
The 42nd iCeMS SEMINAR

2009 12. 25 (金)
16:00-17:00

講演者： 佐藤 綾 氏

カリフォルニア大学バークレー校 分子細胞生物学部
ローレンス国立研究所 ライフサイエンス部門
ハワードヒューズ医学研究所

演 題： **Cytoskeletal Forces Span the Nuclear Envelope to
Coordinate Meiotic Chromosome Pairing and
Synapsis**

場 所： 京都大学 アイセムス本館 2階（東一条北西角）
セミナー室（A207）

A mystery of sexual reproduction is how maternal and paternal chromosomes recombine and separate during meiosis to generate haploid gametes. Using genetic and cytological approaches, we are investigating how each chromosome finds and recognizes its unique homologous partner in the nematode *C. elegans*. We provide evidence that special regions on each chromosome, known as "Pairing Centers", establish physical connections across the nuclear envelope to cytoplasmic microtubules and dynein to facilitate homolog pairing. Our results also suggest that generation of force is used to assess homology and to license subsequent chromosome interactions, including synapsis, during meiotic prophase.