

Nano and Visual Biology of Chromosome Dynamics

16 - 17 October 2004; Shiran Kaikan, Kyoto University

主催：染色体ナノデバイス研究会
(文部科学省 科学技術振興調整費 総合研究)
後援：特定領域研究「細胞核ダイナミクス」

October 16

- 09:00-09:10 Opening Remarks
Kunio Takeyasu (Kyoto University)
- 09:10-09:50 New proteins that regulate mitotic chromosome structures
William Earnshaw (MRC)
- 09:50-10:15 Proteomic analysis of human metaphase chromosome
Kiichi Fukui (Osaka University)
- 10:15-10:30 Conserved Mis12 centromere complex: Link to heterochromatin HP1 and outer kinetochore Zwint-1
Chikashi Obuse (Kyoto University)
- 10:30-10:45 Coffee Break**
- 10:45-11:25 Structure and function of centromeric chromatin in flies and humans
Gary Karpen (Lawrence Berkeley National Laboratory)
- 11:25-11:45 Chromosome nanoFISH: An effective tool for nano-resolution single gene detection using SNOM/AFM
Toshiro Ohtani (National Food Research Institute)
- 11:45-12:00 Mapping the dynamic organization of a nucleolar structure in living cells
Takuya Saiwaki (Osaka University)
- 12:00-13:00 Lunch Break**
- 13:00-13:40 New techniques for visualizing telomeres and centromeres within the nucleus in fission yeast meiosis
Yasushi Hiraoka (Kansai Advanced Research Center)
- 13:40-14:15 Visualization of centromeric proteins/DNA in *Arabidopsis thaliana*
Minoru Murata (Okayama University)
- 14:15-14:50 Chromosome dynamics and the spindle pole body in fission yeast
Osami Niwa (Kazusa DNA Research Laboratory)
- 14:50-15:30 Lessons learned from chromosome engineering
Mitsuo Oshimura (Tottori University)

15:30-15:45 Coffee Break

- 15:45-16:25 Meiotic chromosome dynamics in *C. elegans*
Abby Dernburg (University of California at Berkeley)
- 16:25-17:05 Histone assembly and exchange in human cells: from visualization to reconstitution
Hiroshi Kimura (Kyoto University)
- 17:05-17:45 Large scale chromatin structure and dynamics
Andrew Belmont (University of Illinois)

18:00-20:00 Wine, Beer, Cheese, Vegetable and Meats

October 17

- 09:00-09:25 Chromosome Data Base
Kohei Akazawa (Niigata University)
- 09:30-10:10 Regulators of chromosome movement and the mitotic spindle checkpoint
Gary J. Gorbsky (University of Oklahoma)
- 10:10-10:35 Chromosome imaging in liquid
Tatsuo Ushiki (Niigata University)
- 10:35-10:50 Physical nature of yeast chromatin
Toshiro Kobori (National Food Research Institute)
- 10:50-11:05 Partition mechanism of F-plasmid in *Escherichia coli*
Shun Adachi (Kyoto University)
- 11:05-11:30 What do we learn from bacterial chromosomes?
Kunio Takeyasu (Kyoto University)
- 11:30-11:55 Key tools for nano-biotechnology
Takahito Inoue (Nat'l Inst Ad Indust Sci Tec; AIST)
- 11:55 Closing Remarks
Kiichi Fukui (Osaka University)

Optional

13:00-18:00 Sight-seeing in the Kiyomizu Temple and Gion area

18:00 Dinner at Nanzenji (¥ 5000)