



**Application Guidelines for International Students**  
**(Ph.D. Program for 2024 Enrollment)**

■ Dates for Entrance Examination  
August 22, 2023 and January 16, 2024  
for the Enrollment in April 2024

**Kurume University Graduate School of Medicine**

<https://www.kurume-u.ac.jp/faculty/gmed/examination/>

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## 1. Admissions Policy for Doctoral Program

The Graduate School of Medicine strives to educate students to become independent investigators to conduct innovative research, to gain interdisciplinary medical and scientific knowledge for engaging in highly specialized and cutting-edge medical work, and to cultivate international perspective and high levels of ethical standards and humanity. We thus are looking forward to welcoming applicants who meet the following criteria.

- Applicants who are willing with a strong global mindset to work as a professional in clinical settings or to play an active role in the field of medical education and research.
- Applicants who should have or are expected to have completed a master's degree in the field of medical sciences or social welfare, or who have considerable research experiences in medical institutions, universities, government agencies, or enterprises.
- Alternatively, foreign students are welcomed if certain conditions are met. We are also looking forward to welcoming working adult students who are preferably engaged in medical and health care or services, including residents under clinical training, if they have strong motivation to work toward balancing work and study while pursuing an advanced degree.

※The admission policy describes the eligibility criteria with ability and aptitude required for prospective students.

### ■Our Philosophy

Based on the School Education Act, the Kurume University Graduate School aims to teach, research and explore the depths of the theories and application of academics, and commits ourselves for the contribution of the progress of culture and society at large.

*Stated in the Article 1, Chapter 1 of the Kurume University Graduate School under Objectives*

### ■Educational Objectives

Kurume University Graduate School of Medicine promotes pioneering academic research in the fields of medicine and medical science and train researchers and professionals to acquire wide range of perspectives, advanced expertise and cultural awareness to contribute both in the regional community and the world.

The doctoral course of the Graduate School strives to develop human resources in specialized fields in clinical medicine and medical sciences who are capable of promoting academic research with independent-mind, specialized knowledge in medicine, international perspective and rich cultural and human nature, all of which are indispensable for engaging in highly specialized medical work.

*Stated in the Article 1, Chapter 1 of the Kurume University Graduate School of Medicine Regulations under "Educational Purposes and Goals".*

## 2. Enrollment Capacity and Research Areas

### Graduate School of Medicine, Doctoral Program (Ph.D.)

Degree offered	Students Intake	Standard period of completion	Enrollment Term
Doctor of Philosophy in Medical Science	35	4 years	April 2023
Doctor of Philosophy in Medical Biostatistics			
Doctor of Philosophy in Nursing			

## 3. Academic Course of Study

Students must obtain 30 credits or more, including the subjects specified below, under the instruction of supervising professor within the prescribed period. Acquisition of unit credits is conducted by examination or submission of reports on practical training and experiments.

Department	Major Subjects	Dissertation	Common Subjects
Physiological System Pathological System Social Medicine System Individually Optimized Therapeutics System	20 or more credits (including 8 credits of lecture and 12 credits of practical training)	5 credits	6 credits or more

Department	Course	Requirements (common)	Requirements for electives	Dissertation	Common Subjects
Individually Optimized Therapeutics System  Advanced Cancer Therapy Malignant Tumor Specialist Training Unit	Chemical Medicine Therapy, Specialist Training Course	12 credits	*L: 8 credits *PT: 12 credits	5 credits	6 credits or more
	Radiotherapy, Specialist Training Course	4 credits	L: 4 credits PT: 16 credits		
	Rare Cancer Therapy, Specialist Training Course**	4 credits	L: 4 credits PT: 12 credits		

\* L: lecture, PT: practical training

\*\* The curriculum may be revised in AY2023.

※ Students who receive research guidance that spans two areas of research are able to share the credits in major subjects. If you wish to allocate specialized subjects, 9 units of "Dissertation" will be required.

## 4. Evening and Weekend Classes

Responding to the growing needs from professionals and working adults, the Graduate School of Medicine has started offering classes in the evening to provide learning opportunities and support acquiring advanced research capabilities in medical knowledge and technology for the betterment of society. Classes and research guidance schedule are set in the evening to meet the needs from medical practitioners, doctors working at hospitals, and researches in the medical related fields.

### 【Schedule】

Responding to the needs and working mode of students, classes may be offered during the sixth period (18:00-19:30) and the seventh period (19:40-21:10). Classes may be offered on Saturdays, Sundays and during summer holidays.

※ Evening and night classes can be taken by all students enrolled in the program. However, please consult with your employer and supervisor before making arrangements.

## 5. Specialized Trainings in Research and Education at the Graduate School

The followings are new educational programs developed in the doctoral course at the Graduate School of Medicine in recent years.

### 1. Career Development Program for Chief Clinical Researchers

Medical professionals undertake clinical trials at university hospitals, but their knowledge on clinical trials have not always been sufficient to fully engage and respond to the emerging demands on site. Therefore we established this program to cultivate medical professionals and the course is conducted by specialists and leading scholars/practitioners in Japan regarding the outline of clinical trial, teamwork, laws and regulations such as GCP and Clinical Trial Acts, Ethical Guidelines concerning Biological Science and Medical Research, the Inspection Agency of Clinical Trial, the Fact and Cautionary Points of the Development of drug and Clinical Trial, Investigator-initiated trials, Pharmacological Effects, Pharmacokinetic, Biostatistics, Regulatory Science, ARO/ Clinical Research Center, and Medical litigation.

### 2. Development of Advanced and Field Specific Research Methodology Program

“Advanced and field specific research methodology program” was established in April 2007 and it mainly provides trainings and lectures on physiology and cross-cutting experiments using special equipment to enhance basic education and learning opportunities for wide range of experimental methods.

### 3. Establishment of Department of Biostatistics in Social Medicine

In Japan, biotechnological researchers are lacking quantitatively and qualitatively in the medical research and drug development research fields. This problem has been recognized widely in the academic research, and various efforts are needed to raise international competitiveness in industry. Kurume University Graduate School of Medicine has established the Department of Biostatistics since April 2005 to provide a bio-statistical research program that meets the international standard and strives to educate talented researchers and practitioners.

#### **4. Development of Malignant Oncology Specialist Training Program for Advanced Individually Optimized Therapeutics System**

The Kurume University has developed the program for cancer treatment with the Advanced Individually Optimized Therapeutics System to provide essential research and medical care in response to the increasing needs of the society. Development of cancer specialists have been awaited eagerly as deaths caused by cancer have accounted for 31.1% of all deaths in Japan in recent years.

The Graduate School of Medicine devotes its resources in promoting new research that specializes in learning both the latest basic oncology and clinical oncology in a doctoral program. Students enrolled in the malignant oncologist specialist course in the doctoral program, established in 2007, are able to engage in clinical practices in solid tumor and hematologic malignancy and gain qualification for a cancer medication therapy specialist (specialist doctor accredited by the Japanese Society of Medical Oncology). Furthermore, Radiation Therapy Specialist Training Course was established in 2008, and the Palliative Care Specialist Training Course was added in 2009 in the program where students are able to choose their concentration under "Malignant Oncologist Training Unit". Palliative Care, Specialist Training Course will be discontinued from April, 2022.

## **6. Doctoral Degree**

Doctoral degree is awarded to students who have obtained the required credits (30 credits or more) at the Graduate School for 4 years or more, published his/her thesis work in a journal, and succeeded thesis defense evaluated by oral presentation and final examination. If students show excellent track records in research and complete the prescribed requirements for the course, the enrollment period may be shortened to 3 years.

## **7. Kurume University Research Assistant System**

Under the Research Assistant System, students enrolled in the Graduate School of Medicine are able to take part in the research projects conducted at the University as "Research Assistants" upon completing the prescribed screening procedure. Compensation is determined by each academic research project.

## **8. Award for Outstanding Dissertation**

Award for Outstanding Dissertation is bestowed upon recent graduates with Doctoral degree from the University who demonstrated excellent research and long-term commitment in the research in the field of medicine.

# Admission Procedure for the Enrollment in 2024

## Kurume University Graduate School of Medicine, Doctoral Program

### 1. Intake: Doctoral Program of 2024

Concentration of Research Area	Research Subjects	Intake per year
Physiological System	<ul style="list-style-type: none"> <li>• Anatomy (Clinical Gross Anatomy)</li> <li>• Anatomy (Microscopic Anatomy and Histology)</li> <li>• Physiology (Brain Function)</li> <li>• Physiology (Integrated Automatic Function)</li> <li>• Medical Biochemistry</li> <li>• Pharmacology</li> <li>• Molecular Life Science</li> </ul>	4
Pathological System	<ul style="list-style-type: none"> <li>• Pathology</li> <li>• Infectious Medicine (Microbiology)</li> <li>• Infectious Medicine (Eukaryotic Microbiology)</li> <li>• Infectious Diseases</li> <li>• Immunology</li> </ul>	3
Social Medicine System	<ul style="list-style-type: none"> <li>• Environmental Medicine</li> <li>• Public Health</li> <li>• Health and Sports Science</li> <li>• Forensic Medicine and Human Genetics</li> <li>• Biostatistics</li> <li>• Nursing</li> </ul>	8
Individually Optimized Therapeutics System	<ul style="list-style-type: none"> <li>• Advanced Cancer Therapy</li> <li>• Advanced Medicine for Cardiovascular Diseases</li> <li>• Higher Brain Disorder</li> <li>• Skin Cell Biology</li> <li>• Advanced Therapeutic Study of Other Disorders</li> <li>• Special Training Course: Advanced Cancer Therapy Malignant Tumor Specialist Training Unit (Chemical Medicine Therapy Course, Radiotherapy Course, , and Rare Cancer Therapy Course)</li> </ul>	20
Total		35

### 2. Eligibility for International Students (Application Category “C”)

International applicants (Application category “C”) MUST fulfill at least one of the following requirements. Please indicate under which category (1 through 5) the applicant is applying to on the Application Form 1.

- 1) Foreign/international applicants who graduated or expected to graduate from a university under the Article 83 of the School Education Act of Japan by March 2024, and his/her final degree is in medicine, dentistry, veterinary medicine or pharmaceutical science with a 6-years of study.



- 2) Applicants who have completed 18 years of education within overseas educational institutions (the final course having been medicine, dentistry, pharmaceutical sciences or veterinary medicine), or are expected to complete those courses by March 2024.
- 3) Applicants who have been awarded Master's degree or completed courses towards Master's degree at graduate school in Japan, or those who are acknowledged to have academic ability equal to or higher than degree in medicine, dentistry, veterinary medicine or a 6-year pharmaceutical science.
- 4) Applicants who have completed 16 years of education within overseas educational institutions and engaged in educational or research work at university or research institutions (government agency or companies) for at least two years prior to applying. Assessment will be conducted by the Graduate School of Medicine whether the applicant has acquired abilities equivalent or superior to the graduates of medicine, dentistry, or veterinary medicine course, or a 6-year pharmaceutical science.
- 5) Applicants over 24 years of age by March 31, 2024 and by the prescreening results that have shown that they have academic abilities equivalent or superior to the graduates from medicine, dentistry, or veterinary medicine course, or a 6-year pharmaceutical science.

**【NOTE】**

- For those applicants applying under “General Admission (Application Category “A”) or Professionals (Application Category “B”) should refer to the Application Guidelines in Japanese 「令和 6 年度 学生募集要項（博士課程）」 or contact Academic Affairs Division at the Graduate School of Medicine for further instruction.
- Those who have graduated or are scheduled to graduate from a university other than degree in medical science or dental school cannot major in the Individually Optimized Therapeutics System in principle.

### 3. Prescreening Process

International Applicants (Category “C”) who fall in the category 3), 4) or 5) in the above section 【2. Eligibility for International Students (Application Category=C)】 of the doctoral program must submit the followings for “prescreening” before submission of their formal application:

1. The Application Form (Form 6)
2. A list of previous research achievements (Form 7)
3. University Graduation Certificate(s) of all universities and technical school
4. Academic transcripts of all universities
5. Graduation Certificate / Certificate of Scheduled Graduation from Master's program, if applicable
6. Academic transcripts of graduate program(s), if applicable
7. Certificate of research activities which indicates more than 2 years of research experience, if applicable

#### ■ Submission Period for Prescreening Applications

Kurume University Graduate School of Medicine performs entrance examinations twice a year. The submission periods of each examination are listed below. All required documents must arrive at the Graduate School of Medicine before the last day of the submission period indicated below (not the postmarked date).

Enrollment Term	Submission Period for “Prescreening Application”
Spring (April) 2024	June 12, 2023 (Mon) – June 16, 2023 (Fri)
	November 13, 2023 (Mon) – November 17, 2023 (Fri)

#### ■ Consultation with Prospective Supervisor(s)

Please make sure that you contact the prospective supervisor(s) well in advance and discuss the research project and guidelines with the supervisor(s) before finalizing the prescreening application to the Graduate School of Medicine.

#### ■ Format and Procedure of Submitting Prescreening Application

Please convert all required documents in PDF format and send them to the below e-mail address during the submission period.

Graduate School of Medicine, Kurume University  
Admissions Office, Academic Affairs Section  
E-mail: [igaku-kyomu@kurume-u.ac.jp](mailto:igaku-kyomu@kurume-u.ac.jp)

#### ■ Result of Prescreening Application

Result of the Prescreening Application will be notified by a postal mail to the applicant's mailing address. Only the successful applicants are allowed to submit their formal application to the Graduate School of Medicine in later date. Details are described below in the section “4. Formal Application Procedure”.

## 4. Formal Application Procedure

Applicants must prepare the application documents indicated below and submit them to the Graduate School of Medicine before the deadline. Please make sure that you consult with your prospective advisor(s) about curriculum and research prospects prior to submitting the formal application.

- Applicants must submit either original certificates or certified documents.
- Any documents written in languages other than English or Japanese, must be accompanied with official translation(s) with the translator's name, address, contact information and signature or official seal.
- Kurume University will not return any of the submitted certificates in any circumstances.
- Acceptance to the University will be revoked if any false information or forgeries are found in the submitted documents, even after enrollment.

1. Application Form	Form 1
2. Personal Statement	Form 2 (personal statement in the maximum of 250 words in English or 500 characters in Japanese)
3. Academic Transcripts	Original transcripts issued from the educational institutions, all undergraduate and graduate level studies you have attended. Please submit Japanese or English translations if the document is issued in a language other than Japanese or English.
4. Two Identical Photographs (4 cm x 5 cm)	<ul style="list-style-type: none"> <li>• Submit two identical photographs taken within three months, showing a front view above chest level. No cap or hat is allowed.</li> <li>• The photograph size must be 5 cm high by 4 cm wide (1.96 in x 1.57 in).</li> <li>• Please affix one directly to the application form (Form 1) and another to the Applicant's ID Card for examination (Form 3).</li> </ul>
5. University Graduation Certificate(s)	Original copy issued directly from universities and graduate schools. Please submit Japanese or English translations if the document is issued in a language other than Japanese or English.
6. Applicant's ID Card for Examination	Form 3
7. Application Fee	<p>¥30,000</p> <p>Applicants residing in Japan at the time of submitting formal application should refer to the Application Guidelines in Japanese 「令和 5 年度 学生募集要項 (博士課程)」 and the pay the Application Fee using the designated form (Form 4) prior to taking the Examination.</p> <p>International applicants residing outside of Japan should pay the admission fee in Japanese Yen on the day of the Examination at the University. The Admission Fee will not be refunded under any circumstances.</p>
8. Documents Providing English Proficiency  *Original ONLY *Required from all applicants whose native language is not English	<p>Please submit a copy of the official score report of the TOEFL test. Refer to “Exemption of the English Examination” on page 11.</p> <p><b>【Exemption】</b></p> <p>The following applicants are exempt from having to provide documents for English proficiency:</p> <ul style="list-style-type: none"> <li>• Applicants who can be certified with official certificate indicating their graduation or scheduled graduation from a bachelor's course offered in English</li> <li>• Applicants who can be certified with official certificate indicating their education exclusively in English for at least six years of their formal education.</li> <li>• Applicant whose nationality is an English-speaking country e.g. Australia, Canada, Ireland, New Zealand, Singapore, the United Kingdom and the United States.</li> </ul>
9. Copy of Passport	Applicants are required to submit a copy of their valid passport, showing their photo, name, nationality, gender, date of birth, passport number and date of expiration. If you already have a valid Japanese visa, please submit a photocopy of your visa as well.

10. Copy of Resident Card (both sides)	Submission of a copy of Residence Card (front and back) is required for all international applicants residing in Japan.
11. Letter of Agreement of Examination (Only for Admission Category “B – professionals”)	Applicants applying under the Category “B – professionals” are required to submit the Form 5 upon receiving agreement by the supervisor at the current institution/company.
12. Copy of official certificate and license	Applicants who have acquired pharmacist license and/or physician's license are required to submit a copy of those licenses.
13. Certification of Scholarship received from organizations other than Kurume University	Applicants who are due to accept scholarship offered by organizations other than Kurume University after their admission are required to submit proof of the scholarship award.
14. Official certificate or registration record for name change	Please obtain an official certificate or registration record at the municipality if your name has changed due to changes in marital status or family circumstances.
15. Resident Status Questionnaire (required for all International Applicants)	Please contact Admissions Office before Prescreening to obtain the form. The form includes information of applicant, guarantor's information, Japanese language proficiency, and history of previous entries to Japan. Please attach a Japanese translation of the form.
16. Letter of Paying Expenses (required for all International Applicants)	Please contact Admissions Office before Prescreening to obtain the form.

## 5. Application Submission

Please send all application documents directly to Kurume University Graduate School of Medicine.

### (1) Application Period

Kurume University Graduate School of Medicine performs entrance examinations twice a year. The submission periods of each examination are listed below.

Enrollment Term	Submission Period
Spring (April) 2024	July 18, 2023 (Tue) – July 21, 2023 (Fri)
	December 18, 2023 (Mon) – December 22, 2023 (Fri)

(2) Contact Information

Graduate School of Medicine, Kurume University  
Admissions Office, Academic Affairs Section  
67 Asahi-machi, Kurume, Fukuoka  
830-0011 Japan

Tel: +81 942-31-7528  
E-mail: [igaku-kyomu@kurume-u.ac.jp](mailto:igaku-kyomu@kurume-u.ac.jp)  
HP: <https://www.kurume-u.ac.jp/faculty/gmed/examination/>

## 6. Screening Method for International Applicants

(1) All applicants are evaluated based on an interview, a written test in English and all submitted documents.

(2) Screening Date: Examination

Enrollment Term	Date of Examination
Spring (April) 2024	August 22, 2023 (Tue)
	January 16, 2024 (Tue)

(3) Examination Subjects, Schedule and Venue

Applicants are required to be present at the venue by 10:30 am (Japan time) of the examination date described above.

Examination Subjects	Schedule	Venue
Written Exam (essay in English)	11:00-12:00	Room 1501, 5 <sup>th</sup> Floor, Academic Building 1 (Kyoiku 1 goukan), Kurume University School of Medicine
Interview	13:00-	Your faculty advisor will decide the details (time and venue) of the interview and notify applicants before the interview

(4) Examination admission ticket will be issued on the day of the examination at the venue. The receipt of application fee payment confirms that you have completed the application process.

(5) Request for changing major will not be accepted once the application is submitted.

### [Exemption of the English Examination]

Applicants whose native language or language of instruction at university or graduate school is not English must submit a copy of the official score report of the TOEFL test to be exempt from the English Examination. The official test score is valid for 4 years for the admission at the Kurume University Graduate School of Medicine, and requires a minimum TOEFL score of PBT 580 / iBT 85 to be exempt from the English Examination.

International applicants who do not meet the above conditions are required to take the English Examination which is different from Japanese applicants. Details will be provided upon successful completion of the

prescreening process.

International applicants with fluency in Japanese language are requested to consult with Application Guidelines in Japanese 「令和 5 年度 学生募集要項（博士課程）」 or contact Academic Affairs Division at the Graduate School of Medicine for further instruction.

## 7. Result Announcement

Result will be sent out by a postal mail to the address provided on the application form. Results are also posted on the website (<http://www.kurume-u.ac.jp/site/gmed/>) as scheduled below. Enrollment procedures and necessary documents will be mailed to the successful applicants with the notice of acceptance.

Enrollment Term	Announcement Schedule
Spring 2024	September 15, 2023 (Fri) at 10:00 am
	February 16, 2024 (Fri) at 10:00 am

## 8. Enrollment Procedure

### (1) Deadline for Payment of Admission Fee and Document Submission

Please submit all necessary documents and complete payment by the deadline. The deadline will not be extended under any circumstances.

Enrollment Term	Deadline
Spring 2024	September 29, 2023 (Fri)
	February 22, 2024 (Thu)

### (2) Admission Fee and Partial Tuition Fee

Admission Fee	JPY 250,000
Tuition fee (※annual)	JPY 240,000 per semester (※JPY 480,000)
Facilities fee (※annual)	JPY 60,000 per semester (※JPY 120,000)

※When accepted applicants decline enrollment after going through admission procedures, one-term tuition and facilities fees paid for the first academic year (excluding admission fee) will be refunded. Please submit the letter of request directly to admission office by the deadline (February 22, 2024 at 5 pm, Japan time).

## 9. Scholarship and Tuition Reduction

## **Kurume University Scholarship**

After enrolling at the Graduate School of Medicine, students will have an opportunity to apply for Kurume University Scholarship. This loan scholarship award is 120,000 JPY per month to cover your living expenses.

## **Tuition Reduction for International Students**

The Graduate School of Medicine also provides tuition reduction for selected international students. It covers full or 50% of your tuition.

### **Personal Information Policy**

Kurume University will manage the personal information of application in compliance with relevant laws and regulations concerning the protection of personal information during admission process. The University strives for proper handling of personal information and take necessary measures for safety management.

Personal information provided in the application and admission procedure is used for the necessary work for the entrance examination, acceptance announcement, procedural works for enrollment, student and faculty relations, and support for student life upon employment.

Personal information acquired by our university will not be disclosed or provided to a third party without consent.

## Division, Department and Research Fields

Subject & Course	Department & Professor	Research Fields
Anatomy (Clinical Gross Anatomy)	Koichi Watanabe, M.D., Ph.D. Division of Gross and Clinical Anatomy, Department of Anatomy, Kurume University School of Medicine	Gross anatomical research Clinical anatomical research (development of low invasive surgery, etc.) <ul style="list-style-type: none"> <li>• Structure of the vascular system</li> <li>• Functional anatomy of the musculo-skeletal system (lower extremity, etc.)</li> <li>• Anatomy of the thoracic and abdominal organs</li> <li>• Anatomy of the head and neck region</li> <li>• Analysis of the vascular distribution of transplanted tissue (skin flap, etc.)</li> </ul>
Anatomy (Microscopic Anatomy and Histology)	Yuichi Shima, M.D., Ph.D. Division of Microscopic and Developmental Anatomy, Department of Anatomy, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Clarification of transcriptional regulation mechanisms underlying hypothalamus-pituitary-gonad axis formation</li> <li>• Identification of a novel subpopulation of hypothalamic neurons responsible for sexual behavior regulation</li> <li>• Clarification of the role of NR5A1 in the histological architecture of the spleen</li> </ul>
	Keisuke Ohta, Ph.D. Advanced Imaging Research Center, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• 3D-cellular network in dermis and others using 3D electron microscopy including FIB-SEM tomography</li> <li>• Relationship between mitochondrial structure and organ physiology</li> <li>• Mitochondrial dynamics and inter-organelle interaction by 3D correlative light electron microscopy (CLEM)</li> </ul>
Physiology (Brain Function)		
Physiology (Integrated Autonomic Function)	Makoto Takano M.D., Ph.D. Department of Physiology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Molecular &amp; cellular physiology of cardiac pacemaker cells &amp; arrhythmia (remodeling of HCN channel expression)</li> <li>• Molecular &amp; cellular neuroscience of neurons expressing pacemaker HCN channels (optogenetics, slice patch clamp, behavior analysis)</li> </ul>
Medical Biochemistry	Ken Yamamoto, M.D., Ph.D. Department of Medical Biochemistry, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Elucidation of genetic and epigenetic etiology of common diseases, including metabolic diseases, cancer and autoimmune diseases.</li> <li>• Identification of genes involved in the Mendelian disorders.</li> <li>• Genomics for the lipid absorption systems.</li> </ul>
	Yuichiro Higashimoto, Ph.D. Department of Chemistry, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Post-translational modifications of proteins</li> <li>• Screening and biological applications of aptamers</li> <li>• Mass spectrometry-based medical proteomics</li> </ul>
Pharmacology	Akinori Nishi, M.D., Ph.D. Department of Pharmacology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Dopaminergic signaling mediated through protein phosphorylation</li> <li>• Degeneration and regeneration of dopaminergic neurons</li> <li>• Regulatory mechanisms of neurotransmitter release evaluated with in vivo microdialysis</li> <li>• Neurochemical and behavioral aspects of drug addiction</li> </ul>
Molecular Life Science	Masayasu Kojima, M.D., Ph.D. Department of Molecular Genetics, Institute of Life Science, Kurume University	<ul style="list-style-type: none"> <li>• Search for novel peptide hormones</li> <li>• Molecular biology of peptide hormones</li> <li>• Physiological functions of peptide hormones</li> <li>• Regulatory mechanism of appetite and food intake</li> </ul>



## Division, Department and Research Fields

Subject & Course	Department & Professor	Research Fields
Molecular Life Science	Shigeaki Saitoh, Ph.D. Department of Cell Biology, Institute of Life Science, Kurume University	<ul style="list-style-type: none"> <li>• Molecular mechanisms controlling cellular growth and division in response to changes in the nutritional conditions</li> <li>• Molecular mechanisms ensuring accurate chromosome segregation during mitotic cell division</li> </ul>
Pathology	Hirohisa Yano, M.D., Ph.D. Department of Pathology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Primary culture of liver cancer cells</li> <li>• Molecular pathology of liver cancer (e.g., identification of histogenesis, cancer stem cell, and tissue biomarkers of liver cancer)</li> <li>• Experimental pathology of liver cancer (e.g., development of new molecular targeted therapy of liver cancer using new and unique drug delivery system)</li> </ul>
	Koichi Ohshima, M.D., Ph.D. Department of Pathology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Hematopathological diagnosis of malignant lymphoma</li> <li>• Molecular pathology of malignant lymphoma (Immunostaining and genetical analysis)</li> </ul>
	Jun Akiba, M.D., Ph.D. Department of Diagnostic Pathology, Kurume University Hospital	<ul style="list-style-type: none"> <li>• Surgical pathology</li> <li>• Histogenesis of tumor</li> </ul>
Infectious Medicine (Microbiology)	Yoshitoshi Ogura, M.D., Ph.D. Department of Infectious Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Bacteriology</li> <li>• Microbial Genomics</li> <li>• Evolution of Pathogenesis</li> <li>• Host defense mechanisms against bacterial infections</li> <li>• New therapeutic agents for bacterial infections</li> </ul>
Infection Control and Prevention	Hiroshi Watanabe, M.D., Ph.D. Department of Infection Control and Prevention, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Infectious diseases</li> <li>• Infection control</li> <li>• Tropical medicine</li> <li>• Travel medicine</li> </ul>
Infectious Medicine (Eukaryotic Microbiology)	Masahiro Inoue, M.D., Ph.D. Department of Infectious Medicine, Division of Eukaryotic Microbiology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Development of molecular targeting drugs for eliminating Trypanosoma brucei, a causative agent of Nagana disease and sleeping sickness in animal and human, respectively</li> <li>• Drug screening utilizing unique features of the molecular chaperone of T. brucei               <ol style="list-style-type: none"> <li>1) Biology of T. brucei 14-3-3 (Tb14-3-3)</li> <li>2) Characterization of T. brucei 14-3-3 associated kinase 1 (AKB1)</li> </ol> </li> </ul>
Immunology	Atsushi Mizoguchi, M.D., Ph.D. Department of Immunology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Intestinal immunology</li> <li>• Development of novel therapeutic strategies for IBD</li> <li>• Regenerative immunology</li> <li>• Tissue-specific immunology</li> </ul>
	Emiko Mizoguchi, M.D., Ph.D. Department of Immunology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Actively investigating functional modulation of CEC (colonic epithelial cells) to complete our understanding in the pathogenesis of IBD by utilizing animal models as well as clinical samples</li> <li>• Translational research between bench studies and clinical settings for the study of allergic disorders, chronic inflammatory diseases and infectious diseases.</li> </ul>

## Division, Department and Research Fields

Subject & Course	Department & Professor	Research Fields
Environmental Medicine	Tatsuya Ishitake, M.D., Ph.D. Department of Environmental Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Occupational Medicine               <ol style="list-style-type: none"> <li>1) Health effects on hyperbaric environment (diving)</li> <li>2) Prevention and health management of vibration disorders</li> <li>3) Health management for medical and welfare workers</li> </ol> </li> <li>• Environmental Medicine               <ol style="list-style-type: none"> <li>1) Health effects of electromagnetic wave</li> <li>2) Indoor air pollution and sick building syndrome</li> </ol> </li> <li>• Community Health               <ul style="list-style-type: none"> <li>Application study of Health Impact Assessment (HIA)</li> </ul> </li> </ul>
Public Health	Shinichi Tanihara, M.D., Ph.D. Department of Public Health, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Health Policy</li> <li>• Health Economics</li> <li>• Epidemiology</li> <li>• Real world data analysis in medicine</li> </ul>
Health and Sports Science	Noriko Yoshida, M.D., Ph.D. Hideo Yasukawa, M.D., Ph.D. Department of Sports Medicine and Science Studies, Faculty of Human Health, Kurume University	<ul style="list-style-type: none"> <li>• Influences of life style modification for biological function and disease prevention (ex. the effects of physical activity and nutrition on oxidative stress)</li> <li>• Sports medicine</li> </ul>
Forensic Medicine and Human Genetics	Yoshiro Koda, M.D., Ph.D. Department of Forensic Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Genetic polymorphisms of genes involved in Morphogenesis</li> <li>• Development of methods for detection of haptoglobin gene deletion and these clinical application</li> <li>• Genetic polymorphisms of genes under natural selection</li> </ul>
Biostatistics	Kyoji Furukawa, Ph.D. The Biostatistics Center, Graduate School of Medicine, Kurume University	<ul style="list-style-type: none"> <li>• Methods for survival data analysis</li> <li>• Statistical modeling and risk analysis for environmental epidemiology</li> <li>• Bayesian statistical models</li> </ul>
	Kenta Murotani, Ph.D. The Biostatistics Center, Graduate School of Medicine, Kurume University	<ul style="list-style-type: none"> <li>• Clinical trial design</li> <li>• Diagnostic medicine</li> <li>• Statistical consulting</li> </ul>

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Subject & Course	Department & Professor	Research Fields
Nursing	Tomoko SAKIHAMA, RN, PHN, CNS, PhD. Division of Infection Control and Prevention, Department of Nursing Professor	<ul style="list-style-type: none"> <li>• Infection Control and Prevention</li> <li>• Preventing Hospital Infections</li> <li>• Patient safety</li> <li>• Medical decision-making</li> <li>• Nursing Leadership and management</li> </ul>
	Mitsuyo Furumura, R.N. Ph.D. Gerontological Nursing, Kurume University School of Nursing	<ul style="list-style-type: none"> <li>• Study for early intervention and support system of dementia</li> <li>• Study for the elderly support by multi-occupational collaboration; team medical approach</li> <li>• Study for gerontological nursing and gerontological nursing education</li> </ul>
	Kazuki Masumori, R.N., Ph.D. Kurume University School of Nursing	<ul style="list-style-type: none"> <li>• Child health nursing</li> <li>• Nursing for the families of children with illness</li> <li>• Education on child health nursing</li> </ul>
	Yoriko Hara, R.N., Ph.D. Department of Adult Nursing, Kurume University School of Nursing	<ul style="list-style-type: none"> <li>• QOL development for cancer patients and families</li> <li>• Scale development for QOL measurement in Diabetic patients and families</li> <li>• Research on regional cooperation care-system</li> </ul>
	Kayo Tanaka, R.N., MW, Ph.D. Maternal Newborn Nursing, Midwifery, Kurume University School of Nursing	<ul style="list-style-type: none"> <li>• Women's health care for women with diabetes</li> <li>• Care of abnormal glucose metabolism in pregnancy</li> <li>• Studies on sexuality</li> <li>• Study of midwifery</li> </ul>
	Yukako Shigematsu, R.N., P.H.N., Ph.D. Kurume University School of Nursing	<ul style="list-style-type: none"> <li>• Partnership nursing</li> <li>• Role of Nurses in Community Network</li> <li>• Skills and competencies of community / public health nurses</li> </ul>
	Tsuyoshi Saga, M.S., Ph.Ds. (Dr. of Fisheries and Dr. of Medicine) Kurume University School of Nursing	<ul style="list-style-type: none"> <li>• Applied study to the nursing science domain of the structure of the human body.</li> <li>• Gross anatomy, Histology, Morphogenesis and Comparative anatomy.</li> <li>• Morphogenesis of the bone, blood vessel, neurons and endocrine organs.</li> <li>• Study for relationship of the distribution of the sensory neuron and pain.</li> <li>• Human and animals specimen preparation for the research and education.</li> <li>• Anatomical education, Development of education materials, Research of presentation techniques</li> </ul>
	Fundamental Nursing Professor Mie Kaetsu	Nursing Education, Nursing Management, Nursing Skill, Nursing ethics

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Subject & Course	Department & Professor	Research Fields
Individually Optimized Therapeutics System  Innovative Cancer Therapeutics	Hirohisa Yano, M.D., Ph.D. Department of Pathology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Primary culture of liver cancer cells</li> <li>Molecular pathology of liver cancer (e.g., identification of histogenesis, cancer stem cell, and tissue biomarkers of liver cancer)</li> <li>Experimental pathology of liver cancer (e.g., development of new molecular targeted therapy of liver cancer using new and unique drug delivery system)</li> </ul>
	Koichi Ohshima, M.D., Ph.D. Department of Pathology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Hematopathological diagnosis of malignant lymphoma</li> <li>Molecular pathology of malignant lymphoma (Immunostaining and genetical analysis)</li> </ul>
	Emiko Mizoguchi, M.D., Ph.D. Department of Immunology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>To analyze host-microbial interactions (especially, potentially pathogenic bacteria in intestinal microflora) during the development of inflammatory bowel disease (IBD) and IBD-associated cancer.</li> <li>To analyze the role of Chitinase 3-like 1 (CHI3L1/YKL-40), a chitin-binding protein without enzymatic activity, during the neoplastic changes of colonic epithelial cells.</li> </ul>
	Koji Nagafuji, M.D., Ph.D. Division of Hematology & Oncology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Analysis of growth mechanism of hematopoietic tumor cells</li> <li>Investigation of blood coagulation and platelet abnormality related to thrombosis development</li> </ul>
	Takumi Kawaguchi, M.D., Ph.D. Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine.	<ul style="list-style-type: none"> <li>Metabolic Fatty liver and cancer</li> <li>Nutritional and exercise therapy for patients with hepatocellular carcinoma</li> <li>Orgain interactions in digestive cancer</li> </ul>
	Hironori Koga, M.D., Ph.D. Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Cancer stem cells of liver and pancreatic cancers</li> <li>Wnt signaling pathway</li> <li>Pathogenesis and treatment of hepatitis virus-associated liver diseases</li> <li>Liver regeneration</li> <li>Chemotherapy for hepatocellular carcinoma</li> </ul>
	Ryoko Kuromatsu, M.D., Ph.D. Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Basic and clinical ultrasonography of abdomen</li> <li>Early diagnosis and treatment of liver cancer</li> </ul>
	Fumihiko Fujita, M.D., Ph.D. Division of Gastroenterological Surgery, Department of Surgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Diagnosis and treatment for gastrointestinal cancer</li> <li>Diagnosis and treatment for peritoneal tumor</li> <li>Multidisciplinary treatment for colorectal cancer</li> <li>Surgical treatment for digestive disorders</li> </ul>
	Uhi Toh, M.D., Ph.D. Division of Breast and Endocrine Surgery, Department of Surgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Surgical Oncology</li> <li>Oncoplastic Surgery</li> </ul>
	Hideo Nakamura, M.D., Ph.D. Department of Neurosurgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Functional anatomy in the field of Neurosurgery</li> <li>Molecular biology in Brain tumor</li> <li>Cancer biology</li> <li>Brain tumor pathology</li> </ul>
	Naotake Tsuda, M.D., Ph.D. Department of Obstetrics and Gynecology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Research for diagnosis, pathophysiology, multimodal treatment of gynecologic cancer</li> </ul>
	Tsukasa Igawa, M.D., Ph.D. Department of Urology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>Urologic oncology</li> <li>Multidisciplinary / minimally invasive treatment for urological tumors</li> </ul>

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Subject & Course	Department & Professor		Research Fields
<p>Individually Optimized Therapeutics System</p> <p>Advanced Cancer Therapy - Malignant Tumor Specialist Training Unit</p>	Specialist Training Course for Chemical Medicine Therapy	Uhi Toh, M.D., Ph.D. Division of Breast and Endocrine Surgery, Department of Surgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Surgical Oncology</li> <li>• Oncoplastic Surgery</li> </ul>
	Specialist Training Course for Radiotherapy	Etsuyo Ogo, M.D., Ph.D. Department of Radiology & Radiation Therapy Center, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Basic learning for radiation therapy</li> <li>• Up-to-date knowledge of radiation therapy technique</li> <li>• Clinical application of radiation therapy</li> </ul>
	Special Training Course for Rare Cancer Therapy	Koji Hiraoka, M.D., Ph.D. Department of Orthopedics & Rehabilitation, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Bone and soft tissue tumor</li> <li>• Metastatic bone tumor</li> <li>• Rehabilitation medicine in musculoskeletal system</li> <li>• Improvement of post-operative function in musculoskeletal disorder</li> </ul>
Individually Optimized Therapeutics System	Yoshihiro Fukumoto, M.D., Ph.D. Division of Cardiovascular Medicine, Department of Internal Medicine, Kurume University School of Medicine		<ul style="list-style-type: none"> <li>• Pathogenesis and therapy of atherosclerosis, heart failure, arrhythmia, aortic diseases, and pulmonary hypertension</li> <li>• Angiogenesis</li> <li>• Epidemiology in cardiovascular diseases</li> <li>• Onco-Cardiology</li> </ul>
Advanced Medicine for Cardiovascular Diseases	Eiki Tayama, M.D., Ph.D. Department of Surgery, Kurume University School of Medicine		<ul style="list-style-type: none"> <li>• Cardiovascular Surgery (Pathophysiology and Treatment for Acquired Heart Disease, Pathophysiology and Treatment for Aortic and Vascular Disease)</li> <li>• Artificial Heart (Research &amp; Development, and Clinical Application of Ventricular Assist Device)</li> <li>• Research and Clinical Evaluation on Characteristics of the Prosthetic Valve</li> </ul>

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Subject & Course	Department & Professor	Research Fields
<p>Individually Optimized Therapeutics System</p> <p>Advanced Medicine for Cardiovascular Diseases</p>	Hiroki Aoki, M.D., Ph.D., M.B.A. Cardiovascular Research Institute, Kurume University	<ul style="list-style-type: none"> <li>• Signal transduction in cardiovascular diseases</li> <li>• Molecular pathogenesis of aortic diseases</li> </ul>
	Hisashi Kai, M.D., Ph.D. Department of Cardiology, Kurume University Medical Center	<ul style="list-style-type: none"> <li>• Cardiac biology</li> <li>• Vascular biology</li> <li>• Clinical cardiology</li> <li>• Clinical and experimental high blood pressure medicine</li> <li>• Medical safety and management</li> </ul>
	Kenji Suda, M.D., Ph.D., FJCC. Department of Pediatrics and Child Health, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Pathophysiology of congenital heart disease and Kawasaki Disease</li> <li>• State of the art medical and surgical treatments of congenital heart disease and Kawasaki Disease</li> </ul>
	Hidehiro Matsuoka, M.D., Ph.D. Center for Health Check-ups, Kurume University Hospital	<ul style="list-style-type: none"> <li>• Cardiovascular regulation</li> <li>• Hypertension</li> </ul>
	Nobuhiro Tahara, M.D., Ph.D. Center for Cardiovascular , Kurume University Hospital	<ul style="list-style-type: none"> <li>• Vascular Biology</li> <li>• Inflammatory Pathology of Cardiovascular Disease</li> <li>• Diagnosis and Treatment of Atherosclerosis, Pulmonary Hypertension, Cardiomyopathy, Vasculitis</li> </ul>
	Shinji Yokoyama, M.D, Ph.D. Division of Medical Safety Management, Kurume University Hospital	<ul style="list-style-type: none"> <li>• Medical Safety Management</li> <li>• Cardiovascular Medicine</li> <li>• Coronary Intervention</li> </ul>
<p>Individually Optimized Therapeutics System</p> <p>Higher Brain Disorders</p>	Yushiro Yamashita, M.D., Ph.D. Department of Pediatrics and Child Health, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Pediatric Neurology/Neurodevelopmental Disorders:ADHD, ASD, Rett syndrome</li> <li>• Behavioral treatment for children with ADHD: Summer Treatment Program</li> </ul>
	Motohiro Ozone, M.D., Ph.D. Department of Neuropsychiatry, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Psychiatry</li> <li>• Psychophysiology</li> <li>• Sleep Medicine</li> </ul>
	Yoshihisa Shoji, M.D., Ph.D. Cognitive and Molecular Research Institute of Brain Diseases, Kurume University	<ul style="list-style-type: none"> <li>• Psychophysiology (research using exploratory eye movement, event-related potential, functional magnetic resonance imaging (fMRI), and near-infrared spectroscopy (NIRS) in neuropsychiatric disorders and higher brain dysfunction.)</li> <li>• Geriatric psychiatry (prevention, diagnosis, treatment, care and regional collaboration of psychiatric diseases including dementia in elderly people.)</li> </ul>
	Motohiro Morioka, M.D., Ph.D. Department of Neurosurgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Molecular mechanism of ischemic injury for central nervous system</li> <li>• Neurogenesis</li> <li>• Vasculogenesis of CNS</li> </ul>
	Masaru Hirohata, M.D., Ph.D. Department of Neurosurgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Basic study and clinical investigation of cerebral vascular disease</li> </ul>
	Hideo Nakamura, M.D., Ph.D. Department of Neurosurgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Functional anatomy in the field of Neurosurgery</li> <li>• Molecular biology in Brain tumor</li> <li>• Cancer biology</li> <li>• Brain tumor pathology</li> </ul>
	Takayuki Taniwaki, M.D., Ph.D. Department of Neurology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Functional magnetic resonance imaging in parkinsonism</li> <li>• Functional neuroimaging of dyspnea</li> </ul>

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Subject & Course	Department & Professor	Research Fields
Individually Optimized Therapeutics System  Skin Cell Biology	Takekuni Nakama, M.D., Ph.D. Department of Dermatology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Eosinophils associated skin diseases</li> </ul>
Individually Optimized Therapeutics System  Advanced Therapeutic Study of Other Disorders	Tomoaki Hoshino, M.D., Ph.D., Division of Respiriology, Neurology, and Rheumatology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Respiratory systems</li> <li>• Lung cancers</li> </ul>
	Hiroaki Ida, M.D., Ph.D. Division of Respiriology, Neurology, and Rheumatology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Analysis of pathogenesis of autoinflammatory syndrome using iPS cells</li> </ul>
	Takayuki Taniwaki, M.D., Ph.D. Division of Respiriology, Neurology, and Rheumatology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Functional magnetic resonance imaging in parkinsonism</li> <li>• Functional neuroimaging of dyspnea</li> </ul>
	Tomotaka Kawayama, M.D., Ph.D., Division of Respiriology, Neurology and Rheumatology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Diagnosis and evaluation of airway inflammation</li> <li>• Diagnosis and evaluation of airway hyperresponsiveness</li> <li>• Identification of mechanisms of asthma and COPD and development of new medications for patients with asthma and COPD</li> </ul>
	Munetoshi Nakashima M.D., Ph.D. Division of Rheumatology, Kurume University Medical Center	<ul style="list-style-type: none"> <li>• Rheumatoid arthritis</li> <li>• The relevance of MEFV gene and Rheumatic diseases</li> </ul>
	Koji Nagafuji, M.D., Ph.D. Division of Hematology & Oncology, Department of Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Analysis of growth mechanism of hematopoietic tumor cells</li> <li>• Investigation of blood coagulation and platelet abnormality related to thrombosis development</li> </ul>
	Takumi Kawaguchi, M.D., Ph.D. Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine.	<ul style="list-style-type: none"> <li>• Pathogenesis and treatment for fatty liver</li> <li>• Nutritional and exercise therapy for patients with liver cirrhosis</li> <li>• Orgain interactions in digestive diseases</li> </ul>

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Subject & Course	Department & Professor	Research Fields
<p>Individually Optimized Therapeutics System</p> <p>Advanced Therapeutic Study of Other Disorders</p>	<p>Hironori Koga, M.D., Ph.D.</p> <p>Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Cancer stem cells of liver and pancreatic cancers</li> <li>• Wnt signaling pathway</li> <li>• Pathogenesis and treatment of hepatitis virus-associated liver diseases</li> <li>• Liver regeneration</li> <li>• Chemotherapy for hepatocellular carcinoma</li> </ul>
	<p>Ryoko Kuromatsu, M.D., Ph.D.</p> <p>Division of Gastroenterology, Department of Medicine, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Basic and clinical ultrasonography of abdomen</li> <li>• Early diagnosis and treatment of liver cancer</li> </ul>
	<p>Center for Digestive Disease and GI Endoscopy</p> <p>Professor. Yoshinobu Okabe</p>	<ul style="list-style-type: none"> <li>• Diagnosis and treatment using gastrointestinal endoscopy and pancreatobiliary endoscopy</li> <li>• Diagnosis and treatment of pancreatic cancer and biliary tract cancer</li> <li>• Diagnosis of pancreatic tumor and cystic tumor, diagnosis of autoimmune pancreatitis</li> </ul>
	<p>Tatsuya Ide M.D., Ph.D.</p> <p>Division of Gastroenterology, Kurume University Medical Center</p> <p>Department of gastro enterology Kurume University Medical Center</p>	<ul style="list-style-type: none"> <li>• Viral Hepatitis</li> <li>• Diagnosis and treatment of Liver disease</li> </ul>
	<p>Masatoshi Nomura, M.D., Ph.D.</p> <p>Division of Endocrinology and Metabolism, Department of Internal Medicine, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Development of innovative treatment for type 2 diabetes based on its pathophysiology</li> <li>• Elucidation of molecular mechanism of sarcopenia for establishment of the preventive medicine</li> </ul>
	<p>Kei Fukami, M.D., Ph.D.</p> <p>Division of Nephrology, Department of Medicine, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Clarification of the mechanism and novel therapeutic strategy for the development of AKI, DKD, CKD, and the complications of dialysis</li> <li>• The most advanced research for renal regeneration</li> </ul>
	<p>Ryuta Nishikomori, M.D., Ph.D.</p> <p>Department of Pediatrics and Child Health, Kurume University School of Medicine</p>	<p>Autoinflammatory syndromes</p> <ol style="list-style-type: none"> <li>1) Exploration of their disease-causing genes</li> <li>2) Study on disease mechanism</li> <li>3) Development of drugs or therapies</li> </ol>
	<p>Kosuke Ushijima, M.D., Ph.D.</p> <p>Department of Insured Medical Care Management, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Insured Medical Care Management</li> <li>• Hospital Administration</li> <li>• Pediatrics</li> <li>• Pediatric Gastroenterology, Hepatology and Nutrition</li> </ul>



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<p>Individually Optimized Therapeutics System</p> <p>Advanced Therapeutic Study of Other Disorders</p>	<p>Toshi Abe, M.D., Ph.D. Department of Radiology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Diagnostic Radiology (e.g., Neuroradiology)</li> <li>• Interventional Radiology (e.g., Neuro, Head and Neck, Spine)</li> <li>• 3D imaging analysis (e.g., 3D printing and 3D model)</li> </ul>
	<p>Kiminori Fujimoto, M.D., Ph.D. Department of Radiology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Diagnostic Radiology (imaging interpretation of chest radiography, CT, MRI, and FDG-PET)</li> <li>• Lung and mediastinal diseases (e.g., neoplasms, diffuse lung diseases)</li> <li>• Abdominal diseases (e.g., hepatic neoplasms, diffuse liver diseases)</li> </ul>
	<p>Yusuke Uchiyama, M.D., Ph.D. Department of Radiology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Diagnostic Radiology (e.g., Neuroradiology, Head and Neck radiology)</li> </ul>
	<p>Norimitsu Tanaka, M.D., Ph.D. Medical Imaging Center of Kurume University Hospital and Department of Radiology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Organ preserving treatment for advanced head and neck carcinomas using superselective intra-arterial chemotherapy</li> <li>• Non-surgical minimal invasive treatment for vascular malformations using direct puncture sclerotherapy or endovascular embolization</li> <li>• Percutaneous vertebroplasty for osteoporotic vertebral compression fracture and pathological fracture due to metastatic bone tumors</li> </ul>
	<p>Etsuyo Ogo, M.D., Ph.D. Department of Radiology &amp; Radiation Therapy Center, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Basic learning for radiation therapy</li> <li>• Up-to-date knowledge of radiation therapy technique</li> <li>• Clinical application of radiation therapy</li> </ul>
	<p>Fumihiko Fujita, M.D., Ph.D. Division of Gastroenterological Surgery, Department of Surgery, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Diagnosis and treatment for gastrointestinal cancer</li> <li>• Diagnosis and treatment for peritoneal tumor</li> <li>• Multidisciplinary treatment for colorectal cancer</li> <li>• Surgical treatment for digestive disorders</li> </ul>
	<p>Toru Hisaka, M.D., Ph.D. Division of Hepato-Biliary Pancreatic Surgery, Department of Surgery, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Surgical oncology</li> <li>• Surgical management for hepato-biliary pancreatic disease</li> <li>• Multidisciplinary treatment</li> </ul>
	<p>Masahiro Mitsuoka, M.D., Ph.D. Department of Surgery, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• General thoracic surgery</li> <li>• Surgery for lung cancer</li> <li>• Pulmonary intervention</li> </ul>

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<p>Individually Optimized Therapeutics System</p> <p>Advanced Therapeutic Study of Other Disorders</p>	<p>Uhi Toh, M.D., Ph.D. Division of Breast and Endocrine Surgery, Department of Surgery, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Surgical Oncology</li> <li>• Oncoplastic Surgery</li> </ul>
	<p>Tatsuru Kaji, M.D., Ph.D. Department of Pediatric Surgery, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Pediatric Surgery (gastrointestinal, respiratory, urogenital)</li> <li>• Neonatal Surgery</li> <li>• Pediatric endoscopic surgery</li> <li>• Surgical metabolism and nutrition</li> <li>• Surgical education</li> </ul>
	<p>Koji Hiraoka, M.D., Ph.D. Department of Orthopedics &amp; Rehabilitation, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Bone and soft tissue tumor</li> <li>• Metastatic bone tumor</li> <li>• Rehabilitation medicine in musculoskeletal system</li> <li>• Improvement of post-operative function in musculoskeletal disorder</li> </ul>
	<p>Takahiro Okawa, M.D., Ph.D. Orthopedic and Joint Surgery Center, Kurume University Medical Center</p>	<ul style="list-style-type: none"> <li>• Joint preserving methods and joint arthroplastic procedures for arthritis</li> </ul>
	<p>Kimiaki Sato, M.D., Ph.D. Department of Orthopaedic Surgery, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Spine and spinal cord disorders</li> </ul>
	<p>Hiroo Matsuse, M.D., Ph.D. Division of Rehabilitation, Kurume University Hospital</p>	<ul style="list-style-type: none"> <li>• Exercise therapy for health promotion</li> <li>• Exercise therapy for the chronic pain</li> <li>• Electrical stimulation therapy</li> <li>• Biomechanics of the physical function</li> <li>• Study of the musculoskeletal atrophy during inactivity</li> <li>• Study of the muscles and bones linkage</li> <li>• Study of management of the muscle skeletal function in aerospace</li> </ul>
	<p>Shigeo Yoshida, M.D., Ph.D. Department of Ophthalmology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Development of novel comprehensive molecular therapies for intraocular proliferative diseases targeting periretinal fibrovascular membrane</li> <li>• Development of individualized medicine for diabetic retinopathy, retinal vein occlusion and age-related macular degeneration</li> <li>• Elucidating the underlying mechanisms why vitrectomy is effective</li> <li>• Molecular genetic analyses of eye diseases</li> <li>• Elucidating the mechanisms of intraocular neovascularization</li> </ul>
	<p>Yu Monden, M.D., Ph.D. Department of Ophthalmology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Corneal transplantation</li> <li>• Amniotic membrane transplantation</li> <li>• Anterior segment ocular diseases</li> </ul>
	<p>Naotake Tsuda, M.D., Ph.D. Department of Obstetrics and Gynecology, Kurume University School of Medicine</p>	<ul style="list-style-type: none"> <li>• Minimally invasive treatment for gynecologic cancers</li> </ul>

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<p>Individually Optimized Therapeutics System</p> <p>Advanced Therapeutic Study of Other Disorders</p>	Toshiyuki Yoshizato, M.D., Ph.D. Department of Obstetrics and Gynecology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Perinatology, Fetal medicine</li> <li>• Ultrasound diagnosis</li> <li>• Prenatal diagnosis</li> </ul>
	Tsukasa Igawa, M.D., Ph.D. Department of Urology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Urologic oncology (e.g. prostate cancer, kidney cancer, urothelial cancer)</li> <li>• Urologic endocrinology (e.g. adrenal disease)</li> <li>• Basic and clinical research of urolithiasis</li> </ul>
	Hirohito Umeno, M.D., Ph.D. Department of Otolaryngology Head and Neck Surgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Basic and clinical medicine of phonosurgery, dysphagia and laryngology</li> <li>• Basic and clinical medicine of head and neck tumor</li> </ul>
	Shun-ichi Chitose, M.D., Ph.D. Department of Otolaryngology Head and Neck Surgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Head and neck surgery</li> <li>• Functional organ preservation in treatment of head and neck cancer</li> <li>• Development of minimally invasive surgery for improving function of head and neck</li> </ul>
	Teruyuki Hiraki, M.D., Ph.D. Department of Anesthesiology, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Neuroanesthesia</li> <li>• Operative Medicine</li> </ul>
	Kensuke Kiyokawa, M.D., Ph.D. Department of Plastic and Reconstructive Surgery and Maxillofacial Surgery, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Cranio-maxillo-facial surgery</li> <li>• Head and neck, skull base reconstruction</li> <li>• Tissue transplantation</li> <li>• Regenerative medicine</li> </ul>
	Hideaki Rikimaru, M.D., Ph.D. Department of Plastic and Reconstructive Surgery and Maxillofacial Surgery	<ul style="list-style-type: none"> <li>• Aesthetic surgery</li> <li>• Cranio-maxillofacial surgery</li> <li>• Regenerative medicine</li> <li>• Antiaging medicine</li> </ul>
	Osamu Takasu, M.D., Ph.D. Department of Emergency and Critical Care Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Excessive stress and biological response</li> <li>• Mechanisms of the development of organ dysfunction in critically ill patients</li> <li>• Pathophysiology of sepsis</li> <li>• Organ dysfunction induced by severe sepsis</li> </ul>
	Norio Yamashita, M.D., Ph.D. Department of Emergency Medicine, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Disaster medicine</li> <li>• Traumatology</li> <li>• Prehospital care</li> </ul>
	Jingo Kusukawa, D.D.S., Ph.D. Dental and Oral Medical Center, Kurume University School of Medicine	<ul style="list-style-type: none"> <li>• Oral implantology</li> <li>• Diagnosis and treatment of jaw deformities</li> <li>• Oral tissue regeneration</li> <li>• Clinico-pathological study on oral tumors</li> </ul>