



生醫系/醫資系 特別演講

講題 The Leading-edge Applications of Mass Spectrometry in the Drug Discovery & Diagnosis for Precision Medicine

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地點 實驗大樓一樓演講廳

講者介紹

Dr. Sato received Ph.D. in medical school from Osaka university in 1990. As postdoc at MIT and Burnham Inst., CA. In 1995, he was appointed a tenure in Columbia University. In 1997, he became a Chief Scientist of Molecular Oncology Laboratory at RIKEN, JAPAN. In 2003, he joined Shimadzu Corporation as a Chief Scientist of Life Science Laboratory and he has been a Director of Life Science Research Center in Shimadzu Corporation since 2008. He is currently conducting several research laboratories collaborating and focusing on discovery of new cancer biomarkers by advanced Mass Spectrometry. He is now a Director of R&D Center for Precision Medicine in Tsukuba University, which is currently focusing on the multi-omics analyses including the whole genome sequencing-based approaches for the development and/or progression of human cancers as well as the liquid biopsy.

演講摘要

Driven by the development of high-end mass spectrometers, proteome & metabolome analysis are currently expanding to single-cell imaging & characterization of heterogeneity in post-translational modification. The main topics of the present seminar include: (1) visualization of molecular abundance in biological specimens by mass spectrometry imaging (MSI); (2) high-sensitivity detection of diagnostic markers by Immuno-Beads MS technology; (3) a brief introduction to molecular cohort studies by integration of next-generation sequencing & mass spectrometry system for contribution in Precision Medicine.