

FBS Seminar

November 26 (Mon), 2018 16:30 - 17:30

2F Seminar room, BioSystems Building

Iain Cheeseman

Whitehead Institute for Biomedical Research, MIT

"From hibernation to proliferation: Modulating centromere and kinetochore function across cell state"

The macromolecular kinetochore structure plays an essential role in chromosome segregation by mediating chromosome-microtubule interactions. Prior work has analyzed centromere and kinetochore function primarily in rapidly dividing cell types. However, recent work indicates that the kinetochore is modulated within the same organism, with kinetochore composition and function changing over the cell cycle, during meiosis and development, and across diverse physiological situations. This plasticity appears to be critical for the kinetochore machine to flexibly adapt to diverse situations and functional requirements. I will discuss specific examples of how kinetochore function is modulated under different physiological contexts. In particular, I will discuss our work to understand how centromere and kinetochore function is maintained during extended periods of cell cycle arrest to ensure that cells are able to undergo future proliferation following release from this hibernation.

Chairperson: Tatsuo Fukagawa

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

06-6879-4428, tfukagawa@fbs.osaka-u.ac.jp

世話人:深川竜郎 (<u>tfukagawa@fbs.osala-u.ac.jp</u>, 06-6879-4428)

セミナー終了前、後に、Cheeseman 博士と個別の discussion を行います。面談希望者は、深川までご連絡ください。