

# Research Institutes

## 附置研究所

[http://www.kyoto-u.ac.jp/en/research\\_institutes](http://www.kyoto-u.ac.jp/en/research_institutes)



Kyoto University has a number of research institutes dedicated to specialized academic fields, spanning the full spectrum of research from the social to the natural sciences. The results produced by the institutes are a tangible demonstration of Kyoto University's commitment to fostering an environment conducive to quality research.

It is also our priority to encourage international and domestic industry-government-academia collaborative research activities, along with the strategic exploration of international patents and practical application technologies, with the ultimate aim of contributing to the wellbeing of global society.

### 化学研究所

#### **INSTITUTE FOR CHEMICAL RESEARCH**

The Institute for Chemical Research was established in 1926 in order to investigate the fundamental principles of chemistry and develop their applications. It was Kyoto University's first research institute, and has maintained its original spirit of "freedom of research" since its launch. The institute currently consists of five research divisions and three centers, comprising thirty-one laboratories in total. Each laboratory also functions as a cooperative lab with one of the following seven graduate schools: science (12 labs), engineering (10), pharmaceutical science (3), agriculture (2), medicine (1), informatics (1) and human and environmental studies (1). The institute pursues extensive domestic and overseas collaborations (56 international cooperation agreements are currently tied). As of 2010 the institute functions as a ministry of education designated Joint Usage/Research Center, serving the global community as a center for research in chemistry-oriented fields.

[www.kuicr.kyoto-u.ac.jp](http://www.kuicr.kyoto-u.ac.jp)

### 人文科学研究所

#### **INSTITUTE FOR RESEARCH IN HUMANITIES**

The Institute for Research in Humanities conducts comprehensive studies of diverse cultures and societies around the globe. It was established in 1949 through the amalgamation of the former Institute of Humanistic Studies (est. 1939), the Institute of Oriental Studies (1929) and the Institute of Occidental Studies (1946). The institute currently comprises five research divisions and two research centers: the Center for Informatics in East Asian Studies, and the Research Center for Modern and Contemporary China. In 2010 the institute was selected as a Ministry of Education designated Joint Usage/Research Center, an initiative which provides support for collaborative research projects with researchers from other institutions around the world. The institute holds

collaborative classes with the Graduate School of Letters.

[www.zinbun.kyoto-u.ac.jp/e/](http://www.zinbun.kyoto-u.ac.jp/e/)

### 再生医科学研究所

#### **INSTITUTE FOR FRONTIER MEDICAL SCIENCES**

The Institute for Frontier Medical Sciences aims to undertake basic and clinical research in regenerative medicine. The research activities of the institute encompass studies on the basic biology of stem cells (including embryonic stem [ES] and tissue-specific stem cells), the biology of tissue regeneration, transplantation immunology, tissue engineering, and the clinical application of basic findings from those studies. Through its comprehensive academic programs, the institute endeavors to nurture the next generation of regenerative medicine scientists. It also performs the important function of delivering information about regenerative medicine to the general public. In 2008, the institute was designated as a Joint Usage/Research Center in regenerative medicine by the Japanese government.

[www.frontier.kyoto-u.ac.jp/eng](http://www.frontier.kyoto-u.ac.jp/eng)

### エネルギー理工学研究所

#### **INSTITUTE OF ADVANCED ENERGY**

The Institute of Advanced Energy conducts research and development in the field of energy science and technology, with a particular focus on zero-emission energies. Its principal aims include the exploration of innovative energy sources—from renewable energy to fusion energy—and the development of systems for efficient energy utilization. Its undertakings include bidirectional research into fusion energy in collaboration with the National Institute for Fusion Science (NIFS). The institute promotes collaborative research within the energy science community as a Joint Usage/Research Center for Zero-Emission Energy Research.



The institute comprises three divisions: the Advanced Energy Generation Division, Advanced Energy Conversion Division, and Advanced Energy Utilization Division, and one research center: the Laboratory for Complex Energy Processes, which promotes inter-division research. The institute's faculty also serve as teaching staff in the Graduate School of Energy Science.

[www.iae.kyoto-u.ac.jp/english/e\\_index/e\\_index.html](http://www.iae.kyoto-u.ac.jp/english/e_index/e_index.html)

### 生存圏研究所

#### **RESEARCH INSTITUTE FOR SUSTAINABLE HUMANOSPHERE (RISH)**

The Research Institute for Sustainable Humanosphere (RISH) was established in 2004. Defining the regions vital to human existence as the humanosphere, the institute aims to promote academic study in a new field of science. The institute pursues four missions to solve present and future humanospheric problems: (1) Humanosphere Assessment and Remediation, (2) Refinement of Solar Energy through Bio-mass and Solar Power Satellite Research, (3) Exploration of the Space Environment and its Utilization and (4) Development of Technology and Materials for the Cyclical Utilization of Bio-based Resources.

The RISH also holds cooperative lectures with the graduate schools of engineering, agriculture, informatics, and science with the aim of fostering researchers with a broad insight and a wide range of experiences. Such researchers will be vital for the world in the 21<sup>st</sup> century.

[www.rish.kyoto-u.ac.jp/English](http://www.rish.kyoto-u.ac.jp/English)

### 防災研究所

#### **DISASTER PREVENTION RESEARCH INSTITUTE (DPRI)**

In 1951, the Disaster Prevention Research Institute (DPRI) was established to study the physical mechanisms of natural hazards and to search for ways to mitigate disasters.

Current priorities include enhancing the fundamental understanding of natural hazards, development of integrated methodologies for disaster reduction and the education of students in related fields. The DPRI pursues research in the fields of natural science, engineering, and social sciences, with topics that span local and global scales. The institute also forms interdisciplinary groups to implement practical projects in response to the needs of the global society. With a 63-year heritage of scientific achievements and accumulated knowledge, the institute is dedicated to leading increasingly important research efforts in natural disaster reduction throughout both Japan and the world.

[http://www.dpri.kyoto-u.ac.jp/web\\_e/index\\_topics.html](http://www.dpri.kyoto-u.ac.jp/web_e/index_topics.html)

### 基礎物理学研究所

#### **YUKAWA INSTITUTE FOR THEORETICAL PHYSICS (YITP)**

Founded in 1953, and named after Hideki Yukawa, recipient of the 1949 Nobel Prize in Physics, the YITP is a national center for pioneering research in the field of theoretical physics. Research interests span a wide range of fields, including particle physics, field theory, nuclear physics, astrophysics, cosmology, statistical physics, condensed matter physics, and biophysics. A strong emphasis is also placed on cutting-edge interdisciplinary research. The institute offers one joint course in the Graduate School of Science. The YITP's standing as a world-class center for theoretical physics was recently reaffirmed when former director Toshihide Maskawa was awarded the 2008 Nobel Prize in Physics.

[www.yukawa.kyoto-u.ac.jp/english/index.php](http://www.yukawa.kyoto-u.ac.jp/english/index.php)

### ウイルス研究所

#### **INSTITUTE FOR VIRUS RESEARCH**

The Institute for Virus Research was founded to pursue basic and applied virology with both biological and medical

interests in mind. Our research efforts aim to achieve a thorough elucidation of viral-host interactions at the molecular, cellular, individual, and ecological levels. To this end, we conduct basic biomedical studies, including studies on human retroviruses and related diseases, molecular and cell biology, immunology, developmental biology, neurobiology and evolution. Each of our laboratories is affiliated with one of the following Kyoto University graduate schools; the Graduate School of Medicine (9 labs), Science (2), Human and Environmental Studies (1), Biostudies (6) and Pharmaceutical Sciences (1).

[www.virus.kyoto-u.ac.jp/e](http://www.virus.kyoto-u.ac.jp/e)

### 経済研究所

#### KYOTO INSTITUTE OF ECONOMIC RESEARCH (KIER)

Founded in 1962, the Kyoto Institute of Economic Research(KIER) is the only Japanese social science research institute focusing on economic theory. The research activities undertaken at the institute are acknowledged both internationally and domestically, and encompass the fields of econometric analysis, economic strategy and institutions, finance research, and complex economic systems.

In 2010 KIER was designated as a Joint Usage/Research Center with a special emphasis on complex systems, economic strategy and organization by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT). The institute is dedicated to serving the international research community as a leading research hub for theoretical economics, and is also committed to providing high quality education and research opportunities for doctoral students and post-doctoral researchers.

[www.kier.kyoto-u.ac.jp/eng](http://www.kier.kyoto-u.ac.jp/eng)

### 数理解析研究所

#### RESEARCH INSTITUTE FOR MATHEMATICAL SCIENCES (RIMS)

Research Institute for Mathematical Sciences (RIMS) comprises approximately 40 faculty members and 20 post-doctoral fellows working in various fields, including pure mathematics, applied mathematics, mathematical physics, and computer science. It also functions as a Joint Usage/Research Center, expanding the frontiers of the mathematical sciences by providing facilities to mathematicians around the world and organizing international research projects. RIMS hosts more than 70 conferences and workshops every year, mostly of an international nature. The proceedings of those academic meetings are published in the journals RIMS Kōkyūroku (ISSN 1880-2818) and RIMS Kōkyūroku Bessatsu (ISSN 1881-6193). RIMS also contributes to graduate-level education through four courses offered at the Graduate School of Science. The international acclaim for the achievements of RIMS has been acknowledged through two Fields Medals, a Gauss Medal, and two Wolf Prizes awarded to RIMS faculty members.

[www.kurims.kyoto-u.ac.jp](http://www.kurims.kyoto-u.ac.jp)

### 原子炉実験所

#### RESEARCH REACTOR INSTITUTE (KURRI)

The Research Reactor Institute was established as a nationwide joint research center open to public research institutes. The main installation is a light-water-moderated tank-type nuclear research reactor, and the institute is also equipped with an electron linear accelerator, a <sup>60</sup>Co gamma-ray irradiation facility and a critical assembly reactor.

There are three research departments and two affiliated centers on the premises, which undertake research in the fields of nuclear science and engineering, material science, radiation life science and radiation medical science. Our



numerous experimental facilities are utilized by a wide spectrum of academic and public research institutions, with many students and scientists visiting the institute on a daily basis.

The research laboratories offer research courses at the Kyoto University Graduate Schools of Science, Engineering, Energy Science, Medicine, and Agriculture.

Asashiro-nishi, Kumatori-cho, Sennan-gun,  
Osaka 590-0494  
[www.rii.kyoto-u.ac.jp/en](http://www.rii.kyoto-u.ac.jp/en)

### 霊長類研究所

#### PRIMATE RESEARCH INSTITUTE (PRI)

Japan is an ideal country for primate studies as it is the only industrialized country that is home to an indigenous nonhuman species. The Primate Research Institute (PRI) conducts studies with various species of primate – including humans – with the aim of elucidating the origin and evolution of human nature. We work with living subjects and fossil specimens, and take a multi-disciplinary approach which incorporates fields such as ecology, sociology, behavior, cognition, brain sciences, physiology, genetics, genomics, biomedicine, morphology and paleontology. The institute also provides graduate level classroom instruction in the biological sciences.

Students enrolled at the PRI are encouraged to take advantage of financial assistance from various projects to gain laboratory and fieldwork training overseas. An all-English diploma course for international students is also offered.

Kanrin, Inuyama, Aichi 484-8506, JAPAN  
[www.pri.kyoto-u.ac.jp](http://www.pri.kyoto-u.ac.jp)

### 東南アジア研究所

#### CENTER FOR SOUTHEAST ASIAN STUDIES (CSEAS)

The strength of the Center for Southeast Asian Studies (CSEAS) lies in its multi-disciplinary orientation, with the inclusion of the natural sciences, humanities and social sciences. Since its establishment in 1963, the center has investigated the contemporary and historical dimensions of problems confronting present-day Southeast Asia.

While Southeast Asia remains at the center of our attention, research activities are extended to adjoining regions, with studies conducted in Bangladesh, India, China and Korea to enrich comparative perspectives.

Designated as a Joint Usage/Research Center by the Japanese government in April 2010, the CSEAS strives to integrate a broad range of disciplines with solid empirical field research to play a central role in the field of Southeast Asian area studies.

[www.cseas.kyoto-u.ac.jp/en/](http://www.cseas.kyoto-u.ac.jp/en/)

### iPS細胞研究所

#### CENTER FOR iPS CELL RESEARCH AND APPLICATION (CiRA)

The Center for iPS Cell Research and Application (CiRA) was established to develop iPS cell-based technologies for the benefit of patients afflicted with intractable diseases, and to function as a world-leading iPS cell research institute. Under the direction of Prof. Shinya Yamanaka, Nobel Laureate in Physiology or Medicine 2012, approximately 30 research groups work to achieve those goals. Laboratories are organized into five departments focusing on reprogramming, cell growth and differentiation, clinical applications, fundamental cell technology, and ethics. Our research building is equipped with core facilities for animal research and cell processing, and enables seamless movement from basic labs to preclinical and clinical teams. Over the decade, CiRA will work on establishing basic iPS cell technologies, acquiring patents, building an iPS cell bank, conducting preclinical and clinical research, and supporting drug screening and development.

[www.cira.kyoto-u.ac.jp/e](http://www.cira.kyoto-u.ac.jp/e)

