RIKEN SEMINAR

4 14th Epigenetics Seminar Series 2017-2018

Title

Role of H3K9 methylation dynamics for mammalian reproduction

Covalent modifications of histone tails are epigenetic marks that play roles in many nuclear processes. Among them, methylation of histone H3 lysine 9 (H3K9) is a hallmark of transcriptionally silenced heterochromatin. Various types of H3K9 methyltransferases ("writers") and demethylases ("erasers") have been discovered in mammals. Considering that H3K9 methylation writers and erasers are expressed in a cell-type-specific and developmental-stage-specific manner, H3K9 methylation levels are regulated not statically but dynamically during development. We found that H3K9 methylation levels are dynamically regulated both in somatic cells and germ cells in the mouse reproductive processes. Here we discuss the functions of H3K9 methylation writers and erasers in gonadogenesis and gametogenesis.

Speaker

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Language: English

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Location: 408 Seminar Room, Chemical Biology Bldg., Wako

Live telecast from Wako Main

< Kobe: N701-703 Seminar Room, CDB Bldg. A> < Yokohama: C210/C212, Central Research Bldg.>

<Tsukuba: Moriwaki Hall>

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