

## **FBS Seminar**

July 12 (Wed), 2017 16:00 - 17:00

2F Seminar room, BioSystems Building

## Prof. Hironori Funabiki

The Rockefeller University, New York

## "When DNA meets the cytoplasm -- does the cytoplasmic DNA sensor cGAS respond to mitotic chromosomes?"

When chromosomes are exposed to the cytoplasm, they induce spindle assembly during mitosis and recruit the nuclear envelope at the exit of mitosis. However, exposure of pathogenic foreign DNAs, such as those from viruses and bacteria, to the cytoplasm is recognized by the cyclic GMP-AMP (cGAMP) synthase cGAS, which induces inflammatory signaling pathways to defend against infections. While the nuclear envelope can prevent cGAS from engaging genomic self-DNA, consequences of exposure of mitotic chromosomes to cGAS upon nuclear envelope breakdown are unknown. Our recent progress toward this question will be presented.

Chairperson: Tatsuo Fukagawa

If you want to speak with prof Funabiki in person, please let me know. I will arrange the Interview with him.

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世話人:深川竜郎 ( $\underline{tfukagawa@fbs.osaka-u.ac.jp}$ , 06-6879-4428) セミナー前に 2 時間ほど個別の discussion を行います。面談希望者は、深川までご連絡ください。議論の時間をアレンジいたします。