



# Kanazawa University

[Bangkok Office]

Location: King Mongkut's University of Technology,  
Thonburi Campus in Bangkok, Thailand

<http://www.kanazawa-u.ac.jp/>  
and

AP-SixERS (SixERS ASEAN Platform) (tentative)

KMUTT Knowledge Exchange for Innovation Center (KX) 12F

## Introduction



### BASIC DATA

Total Enrollment: 10,222 students  
Budget for 2016: 54,574 million Yen

Colleges	Schools
Human and Social Sciences	Humanities
	Law
	Economics
	Teacher Education
	Regional Development Studies
Science and Engineering	International Studies
	Mathematics and Physics
	Chemistry
	Mechanical Engineering
	Frontier Engineering
Medical, Pharmaceutical and Health Sciences	Electrical and Computer Engineering
	Geosciences and Civil Engineering
	Biological Science and Technology
	Medicine
	Pharmacy
	Pharmaceutical Sciences
	Health Sciences

Faculty and Staff : 2,806 personnel  
Campus Size: Kakuma 2,008,565 m2  
Takara-machi·Tsuruma 151,053 m2

### For more information...

**International Students:**  
<http://www.adm.kanazawa-u.ac.jp/ie/e/index.html>

**Directory of Researchers:**  
[http://ridb.kanazawa-u.ac.jp/public/index\\_en.php](http://ridb.kanazawa-u.ac.jp/public/index_en.php)

**University Outline:**  
<https://www.kanazawa-u.ac.jp/wp-content/uploads/2017/06/en2017.pdf>

Graduate Schools
Human and Socio-Environmental Studies
Natural Science and Technology
Medical Sciences (includes Pharmacy and Health Sciences)
Advanced Preventive Medical Sciences
Frontier Science Initiative
Law School (Professional Degree Course only)
Professional Development in Teacher Education (Professional Degree Course only)
United Graduate School of Child Development

A research university dedicated to education, while opening up its doors to both local and global society

----- **Kanazawa University**

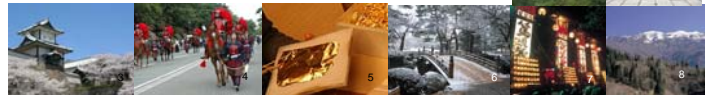
the Stronghold of Intellect in East Asia



The origin of Kanazawa University dates back to a smallpox vaccination center established by the Kaga Clan in 1862. It is the third oldest national university and one of the Hokuriku Region's major institutions of higher education. Succeeding the history and tradition of its predecessors, the university was established in 1949.

### Ishikawa and Kanazawa

Ishikawa prefecture is famous for its beautiful four seasons, rich tradition and history, hot springs, and exceptional food of land and sea resulting in famous gourmet culture. Satoyama in Noto Peninsula is an Agricultural World Heritage registered by UNESCO. (Satoyama means "local mountain area," and it is a ecosystem in which human civilization and local biodiversity coexist in harmony.)



1 Senmaida(1,000fold rice fields) / 2 Shiroyama-Hime Shrine(Hakusan worship) / 3 Kanazawa Castle / 4 Hyakumangoku Festival / 5 Metal Gold Leaf (Traditional Art) / 6 Kenroku-en Garden / 7 Kiriko Festival (giant lanterns) / 8 Mt. Hakusan

**Kanazawa University Alumni Association in Thailand** was established on August 23, 2014. The Foundation Party took place in Bangkok, and President Koetsu Yamazaki and other delegates participated. The event was attended by 8 honorable guests from Thai universities and the Embassy of Japan in Thailand, as well as 31 alumni and their company. There is much anticipation for further exchanges through the network of the association.

## Major research projects



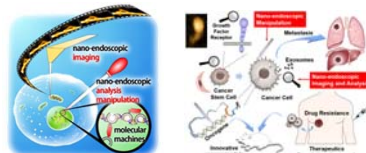
### Nano Life Science Institute (NanoLSI)

<https://nanolsi.kanazawa-u.ac.jp/>

**Outline** ----- Aims to combine the world's most advanced bio-scanning probe microscopy (SPM) and methods in supramolecular chemistry to develop "nano-endoscopic techniques" that enable direct imaging, analysis, and manipulation of protein, nutrient, and nucleic acid nano-dynamics on the cell surface and inside the cell. Its goal is to facilitate complementary use of this technique with multi-scale simulation technology to further the current understanding of various molecular cell dynamics related to cancer pathogenesis. Furthermore, we aim to develop a novel field of study based on this technology, known as "nano-probe life science," committed to enhancing our current understanding of various biological phenomena including those associated with cancer pathogenesis.

**Specialties** ----- 1. To ensure sustainability of this center, the budget and human resources of an existing organization, which was formed with the goal of creating new, interdisciplinary fields of study, will be utilized. 2. To reduce administrative work to a minimum and cultivate a research-focused environment, the university's unique "research professor system" will be applied to all Principal Investigators. 3. To nurture young researchers with interdisciplinary, comprehensive, and international research capacities, specially selected educational programs will be developed..

**Research Aims** ----- 1. To enable intra/extracellular imaging at the nanoscale level, we will integrate Kanazawa University's state-of-the-art bio-SPM technologies, such as high-speed 3-dimensional atomic force microscopy (AFM) and rapid scanning ion-conductance microscopy (SICM). 2. To enable analysis and manipulation of intra/extracellular nanoscale dynamics, we will integrate bio-SPM and techniques in supramolecular chemistry, such as molecular sensors and molecular machinery. 3. To further our understanding of the causes of various functional abnormalities exhibited by cancer cells at the nanoscale level, we will utilize innovative nano-probe and simulation technologies..



### CHOZEN PROJECT

<http://www.o-fsi.kanazawa-u.ac.jp/research/chozen/>

**Development of Nanoscience Research Base by Innovative Atomic Force Microscopy Techniques** ----- Aims to strengthen the research ability and foundation of sustainable development of Kanazawa University in the nanoscience field, through atomic force microscopy (AFM) research that is already at the world's highest standard.

**Establishment of Research Base for Nutrition-Related Diseases** ----- Focuses on the research of liver nutrition related diseases such as diabetes, hypertension, hyperlipidemia and cancer, and organopathy caused by excess nutrition, which leads to the development of an advanced medical method of disease prevention/diagnose/treatment.

**Innovative Project of Research Base for Cancer Progression** -----Plans to enforce function of three core research programs of the Cancer Research Institute of Kanazawa University: "Cancer Stem Cell Program," "Cancer Microenvironment Program" and "Molecules Target Search Program." Moreover, integrated research of a genetically modified mice based on the latest genome information and transplantation model to a super immunodeficiency mice at the "Innovative Cancer Model Research Center" will be promoted.

**Establishment of a World's Leading Research Center for Cultural Resource Management** ----- Promotes further developments of the research, education, and international contribution conducted by the Center for Cultural Resource Studies of the Institute of Human and Social Sciences, and aims to establish a world-class research center for the "cultural resource management."

**Establishment of the Developmental Base for the Innovative Material Science Using Supramolecule** ----- Aims to create an innovative supramolecule material through a new idea developed by the combination of research know-how and to improve research competitiveness. This is made possible by the combination of research groups from science and engineering fields and the exchange of supramolecule techniques of each field.

