospital care using doctor-helicopter system 8 Efficacy on antimicrobial stewardship program in the treatment of bacteremia 9 MRSA Antimicrobial treatment strategy in MRSA infection 10 Development of a new electric stethoscope 11 Development of a novel respiratory sound monitoring system 12 Picture communication system from distal emergency settings 13 Airway management using video-assisted laryngoscope
HASUNUMA Naoko TEL 082-257-1586 FAX 082-257-1645 E-mail hasunuma@hiroshima-u.ac.jp Department of Medical Education	1 Development of methods and assessments for medical education 2 Development of novel curriculum for medical education
ITO Masanori TEL 082-257-5461 FAX 082-257-5461 E-mail maito@hiroshima-u.ac.jp Department of General Medicine	1 Pathophysiology of bile acid and lipid metabolism 2 SASP Involvement of degradated lipids in inflammation and oncogenesis: Focusing on senescence associated secretory phenotype (SASP) 3 Periostin, an extracellular matrix protein and digestive diseases: molecular cell biological research and therapeutic strategy 4 Hepatic stellate cell and anti-fibrotic therapeutics 5 IgG4 Pathophysiology of Hepato-biliary-pancreatic diseases 6 Remote medicine and home-based medical care 7 Community medicine and general medicine 8 Advanced general medicine and skill-up training system 9 Clinical nutrition and therapeutic strategy of life-style diseases 10 Helicobacter pylori infection and gastric carcinogenesis

MIHARA Naoki TEL 082-257-1943 FAX 082-257-1701 E-mail naoki-mihara@hiroshima-u.ac.jp Department of Medical Informatics and Systems Management	1 Characteristics of medical information and its system 2 Medical supporting system 3 Function, implementation and operation, evaluation and improvement of hospital information system 4 Standardization of medical information 5 Data management and analysis, and utilization in the field of health and welfare 6 Information security and personal information protection 7 Information processing technology and application in medicine 8 Human resource development in medical informatics
To be decided Department of Endoscopy and Medicine	
HIRATA Shintaro TEL 082-257-5539 FAX 082-257-1584 E-mail shirata@hiroshima-u.ac.jp Department of Clinical Immunology and Rheumatology	1 Novel biomakers for management of rheumatic diseases 2 Mechanism in joint destruction in rheumatoid arthritis 3 Pathogenesis of systemic lupus erythematosus 4 Microangiopathy in systemic sclerosis 5 Development of novel treatment against systemic vasculitis syndrome 6 Physiology and treatment of autoinflammatory diseases
OHGE Hiroki TEL 082-257-1613 FAX 082-257-1613 E-mail ohge@hiroshima-u.ac.jp Department of Infectious Diseases	1 Prevention and treatment of surgical site infection 2 Resistance of Enterobacteriacae 3 Association between hydrogen sulfide and intestinal diseases 4 Breath hydrogen test for assessment of intestinal fermentation 5 Penetration of antimicrobials into peritoneal cavity 6 Prevention of nosocomial infection
MIKAMI Yukio TEL 082-257-5566 FAX 082-257-5594 E-mail mikamiy@hiroshima-u.ac.jp Department of Rehabilitation Medicine	1 VICON Liverty Three-dimensional motion analysis (VICON, Liverty) 2 Joint proprioception and motor control 3 Lower limb amputation and artificial limb 4 The impact of early mobilization to the respiratory and circulatory system 5 Cancer rehabilitation 6 Rehabilitation of developmental disorders 7 Cardiac Rehabilitation 8 Sports rehabilitation 9 Consistent rehabilitation from medical insurance to long-term care insurance 10 Gastroenterological rehabilitation
ARIHIRO Koji TEL 082-257-5590 FAX 082-257-5590 E-mail arihiro@hiroshima-u.ac.jp Department of Anatomical Pathology	1 Study of clinical application of genetic abnormality including miRNA and so on using cytological samples 2 Study of detection method for genetic abnormality of cytological samples 3 heterogeneity Study of clinicopathological significance of breast cancer heterogeneity 4 Study of application of whole slide imaging to both pathological diagnosis and averaging of cancer treatment

MASAKI Takao TEL 082-257-1506 FAX 082-257-1508 E-mail masakit@hiroshima-u.ac.jp Department of Nephrology	1 Renal interstitial fibrosis 2 Peritoneal fibrosis 3 Physiology of renal tubular cells 4 Hypertension induced renal injury 5 Mechanism of renal failure 6 Gene analysis of renal failure 7 Mesenchymal stem cell research in kidney and peritoneum 8 Hemodialysis and apheresis
To be decided Department of Reconstructive Surgery	
OKAMOTO Wataru TEL 082-257-5981 FAX 082-257-5981 E-mail wakamoto@hiroshima-u.ac.jp Department of Clinical Oncology	1 Exploratory research of biomarkers for prognostic factors and predictive factors of efficacy for chemotherapy in solid tumors 2 Clinical development of chemotherapy based on biomarkers in solid tumors 3 Clinical trials for development of chemotherapy and supportive care in solid tumors 4 Exploratory research of mechanisms for the efficacy and resistance of chemotherapy in solid tumors 5 Clinical research for management of chemotherapy in solid tumors
HINOI Takao TEL 082-257-2019 FAX 082-257-2019 E-mail thinoi@hiroshima-u.ac.jp Department of Genetic Medicine	1 Surveillance and development of treatment based on cancer genome profiling analysis in solid tumor 2 Development of genetic counseling and surveillance system for hereditary cancer syndrome 3 Research for Ethical, Legal and Social Issues ELSI of genome medicine to improve genome medicine literacy 4 Investigation of molecular genetics and molecular pathology of hereditary cancer syndrome 5 Analysis of mechanism in colorectal cancer development, invasion, and metastasis based on subtype classification, and establishment of disease model for colorectal cancer

SOTOMARU Yusuke TEL 082-257-5106 FAX 082-257-5109 E-mail sotomaru@hiroshima-u.ac.jp Department of Natural Science Center for Basic Research and Development	1 Improvement/development of the reproduction engineering in the mammal 2 Improvement/development of the production system of the genetically-modified animals 3 Development of the human disease model animals 4 Maintenance and analysis of the human disease model animals 5 Production and abnormality analysis of the clone animals 6 Elucidation of differentiation mechanism of the mammalian embryos
MARUYAMA Fumito TEL 082-424-7048 E-mail fumito@hiroshima-u.ac.jp Department of Microbial Genomics and Ecology	i) ii) iii) iv) v) : https://mge.hiroshima-u.ac.jp Our research focuses on understanding how microorganisms interact with each other, with their symbiotic hosts and with the environment, both experimentally and through big data analysis.In particular, we focus on the relationship between climate change and microbes (infectious diseases), genomic dynamics of pathogenic microbes in habitats, and pathogenic microbes and antibiotic resistance in aquaculture. In this framework, we will focus on: i) homeostasis mechanisms through the analysis of microbial community (microbiome) dynamics in the environment using large DNA sequence data analysis and bioinformatics; ii) definition of abnormal and normal states through microbial interaction analysis and holobiome analysis; and iii) the experimental study of bacterial evolution and diversity using comparative (meta)genomic and epigenomic analysis. iii) experimental and bioinformatics studies of microbial evolution and diversity by comparative (metagenomic) and epigenomic analyses, iv) basic research on the design of environments with artificial mixtures of microorganisms, and v) the search for useful microorganisms (especially, bacteria) from the environment (bioaerosols), which is so called bioprospecting. For more information see below: https://mge.hiroshima-u.ac.jp/en/

Program of Dental Sciences

Professor	Contents of education and research
To be decided Department of Calcified Tissue Biology	

TERAYAMA Ryuji
TEL 082-257-5623
FAX 082-257-5689
E-mail ryujit@hiroshima-u.ac.jp

Department of Maxillofacial Anatomy and Neuroscience

1 Study on nociceptive transmission in the spinal and trigeminal sensory system
2 Study on mechanisms underlying the development of neuropathic pain
3

AGO Yukio TEL 082-257-5640 FAX 082-257-5640 E-mail yukioago@hiroshima-u.ac.jp Department of Cellular and Molecular Pharmacology	1 Studies on the mechanisms of action of the drugs in depression, schizophrenia, anxiety, and neurodegenerative diseases 2 Studies on the roles of gene-environment interactions in brain development 3 Studies on the roles of cell migration, adhesion, and proliferation in biological and pathological processes
KATO Koichi TEL 082-257-5645 FAX 082-257-5649 E-mail kokato@hiroshima-u.ac.jp Department of Biomaterials	1 Technologies for manufacturing stem cells to be used in clinical regenerative dentistry and medicine 2 Design principles that enable duplication of histologically-ordered tissue structure found in living organisms.
TAKAHASHI Ichiro TEL 082-257-5650 FAX 082-257-5650 E-mail snatum@hiroshima-u.ac.jp Department of Mucosal Immunology 2025 3 Retirement at the end of March 2025 TOBIUME Kei Associate professor E-mail tobi5651@hiroshima-u.ac.jp	Molecular and cellular analysis for the creation and maintenance of physiological inflammation in the gastrointestinal tissue and its application for a novel medical intervention
FUJII Makiko TEL 082-257-1503 FAX 082-257-1572 E-mail fujiim@hiroshima-u.ac.jp Department of Genomic Oncology and Oral Medicine	1 Development of molecular target therapy for cancer 2 Establishment of cancer treatment using heavy ion radiotherapy 3 Research on mechanisms of squamous cell carcinoma invasion and metastasis 4 TGF- TGF- 5 Research and development of educational methods in health care professional education
MIZUNO Noriyoshi TEL 082-257-5660 FAX 082-257-5664 E-mail mizuno@hiroshima-u.ac.jp Department of periodontal medicine	1 Study on the gnetic and molecular analyses of aggressive periodontitis 2 Study on the improvement of diagnostic yield in aggressive periodontitis 3 Study on the relationship between the periodontitis and systemic diseases 4 Study on therapies for periodontal tissue regeneration 5 Study on the prevention of periodontal disease 6 Study on the halitosis

YANAMOTO Souichi TEL 082-257-5665 FAX 082-257-5669 E-mail syana@hiroshima-u.ac.jp Department of Oral Oncology	1 Multicenter clinical research on oral cancer 2 Genetic and molecular diagnostic and therapeutic research on oral cancer and salivary gland tumors 3 Molecular and genetic diagnostic and therapeutic research on craniofacial, maxillofacial, and oral diseases 4 iPS Pathogenic mechanism, diagnosis and treatment research using disease-specific iPS cells 5 Research on dental treatment of obstructive sleep apnea 6 Research on the development of remote-controlled dental chair
AIKAWA Tomonao TEL 082-257-5670 FAX 082-257-5671 E-mail aikawat@hiroshima-u.ac.jp Department of Oral Maxillofacial Surgery	1 Research of mechanisms of jaw bone resorption by oral diseases, e.g. oral cancer and jaw bone tumor. 2 Pathological and molecular analyses of TMJ-osteoarthritis and condyle resorption. 3 Clinical study on orthognathic surgery for cleft palate. 4 Clinical study on post-operative stability, effects on sleep apnea, and effects on TMJ pathological condition, of orthognathic surgery. 5 Research of a novel anti-angiogenic agent for oral squamous cell carcinoma. 6 Research of responsible gene for cemento-osseous lesion of the jaw.
TSUGA Kazuhiro TEL 082-257-5675 FAX 082-257-5679 E-mail tsuga@hiroshima-u.ac.jp Department of Advanced Prosthodontics 2026 3 Retirement at the end of March 2026	1
ABE Yasuhiko Associate professor E-mail abey@hiroshima-u.ac.jp	
YOSHIKAWA Mineka Associate professor E-mail mineka@hiroshima-u.ac.jp	

TANIMOTO Kotaro TEL 082-257-5686 FAX 082-257-5687 E-mail tkotaro@hiroshima-u.ac.jp Department of Orthodontics and Craniofacial Developmental Biology	1 Elucidation of pathogenic mechanism in malocclusion and management of oral maxillofacial skeletal growth 2 Optimization of tooth movement by orthodontic force 3 Establishment of a new orthodontic treatment based on the image and biochemical diagnosis of temporomandibular disorders (TMD) 4 Application of regeneration medicine to orthodontic treatment 5 Suppression of caries risk in orthodontic treatment 6 Evaluation of the contribution of various oral functions to general fitness 7 Development of new instruments and materials for orthodontic treatment
KAKIMOTO Naoya TEL 082-257-5690 FAX 082-257-5692 E-mail kakimoto-n@hiroshima-u.ac.jp Department of Oral and Maxillofacial Radiology	1 Research and quantitative analysis of image diagnosis on oral and maxillofacial area 2 Clinical research of radiation therapy for oral cancer 3 Image diagnosis as screening for osteoporosis 4 Physical characteristics and quantitative analysis of image diagnostic machine 5 Radiological effect for bone metabolism 6 Image analysis of brain function for oral sensation
SHIBA Hideki TEL 082-257-5656 FAX 082-257-5659 E-mail bashihi@hiroshima-u.ac.jp Department of Biological Endodontics	1 / Study on regeneration of dentin / pulp complex and periapical tissues 2 Study on biological obturation of root canals at apical areas 3 Study on development of a therapeutic medicament for pulpitis 4 Study on development of an intracanal medicament possessing the ability to regulate cell function 5 Study on development of a new therapeutic agent for intractable pain
Nomura Ryota TEL 082-257-5695 FAX 082-257-5695 E-mail rnomura@hiroshima-u.ac.jp Department of Pediatric Dentistry	1 Pathogenicity of oral streptococci against cardiovascular diseases 2 Mechanism of *Helicobacter pylori* colonization via the oral cavity 3 Inhibitory effects of novel agents on cariogenic and periodontopathic bacteria 4 IgA Pathogenic mechanisms of oral bacteria against IgA nephropathy 5 Pathogenicity of periodontopathic bacteria in companion animals
To be decided Department of Dental Anesthesiology	
KAWAGUCHI Hiroyuki TEL 082-257-5748 FAX 082-257-5717 E-mail hkawarp@hiroshima-u.ac.jp Department of Dental Education	1 Development of novel curriculum for dental education 2 Development of effective learning methods for clinical competencies 3 Development of novel assessments for clinical competencies 4 Epidemiological studies on clinical evaluation of perioperative oral management 5 Clinical studies on relationships between dental treatments and systemic diseases

OKADA Yoshiyuki TEL 082-257-5753 FAX 082-257-5753 E-mail okay@hiroshima-u.ac.jp Department of Special Care Dentistry	1 Evaluation of the circulatory systems in patients with cardiovascular and congenital heart diseases 2 Effects of vasoconstrictor in local anesthesia on baroreflex sensitivity 3 Relationship between central arterial stiffness and periodontal diseases, and the influence on baroreflex sensitivity 4 Influences of sleep bruxism in hypoxia on the central cardiovascular control system 5 Underlying mechanisms of suppressed pressor responses to pain stimulation by N2O 6 Alterations of pulse wave reflection by sedative agents 7 Effects of physical training on the oral immunofunction
KAJIYA Mikihito TEL 082-257-5727 FAX 082-257-5727 E-mail mkajiya@hiroshima-u.ac.jp Department of Innovation & Precision Dentistry	1 3 Develop the promising tissue regenerative therapy using stem cells and 3D culture techniques. 2 Establish a novel culture system that can mimic the oral cavity using 3D cell constructs and micro-devices 3 Identify novel biomarkers that can predict the degree of oral diseases and response to treatment for each patient, and develop an optimal therapy
SUGAI Motoyuki TEL 082-257-5635 FAX 082-257-5639 E-mail sugai@hiroshima-u.ac.jp Department of Antimicrobial Resistance	1 Comparative genome analysis of Staphylococcus aureus 2 Transcription factors involved in S. aureus virulence 3 Virulence factors produced by S. aureus 4 Cross talk of S. aureus and Pseudomonas aeruginosa 5 MDRP MRSA ESBL Molecular epidemiology of nosocomial antimicrobial resistant pathogens (MDRP, MRSA, ESBL producers) 6 CDT Cell-cycle specific toxin, CDT

Program of Pharmaceutical Sciences

Professor	Contents of education and research
NOMURA Wataru TEL 082-257-5308 FAX 082-257-5309 E-mail wnomura@hiroshima-u.ac.jp Department of Genome and Biomolecular Engineering for Drug Discovery	1 DNA Genome editing using DNA recombinases 2 Suppression of off-target effects for precise genome editing 3 DNA Epigenome editing using DNA methylases 4 Gene regulation by artificial transcription factors 5 Chemical biology by protein engineering and genome editing 6 Visualization of in situ protein dynamics using fluorescent imaging 7 BRET BRET-based compound screening for drug discovery 8 Roles of phosphoinositides in signal transduction system 9 Roles of phosphoinositides in intracellular vesicular trafficking 10 Research on tumor metabolism

KOTAKE Yaichiro TEL 082-257-5325 FAX 082-257-5329 E-mail yaichiro@hiroshima-u.ac.jp Department of Neurochemistry and Environmental HealthSciences	1 Neurotoxic mechanism of environmental chemicals and its evaluation 2 ease-related neurotoxic chemicals 3 Metabolism, toxicity and human prediction of chemicals including pharmaceuticals 4 Neurotoxicity and metabolism of designer drugs
TAHARA Hidetoshi TEL 082-257-5290 FAX 082-257-5294 E-mail toshi@hiroshima-u.ac.jp Department of Cellular and Molecular Biology	1 Molecular mechanism of cellular senescence and cancer 2 G-tail Development of anti-cancer drug targeting telomere G-tail 3 G-tail Risk assessment of age-related disease using telomere G-tail 4 Cellular immortalization using telomerase 5 RNA Biomarker using circulating microRNA 6 RNA Nucleic acid biomedicine for cancer treatments 7 RNA Molecular mechanism of microRNA regulation in aging and cancer 8 Extracellular vesicles including exosome in aging and cancer
KAMIYA Hiroyuki TEL 082-257-5300 FAX 082-257-5334 E-mail hirokam@hiroshima-u.ac.jp Department of Nucleic Acids Biochemistry	1 DNA Mutagenesis by DNA damage 2 DNA DNA Functions of DNA repair 3 Gene correction (genome editing) for gene therapy 4 iPS Mutations and genome stability in iPS cells
To be decided Department of Clinical Pharmacotherapy	
To be decided Department of Frontier Science for Pharmacotherapy	

OZAWA Koichiro
TEL 082-257-5332
FAX 082-257-5332
E-mail ozawak@hiroshima-u.ac.jp

UCHIDA Yasuo TEL 082-257-5315 E-mail yuchida@hiroshima-u.ac.jp Department of Pharmaceutics and Therapeutics	1 The study using human brain tissue to clarify molecular mechanisms of brain disorders 2 Drug transport study for human central nervous system (CNS) barrier and drug delivery to the brain 3 Elucidation of pathological molecular mechanisms of CNS barrier using next generation quantitative proteomics 4 Development of novel proteomics techniques and big data analysis 5 Disease biomarker study using highly sensitive and precise quantitative proteomics
MATSUO Hiroaki TEL 082-257-5570 FAX 082-257-5598 E-mail hmatsuo@hiroshima-u.ac.jp Department of Pharmaceutical Services	1 Clinical pharmacokinetics and administration planning of drugs 2 Drug interactions 3 Drug informatics for proper use of pharmaceutical products 4 Drug allergy 5 Influence of drug intake on development of food allergy

Program of Radiation Biology and Medicine

Professor	Contents of education and research
YOSHINAGA Shinji TEL 082-257-5852 FAX 082-256-7106 E-mail syoshinaga@hiroshima-u.ac.jp Department of Environmetrics and Biometrics	1 Evaluation of health effects of ionizing radiation based on the epidemiological data of atomic bomb survivors 2 Evaluation of health effects of protracted and fractionated exposures to ionizing radiation by epidemiological approaches 3 Development and application of statistical methods for evaluation of health effects of ionizing radiation
YASUDA Hiroshi TEL 082-257-5872 FAX 082-257-5873 E-mail hyasuda@hiroshima-u.ac.jp Department of Radiation Biophysics	1 Assessments of radiation doses and risks reflecting the physiological characteristics of individuals 2 Identification of radiation doses and radiation-induced health effects attributing to atomic bombs, nuclear tests and nuclear accidents 3 Radiological protection studies relevant to expansion of our living field such as human space exploration and air travel 4 Education and research for response to nuclear emergency and restoration from combined disaster 5 Research and development for dosimetry and health risk estimates related to radiation medicine 6 , IAEA, WHO, ICRP Contribution to the activities of international organizations (IAEA, WHO, ICRP, etc.) as an expert

KAWAKAMI Hideshi TEL 082-257-5846 FAX 082-257-5850 E-mail hkawakam@hiroshima-u.ac.jp Department of Molecular Epidemiology 2025 3 Retirement at the end of March 2025 KUME Kodai Associate professor E-mail kumek@hiroshima-u.ac.jp	1 Study of causative genes, model animals and the mechanism of amyotrophic lateral sclerosis 2 The causative factors of neurological disorders 3 Epidemiology of Radiation Disorders
WATANABE Tomonobu TEL 082-257-5938 E-mail twatanabe@hiroshima-u.ac.jp Department of Stem Cell Biology	In this course, we aim to elucidate (1) the mechanism by which individual differences in resistance to radioactive disorders occur, and (2) the relationship between the undifferentiated maintenance function of stem cells and radiation exposure, in combination with development of advanced microscopy. We accept students from science and engineering as well as biology and medicine.
TASHIRO Satoshi TEL 082-257-5817 FAX 082-256-7104 E-mail ktashiro@hiroshima-u.ac.jp Department of Cellular Biology 2027 3 Retirement at the end of March 2027 SON Keiei Associate professor E-mail jysun@hiroshima-u.ac.jp	1 Function of nuclear domains in human cells 2 Dynamic organization of DNA damage response in cell nucleus 3 Development of the biological dosimetry system based on the higher order nuclear architecture 4 Study of the mechanism of chromosome translocations
KAMINUMA Osamu TEL 082-257-5819 FAX 082-257-1556 E-mail okami@hiroshima-u.ac.jp Department of Disease Model	Clarification of cellular and molecular mechanisms and development of novel diagnostic and therapeutic methods for allergic and immunological diseases by using innovative somatic cell nuclear transfer and genetic modification technologies.

MATSUURA Shinya
TEL 082-257-5809
FAX 082-256-7101

HIGASHI Yukihito
TEL 082-257-5831
FAX 082-257-5831
E-mail yhigashi@hiroshima-u.ac.jp

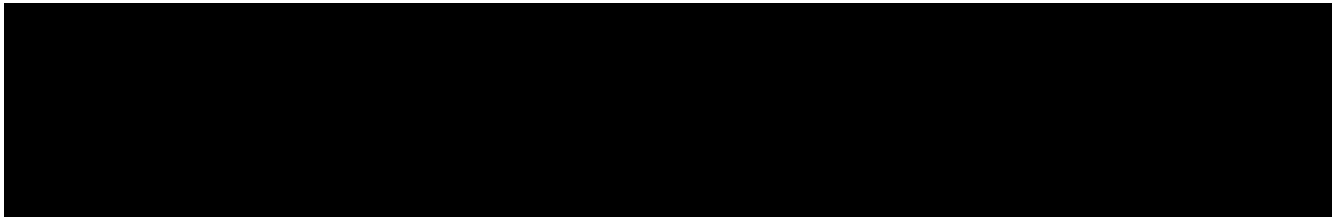
Department of Regenerative Medicine
2027 3
Retirement at the end of March 2027

MARUHASHI Tatuya
Associate professor
E-mail maru0512@hiroshima-u.ac.jp

NODA Asao
TEL 082-261-3131
FAX 082-263-7279
E-mail asnoda@rerf.jp

Department of Analysis of radiation-induced mutations
Radiation Effects Research Foundation

1 Mechanisms of Cardiovascular disease
2 Role of endothelial cells in atherosclerosis
3 Development of methods for assessment of endothelial function
4 Development of regenerative therapy for cardiovascular disease
5 Development of regenerative therapy for radiation injury
6 Effects of low-intensity radiation on cardiovascular system



HAYASHI Tomonori TEL 082-261-3169 FAX 082-261-3170 E-mail tomo@rerf.or.jp Department of Functions of Biological Defense Genome Radiation Effects Research Foundation	1 Genome study on disease development 2 / Logic and methods for molecular epidemiology/genome research 3 Study on effects of environmental and host factors on immunity and inflammation 4 Molecular epidemiological study of radiation-associated diseases
TSURUYAMA Tatsuaki TEL 082- FAX 082- E-mail Department of Pathology and Biological responses Radiation Effects Research Foundation	
SAKATA Ritsu TEL 082- FAX 082- E-mail Department of Epidemiology of radiation health effects Radiation Effects Research Foundation	
SUGIYAMA Hiromi TEL 082- FAX 082- E-mail Department of Epidemiology of radiation health effects Radiation Effects Research Foundation	
TSUJI Hiroshi TEL 043-206-3306 E-mail tsuji.hiroshi@qst.go.jp Department of Charged Particle Therapy Research Molecular Imaging and Theranostics National Institutes for Quantum and Radiological Science and Technology	1 Clinical research of heavy ion radiotherapy 2 Clinical application of scanning irradiation 3 Database for clinical analysis