

Hiroshima International University



Faculty of Pharmaceutical Sciences



Kure Campus 5-1-1 Hirokoshinkai, Kure city, Hiroshima, 737-0112, Japan http://www.hirokoku-u.ac.jp/pharm/



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Message from the President



Hiroshima International University (HIU) was established in 1998, and there are approximately 4,000 students now taking a wide range of courses in the field of health, medical services and welfare. Our graduate school started in 2003, and now has five master's courses and four doctoral courses including pharmaceutical sciences.

In the undergraduate school, we have been promoting interprofessional education, in which, for example, students learn the roles and responsibilities of other providers and how the team works together to provide care, promote health, and prevent disease.

In today's society, where the average life expectancy is increasing and the birthrate is declining and aging, such education has led us to think that we should make further efforts to promote health.

Therefore, we decided to strengthen education and research for health promotion throughout the university. As part of that, we have set up a center that accepts health consultations and holds health classes for local residents and start the Faculty of Health and Wellness Sciences and the Faculty of Health and Sports Sciences. These allow us to cultivate more diverse students to extend healthy life expectancy and improve quality of life.

It is known that various factors extend healthy life expectancy. Among them, as it is said that "Good relationships keep us happier and healthier", good relationships are very important. We, therefore, will make the university a place of learning, where diverse people can meet, and grow as individuals and as part of their teams.

I welcome you to visit our campuses in Hiroshima and interact with our students and faculty members to know more about HIU and our activities.

Masuhide Yakehiro

Message from the Dean



Institute of Pharmaceutical sciences in Hiroshima International University is putting an effort letting all students acquire necessary knowledge, skill and attitudes, as well as foster a sense of ethics through practical training as a pharmacist. We also provide an education by witch students can create a wide range of perspective and flexibility. In addition, with regard to the measurement for national examination, all staffs with expertise are working on an original system to support the study of each student.

This university will accept students who want to contribute to the health improvement of people through pharmaceutics, and those who wish to create the future of Japan as a pharmacist.

Takamitsu Hori

Message from the Department Chair



The environment surrounding medical care has changed daily in recent years. The advancement of AI (artificial intelligence) technology can be cited as a factor in such changes. In response to these changes, the pharmacist's abilities should be also required to change flexibly.

Faculty of Pharmaceutical Sciences of our university aims to train pharmacists who act responsibly and independently in society with the catchphrase "pharmacists close to people".

The meaning of "close to people" includes not only "snuggling with people (beside)" but also "snuggling with your heart". The future pharmacist must be required to act as a member of healthcare professional for patients and users by accurately grasping and analyzing their physical conditions, and also acting with the right thoughts. All of our educational staffs will conduct pharmaceutical education to produce graduates with the qualities mentioned above.

Let's aim to be a pharmacist who learns greatly with our educational staff and contributes to society!

Masafumi Yamaguchi

History

Hiroshima International University is a member of Josho Gakuen Educational Foundation together with Osaka Institute of Technology and Setsunan University.

1922	Josho Gakuen Educational Foundation was founded. Kansai Engineering Technical School was established as the first school of the Foundation.
1949	Osaka Institute of Technology was established.
1975	Setsunan University was established.
1998	Hiroshima International University was established. Faculty of Health and Welfare and Faculty of Health Sciences were launched.
2001	Faculty of Human Environment was launched.
2002	Faculty of Socio-Environmental Science was launched.
2003	Faculty of Nursing was launched.
2004	Faculty of Pharmaceutical Sciences was launched.
2004	racuity of Filal maceutical Sciences was fauncheu.
2004	Faulty of Human Environment was reorganized as Faculty of Psychological Science. The Faculty of Pharmaceutical Sciences shifted to the six-year system.
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2006 2011 2012	 Faulty of Human Environment was reorganized as Faculty of Psychological Science. The Faculty of Pharmaceutical Sciences shifted to the six-year system. Faculty of Health services Management was established. Graduate School of Pharmaceutical Sciences was set up.

Organization

Josho Gakuen Educational Foundation

Our foundation strives to develop specialist with science –based practical skills who play an important role in society.

Hiroshima International University Osaka Institute of Technology Setsunan University Josho Gakuen Junior and Senor High School Josho Keiko Gakuen Junior and Senor High School

Hiroshima International University

The university is specialized in health, medical service and welfare

Kure Campus

Faculty of Pharmaceutical Sciences Faculty of Nursing Faculty of Clinical Nutrition

Higashi-Hiroshima Campus

Faculty of Health Sciences Faculty of Rehabilitation Faculty of Health and Welfare Faculty of Psychology Faculty of Health Services Management

Educational Policy

The School of Pharmaceutical Sciences cultivates students who acquire professional knowledge and skills together with humanity through the study of Pharmaceutical Sciences. The School also makes efforts to cultivate students who become excellent pharmacists in the fields of medical care, human health and welfare. The Graduate School of Pharmaceutical Sciences contributes to cultivate students who take active parts in the field of Pharmaceutical Sciences and related area at university, industry and government.

Curriculum policy

The School of Pharmaceutical Sciences aims to develop young pharmacists who contribute community medicine based on their professional knowledge and humanity. Such human resource is required in our society at the new era of 21st century. The School has following objects and provides specialized curriculum.

- Cultivation of pharmacists with humanity and high ethical standards
- Cultivation of pharmacists who are able to contribute medical and health cares in cooperation with other special personnel.
- Cultivation of pharmacists with professional skills and respectable personality
- Cultivation of pharmacists with ability to resolve problem based on scientific grounds

Year 1

The curriculum includes Liberal Arts and Basic Natural Sciences in addition to Basic Pharmaceutical Sciences. These subjects are provided to students for acquiring a high level of knowledge and scientific thinking. The early exposure program for visiting medical facilities is helpful for students to understand role of pharmacist there.

Years 2-3

The curriculum includes Biological Sciences, Organic Chemistry, Physical Chemistry Analytical Chemistry and Environmental Chemistry, and related subjects for Pharmaceutical Sciences. Basic Medical Sciences and Plant Sciences are provided. These subjects are helpful for students to understand biology of the human body and the effects of medicinal products together with drug disposition and drug toxicity. In addition, student's comprehension about food products and environment problems are deepened. In the year 3, specialized education subjects such as Laboratory Teaching are enabling students to learn experimental techniques in Pharmaceutical Sciences.

Years 4-5

The curriculum includes Clinical Pharmacy together with practical exercise, Pathophysiology and Pharmacology. From Year 4, students belong to one of research laboratories and carry out research work for long-term as graduation studies. During the second semester in Year 4, students take the Common Achievement Tests (OSCE and CBT). The students who pass the examination are able to go a hospital and pharmacy for pharmacological practical training there for 11 weeks each in Year 5.

Year 6

Students complete long-term pharmaceutical research and submit graduate thesis. The curriculum includes several special subjects regarding the field around medical care such as Medical Economy, Home Healthcare, and Nutrition Management. In addition, Students are provided several subjects for the national examination form faculty members and they study hard the subjects and may acquire a pharmacist's license upon passing the examination.

Graduate School Years 1-4

The program is designed to cultivate students who become researchers or advanced pharmacists to be able to extend the field of Clinical Pharmacy. They are expected to become future leaders of the field. The students study individual research project and learn leading-edge knowledge and technique in Pharmaceutical Sciences. The graduate students in this course are expected to work in academic institutes, general hospitals as a leader of pharmacists and pharmaceutical industries for advances in medical treatment including developing of new drugs.



Campus Map in Kure Campus



- **1** : Faculty of Pharmaceutical Sciences
- 2 : Library
- **3** : Education Center
- 4 : The Secretariat Offices and Faculty of Clinical Nutrition
- **5** : Faculty of Nursing
- 6 : Student Dormitory
- 7 : Gymnasium
- 8 : Club House
- 9 : Rose Garden
- 10: Herbal Garden

Education Center



Rose Garden and Club House



Pharmaceutical Sciences Building

10F	 Laboratory of Synthetic Organic Chemistry Laboratory of Organic and Medicinal Chemistry Kampo Medicine and Pharmacognosy Fourth joint research room • Graduate Students' Room
9F	 Laboratory of Environmental Chemistry Laboratory of Physiological Chemistry Laboratory of Biochemistry Laboratory of Pharmacology and Pathophysiology Laboratory of Pharmacology Low-Temperature room · Third Joint Research Room Graduate Students' Room
8F	 Laboratory of Medicinal and Biochemical Analysis Laboratory of Biopharmaceutics and Pharmacokinetics Laboratory of Pharmaceutics Research Center for Pharmaceutical Health Care and Sciences Second Joint Research Room
7F	 Laboratory of Xenobiotic Metabolism and Environmental Toxicology Laboratory of Molecular Microbiological Science Laboratory of Physical Chemistry First Joint Research Room
6F	 Medical Pharmacy Research Center SGD Room Simulated Hospital Room Clean Room Community Room Drug Information Room
5F	 Third Training Room Fourth Training Room Equipment Storage Room
4F	 Second Training Room First Training Room Seminar Room Equipment Storage Room
3F	• 6301Classroom• 6302 Classroom• 6303 Classroom• 6304 Classroom
2F	 Information Practice Room RI laboratory Seminar Room
1F	 Mass Spectrometry laboratory NMR Spectrometry laboratory Laboratory Aminal Rooms Administation Offices Dean's Office • Reception Room Room for Lecture to Graduate Students Conference Room

Laboratory Instruments of Pharmaceutical Sciences



















Student Dormitories

Kure Campus



Higashi-Hiroshima Campus



Number of Faculty members are 47 (Professor:16, Associate Professor:12, Assistant Professor:8, Instructor:11)

Professors	Research Interests
Kiyoshi Ikeda PhD	 Synthetic Organic Chemistry 1. Development of novel fluorescent sialidase probes 2. Development of HN glycoprotein inhibitors against Human parainfluenza virus 3. Development of novel anti-dengue virus agents
Takuya Sueda PhD	 Organic and Medicinal Chemistry 1. Development of new synthetic reactions using N-alkynyl and N-allenyl imides 2. Development of new synthetic reactions using hypervalent organobismuth and organoiodine compounds 3. Design and synthesis of new bioactive heterocyclic compounds
Masamitsu Nakajima MD PhD	 Kampo medicine and Pharmacognosy 1. Drug (Kampo)-induced pneumonia and cigarette smoke- induced Acute eosinophilic pneumonia 2. Clinical education, diagnostic method and clinical effect of Kampo Medicine (Traditional Herbal Medicine) 3. Clinical application of diagnostic equipment for tongue image 4. Search for bioactive substance from natural sources
Kazumi Sugihara PhD	 Environmental Chemistry 1. The mechanism of sex differences in drug metabolizing enzymes 2)1H-NMR metabolome analysis 3. Environmental pollution and ecotoxicity caused by pharmaceuticals and personal care products (PPCPs). 4. Appropriate disposal of medical waste

Professors	Research Interests
Masafumi Yamaguchi PhD	 Physiological Chemistry 1. Understanding the molecular pathophysiology of Schwachman-Diamond syndrome, inherited bone marrow failure syndromes 2. Research on neutrophil extracellular traps 3. Development small molecules for cell differentiation with a focus on leukaemia
Takamitsu Hori PhD	 Biochemistry 1. Functional analysis of RAS guanyl-releasing protein 2 (RasGRP2) in vascular endothelial cells 2. Research on the effects of advanced glycation end products (AGEs) in lifestyle-related diseases
Kumatoshi Ishihara PhD	 Pharmacology and Pathophysiology 1. Neuropharmacological study on drug-dependence. 2. Therapeutic mechanism of anti-epileptic treatment. 3. Histopathological study on animal models for human diseases. 4. Elucidation of microglial function.
Mitsugu Fujita PhD	 Pharmacology 1. Search for natural products to prevent endothelial oxidative stress 2. Research on intracellular signaling linked with osteogenic effect of Rac GTPase 3. Pharmacological studies of Rac1 GTPase in bone metabolism
Yorimitsu Kodama PhD	 Medicinal and Biochemical Analysis 1. Application of novel chiral surfactant for asymmetric synthesis. 2. Resistance mechanism to cisplatin-based chemotherapy and therapeutic strategies to overcome resistance 3. Molecular mechanisms of Tob/BTG-mediated signaling pathway.
Nobuhiro Mori PhD	 Biopharmaceutics and Pharmacokinetics 1. Pharmacokinetic analysis of drug-drug interactions 2. Pharmacokinetic and molecular analysis of immunosuppressant in vitro and in vivo 3. Clarification of the modulated function of multidrug resistance- associated proteins in disease

Professors	Research Interests
	PharmaceuticsPharmaceutics1. Nanoparticle-based drug delivery systems for tumor therapy2. Nanoparticulation of low-soluble drugs3. Liposomal boron delivery system for neutron capture therapy
Satoshi Kasaoka PhD	
Masufumi Takiguchi PhD	 Xenobiotic Metabolism and Environmental Toxicology 1. Molecular mechanism of inorganic carcinogenesis (mainly cadmium)-epigenetic models 2. Defining roles and elucidating mechanism of metallothionein during chemical carcinogenesis 3. Analyzing exposure effects of bisphenol A and its active metabolite
Hiroyasu Yamanaka PhD	 Molecular Microbiological Science 1. Analysis of molecular mechanism in virulence expression of pathogenic factor produced <i>by Aeromonas</i> strains 2. Study on biofilm formation ability in <i>Aeromonas</i> strains 3. Molecular epidemiological analysis of pathogenic bacteria isolated in hospital
Hiromitsu Aoki PhD	 Physical Chemistry 1. Development of novel separation and purification method of macromolecules using counter-current chromatography 2. Applied research on separation and purification of enantiomers with counter-current chromatography 3. Control the solubility of compounds using the co-crystallization technique
Katsushi Miyake PhD Akihiro Sawa PhD	 Research Center for Pharmaceutical Health Care and Sciences 1. Study for Pharmaceutical Communication 2. Study for Infection Control 3. Study for appropriate use of drugs 4. Study for health behavior of osteoporosis patient by using transtheorical model 5. Clinical Study of Infection prevention and control 6. Clinical Study of prevention of side effect by medicine
AKINIFO SAWA PND	

Visiting professor	Research Interests
	 Organic and Biomolecular Chemistry 1. Comparative biochemistry of cholanoids (bile acid and bile alcohol) 2. Development of bile acid derivatives for TGR5 (GPCR) ligand 3. Exploration of novel agonist and antagonist of Farnesoid X receptor
Tsuneo Imanaka PhD	 Research on structure, function and biogenesis of peroxisomes Political study about lysosomal and peroxisomal disorders
Atsuko Kuramoto PhD	 Language & Culture Research on the cognitive aspects of language processing in the EFL (English as a Foreign Language) environment Development of a web-based learning environment to facilitate EFL learners' proficiency levels Exploration of the impact of SNS materials on Japanese EFL students

International Exchange

University and Faculty Exchange Relationships

China	Shandong University School of Pharmacy Capital Medical University School of Rehabilitation Medicine Rehabilitation Research Center Wenzheng College of Soochow University Suzhou University of Science and Technology
Korea	Daejeon University
Taiwan	Tzu Chi University of Science and Technology Central Taiwan University of Sciences and Technology
UK	Oxford University
USA	The University of Tennessee The College of Pharmacy Mercer University College of Pharmacy The University of North Carolina at Chapel Hill Bellevue University

Student Exchange Program

USA The University of Tennessee College of Pharmacy Mercer University College of Pharmacy



Programs for Undergraduate Students





















Club Activities



Location



From Higashi-Hiroshima Station on the Shinkansen, High-speed Railway, it takes 1 hour to Fukuoka, 1.5 hours to Osaka, and 4 hours to Tokyo.

Our two campuses are located in Kure city and Higashi-hiroshima city in Hiroshima prefecture. The Faculty of Pharmaceutical Sciences is located at Kure Campus in Kure city.





Sightseeing in Hiroshima and Kure

Hiroshima is a center city of economic and industry in western Japan, and is famous for the world heritage Miyajima and Peace Memorial Park. Kure city is a historic city. In the old days, it prospered as a military port. Currently there are many shipbuilding and high-tech factories. Hiroshima has many delicious cuisine such as Okonomiyaki, Momiji manju and Sea food.



Hiroshima City



Shopping Arcade



Miyajima



Okonomiyaki



Momiji manju



Peace Memorial Park



Hiroshima Castle



City Train



Photo: Hiroshima Convention & Visitors Bureau



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