

Kyoto University On-site Laboratory: Quantum Nano Medicine Research Center



General Information

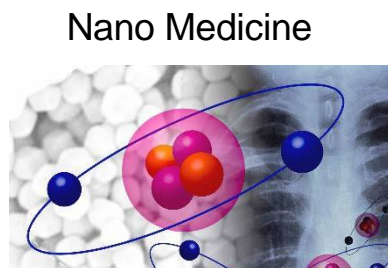
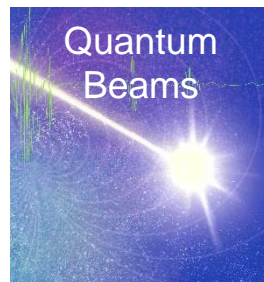
- ◆ Approved in FY 2019
- ◆ Established in October 2019
- ◆ Established by the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- ◆ Partner institution: The University of California Los Angeles (UCLA), USA
- ◆ Purposes: Quantum nano-medicine research with a focus on cancer treatment applications, development of new research fields, and expansion of collaboration with UCLA and industrial partners
- ◆ Location: Kyoto University, Kyoto, Japan (inbound)
- ◆ Functions: Promoting academic, researcher and student exchange between UCLA and Kyoto University, Hosting symposiums and seminar series

Positive ripple effects to the university's activities

- Establishment of new academic fields
- Ripple effects radiation medicine research
- Collaboration with the Institute for Integrated Radiation and Nuclear Science and SPring-8
- Collaboration with research centers in California
- Ripple effects on industries in California and Japan
- Advancements in quantum nano medicine research have influenced research at Kyoto University, including the development of new radiation therapies. The center promotes interdisciplinary research that transcends disciplinary boundaries at the university
- The center provides opportunities for the university's researchers and world-class researchers in the US to interact by engaging in its activities

Activity Overview

iCeMS, KUIAS,
Kyoto University



Quantum Nano Medicine Research

Dept. of MIMG/UCLA



Collaboration: Institute for Integrated Radiation and Nuclear Science and SPring-8

Main Activities in FY 2024

Academic exchange between UCLA and Kyoto University, publication of the **KAWARABAN** newsletter

- Gave a keynote lecture titled “Nanomedicine and cancer ” and discussed how nanomedicine is revolutionizing for cancer at Nano conference.
➤ Held on May 22-24, Tohoku University
- Gave a presentation on recent findings about BNCT with dipeptides titled “Tumor eradication by BNCT with boron-conjugated novel dipeptides”.
➤ Held on July 26-27, Osaka Medical and Pharmaceutical University
➤ The 20th Congress on Neutron Capture Therapy
- Organized a session on “Current situation and future of CAM model” at the joint meeting of Japan Society of Patient-Derived Cancer Model and the Japan Society of Human Cell Science in August 2024.
➤ Held on August 21-23, National Cancer Institute
- Gave a talk entitled “Boron neutron capture therapy (BNCT): SLC family membrane transporters and boron compound uptake” on the 52nd International Symposium of The Princess Takamatsu Cancer Research Fund.
➤ Held on November 12-14, Palace Hotel Tokyo, Japan

