## セミナーのお知らせ

## "Chromatin Modifiers in Epigenetic Control of Cancer and Stem Cells"

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Date: Jul 7<sup>th</sup> Tuesday Time: 4 pm to 5 pm

Location: Biken Hall, 1st Floor, Main building, Research Institute for Microbial

Diseases (微研ホール、微生物病研究所 本館 1F)

Epigenetics encompass inheritable changes in gene expression profiles that occur without alterations to the genomic DNA sequence. Epigenetic modifications conduct important roles in diverse biological processes. Histones and nonhistone proteins including chromatin modifiers and transcriptional coregulators are subject to diverse epigenetic modifications including phosphorylation, acetylation, methylation, ubiquitination, and SUMOylation. These diverse post-translational modifications can modulate the activity of chromatin modifiers altering the chromatin state for either activation or repression. In this presentation, I will discuss our continued efforts to decipher epigenetic regulatory mechanism of cancer and stem cells. I will introduce newly identified signaling crosstalk regulated by chromatin modifiers and address its biological meaning in cancer and stem cells.

## Reference:

- 1. Pontin Functions As an Essential Coactivator for Oct4-Dependent LincRNA expression in Mouse Embryonic Stem Cells. **Nature Communications** 2015, DOI: 10.1038/ncomms7810.
- EZH2 Generates a Methyl Degron That Is Recognized by the DCAF1/DDB1/CUL4 E3 Ubiquitin Ligase Complex. Molecular Cell 2012, 48, 572-586. 2012 (Cover Article)
- 3. When Signaling Kinases Meet Histone and Histone Modifiers in the Nucleus. **Molecular Cell** 2011, 42, 274-284.
- 4. Negative Regulation of Hypoxic Responses via Induced Reptin Methylation. **Molecular Cell** 2010, 39, 71-85. (**Cover Article**)

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