Medical Chemistry Seminar

“Crosstalk between the Ubiquitin-Proteasome System and Metabolism”

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Date: November 6 (Thu), 2025
Time: 15:00–16:00
Venue: Bldg. A Rm 103, 107
11月6日（木）15時より、場所：A棟103, 107室

Cellular metabolites are essential components of life processes, and their import, biosynthesis, and enzymatic conversion are regulated by a wealth of pathways. The ubiquitin-proteasome system (UPS) plays a major role in ensuring that key metabolic regulators are maintained at proper levels, to control concentrations of ions, carbohydrates, amino acids, cofactors, and lipids. In particular, the activities and localization of critical ubiquitination enzymes (E3 ligases) and the proteasome must be tightly regulated to ensure that degradation is restricted to proteins that are unwanted, superfluous, or toxic, while sparing those proteins needed for ongoing metabolic functions. Many projects in the lab to decipher molecular principles underlying crosstalk between ubiquitination and metabolites at large. In this talk, I will highlight our findings on the visualization of dynamic assemblies involved in crosstalk between metabolism and the ubiquitin-proteasome system.

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