
The 153rd iCeMS SEMINAR

Thu 12 December 2013
14:00-15:00

"Shuriken" prevents infertility: Genomic integrity in germ cells

Lecturer: **Dr Takamune Saito**
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Venue: Room 119
iCeMS Research Building No. 1/Project Lab
Kyoto University

Declining birth rates are a social problem in advanced nations. Infertility is one of its causes. Nowadays, approximately 15% of couples are suffering from infertility, therefore there is tremendous urgency in performing investigations to determine the causes and establish treatments for infertility. Meiosis is a special type of cell division that generates eggs and sperm resulting in halving of the chromosome number. Especially, crossover recombination between homologous chromosomes is essential for meiosis. Failure to successfully complete crossover recombination leads to genomic instability and aneuploidy, resulting in infertility, miscarriages and infant cancer in newborns. In this seminar, I will introduce the mechanisms of recombination focusing on the "Shuriken"-like multinuclease complex discovered by us and discuss its unexpected aspects.

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Hosted by: iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University

