Kyoto University On-site Laboratory: International Research Laboratory for Earthquake and Tsunami Risk Cognition and Reduction

General Information

- Established by the Disaster Prevention Research Institute (DPRI)
- Partner Institution: National Autonomous University of Mexico (UNAM)
- Establishment (scheduled): November 2024
- Location: (Cross-bound type)
  National Autonomous University of Mexico (UNAM), Mexico City, Mexico (outbound)
  Disaster Prevention Research Institute (DPRI), Kyoto University, Uji, Kyoto, Japan (inbound)
- Purposes: An interdisciplinary research center on the disaster mitigation of earthquake and tsunami in subduction zones
- Functions: Enhance understanding of earthquake/tsunami disasters and risks through natural science, engineering, and social sciences

Positive ripple effects on the university's activities

- Establishment of the new academic field, "Comparative Earthquake and Tsunami Disaster Science."
- Publicize Kyoto University's leading role in earthquake and tsunami disaster prevention research.
- Serve as a hub laboratory with the Latin American research community.
- Recruit excellent master's and doctoral students.

Activity Overview

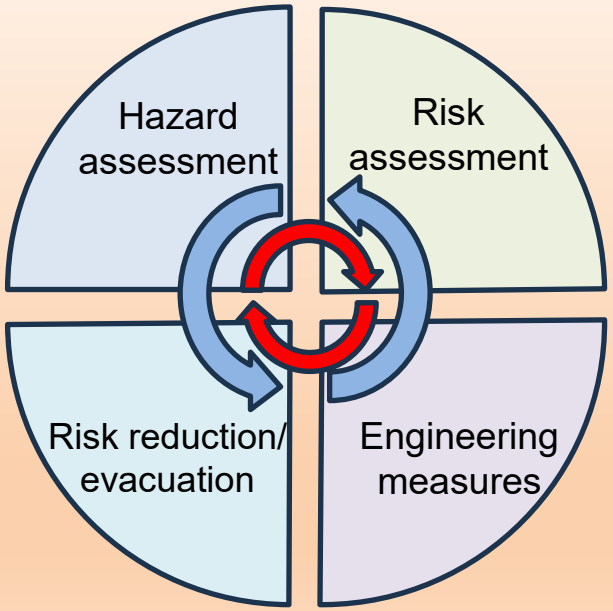
Kyoto University
Disaster Prevention Research Institute (DPRI)

Cooperation with national government/local governments/communities

UNAM On-site Laboratory

International Research Laboratory for Earthquake and Tsunami Risk Cognition and Reduction

A research base for comparative studies on earthquake and tsunami disasters in subduction zones worldwide



"Risk communication" to promote disaster risk reduction in society

Effective evidence-based risk mitigation strategies

Proposal of engineering measures and evacuation strategies

Autonomous University of Mexico (UNAM)
School of Engineering/ Institute of Geophysics

Cooperation with national government/local governments/communities

Kyoto University On-site Laboratory

Kyoto University On-site Laboratory: Kyoto University-China Medical University Lab, Taiwan

General Information

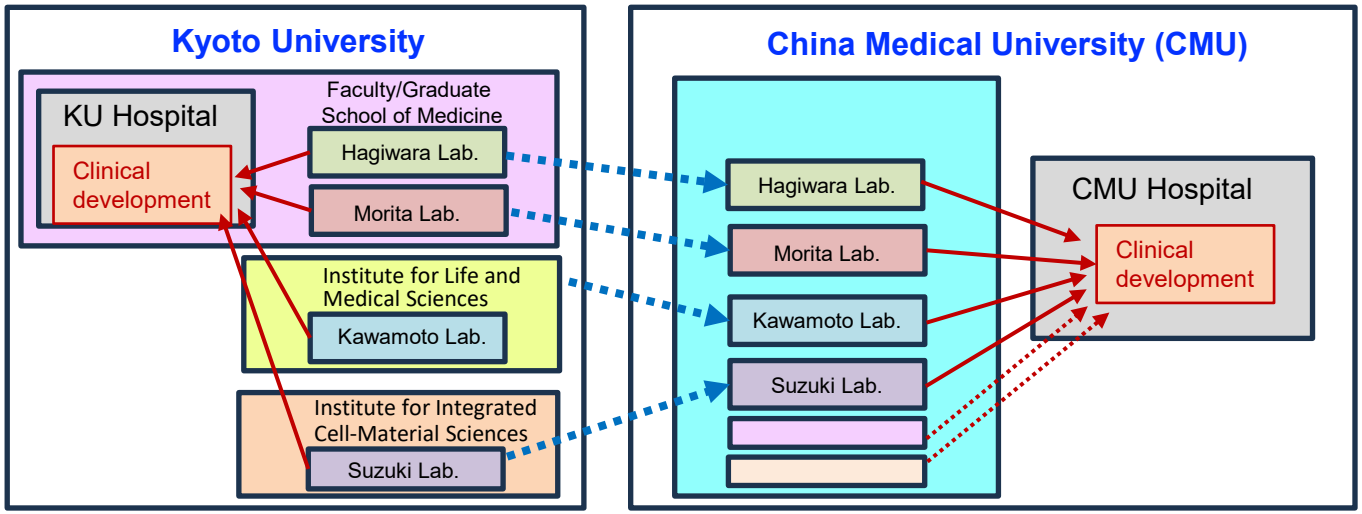
- Established by the Faculty of Medicine, Graduate School of Medicine, Institute for Life and Medical Sciences, and Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- Partner Institution: China Medical University (CMU)
- Establishment (scheduled): October 2024
- Location: Taichung, Taiwan (outbound)
- Purposes: Promotion of clinical trials/Collaborative development of new strategies for clinical application
- Functions: Clinical trials using drugs and technologies developed at Kyoto University will be transferred to CMU via the on-site lab, where clinical trials will be conducted. The on-site laboratory will not only transfer the technology, but will also conduct joint research for further technological development and non-clinical trials to expand the range of target diseases.

Positive ripple effects on the university's activities

- Clinical trials using drugs and technologies developed at Kyoto University can be carried out at CMU Hospital.
- This will efficiently increase the number of clinical trial participants, and will serve as a bridgehead for global development.
- CMU will also benefit from being able to conduct joint development based on Kyoto University's materials and technologies.
- Research exchange is expected to lead to interdisciplinary development.

Activity Overview

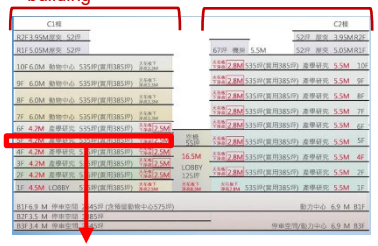
- The location (building and lab space within the building: 636 m^2) has been prepared (see diagram on the right).
- A total of four labs are planned to participate (three currently active labs and one new lab).
- Additional labs can participate in the on-site laboratory.
- A resident PI who will coordinate the entire lab will be employed through a cross-appointment by Kyoto University and CMU.

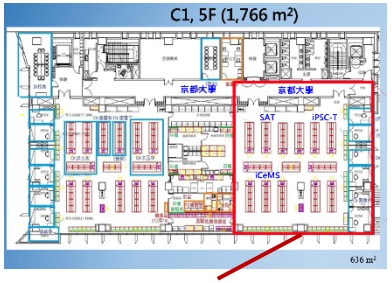


C1/C2 Building, Shui-Nan Campus

Joint research building

Industry-academia collaboration building





Space prepared for KU on-site lab. (636m^2)

Kyoto University On-site Laboratory: INitiative for INtelligent ChemBioInformatics (IN-CBI)

on-SITE Laboratory

General Information

- Established by Institute for Integrated Cell-Material Science (iCeMS), Institute for Advanced Study (KUIAS), and backed by the Institute for Chemical Research
- Partner Institution: Indian Institute of Technology Roorkee
- Establishment (scheduled): October 2024
- Location: (Cross-bound type)
  Indian Institute of Technology Roorkee, Roorkee, Uttarakhand, India (outbound)
  KUIAS, Kyoto, Japan (inbound)
- Purpose: Scripting an ecosystem to develop intelligent medical tools for age-related diseases
- Functions: Establishment of a hybrid (physical and virtual) platform between Kyoto University and premier Indian research institutions to efficiently identify and exchange outstanding students and early career researchers for education

Positive ripple effects on the university's activities

- Collaborate with India's top-tier engineering and medical institutions to co-develop innovative chemical biology tools at Kyoto University.
- Cultivate a new generation of scientists through the exchange of top students and researchers, empowering them to contribute to the global scientific community.
- Create an environment in which Kyoto University can become a "first destination" for Indian students.

Activity Overview

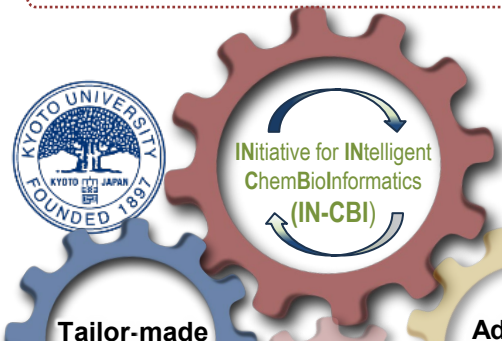
A hybrid (physical and virtual) cross-bound on-site laboratory for accelerating the development of intelligent (=programmable molecular design) chemical biology tools with the aim of advancing precision medicine

- Promoting research exchange and brain circulation as a hub between Kyoto University and the IIT network

Physical — **Provisional space by IIT Roorkee (3500 m²) and iCeMS (124 m²), cross-appointment of principal investigators, assignment of resident researchers by IIT and Kyoto University**

iCeMS KYOTO UNIVERSITY WPI Research Center

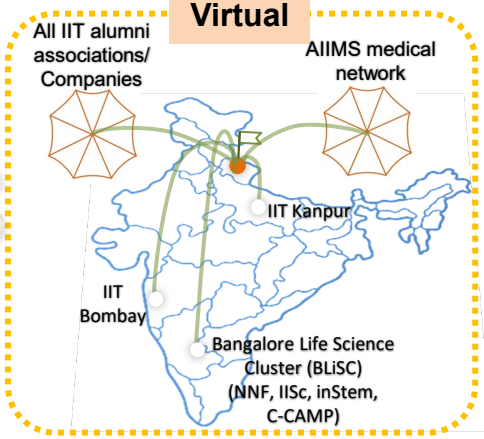
KYOTO UNIVERSITY Institute for Chemical Research ICR



सत्यमेव जयते
Government of India

- ✓ Cross-border funding initiatives
- ✓ Sustainable mechanisms
- ✓ Network expansion
- ✓ Regional development contribution
- ✓ Engagement and outreach activities

Virtual



- The synergistic effect of combining IIT Roorkee's outstanding engineering environment and Kyoto University's expertise in chemistry and cell biology will accelerate collaborative research to understand and treat age-related diseases.