Kyoto University-UCLA International Symposium
/ 25th iCeMS International Symposium

Organized by **iCeMS** *of Kyoto Univ*
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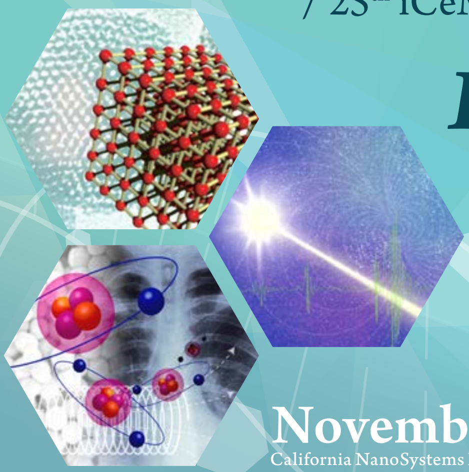

Harnessing Physical Forces for Medical Application

November 15–16 2018
California NanoSystems Istitute Auditorium at UCLA

Convergence of
Physics, Nanomaterials, Cell Biology and Cancer Research

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One of the recent excitements in physical science research is the discoveries and characterization of novel particles and beams. The pace of discovery is quickened by the construction of particle accelerators as well as progress in astronomy that examines stars such as neutron stars. In addition, laser studies are focusing on new light sources. Progress on magnetic field and sound are also fueling new discoveries.

Cells respond to external forces. Major advance has been made recently on elucidating mechanisms cell possess to respond to external cues such as external force. Application of the various physical forces to medical research, therapy and diagnosis has the potential to change medical practices.

Improved X-ray beams with increased energy are having impact in the way radiation therapy is carried out, Neutron beams play a major role in boron neutron capture therapy (BNCT) for cancer treatment. Light and magnetic field are increasingly utilized in cancer therapy. This advance is further accelerated by the development of novel nanomaterials that respond to various external cues. Furthermore, cancer diagnosis is seeing advancement by improved use of physical forces.

This meeting is intended to bring together physicists, material scientists and medical researchers to brain storm state-of-the-art knowledge in each field, discuss critical issues and to promote discussion on future possibilities.

For more information visit **u.kyoto-u.jp/icems-cnsi**

Hosted by
University of California Los Angeles
Kyoto University

Co-Hosted by
UCLA Jonsson Comprehensive Cancer Center
UCLA David Geffen School of Medicine
UCLA Clinical and Translational Science Institute
San Francisco Office of Japan Society for the Promotion of Science

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