(Center for Meso-Bio Single-Molecule Imaging = CeMI)

The 34th iCeMS SEMINAR

アイセムス メゾバイオ1分子イメジングセンター 設置記念セミナーシリーズ 9

2009 10. 23(金)

15:00 - 17:00

場 所: 京都大学 再生医科学研究所

西館1階 第一会議室

講演者 1: Jacco van Rheenen, Ph.D.

Assistant Professor
Hubrecht Institute
Developmental Biology and Stem Cell Research
Utrecht, The Netherlands

演題: Cofilin-Mediated Actin Remodeling is Important for Migration and Metastasis of Mammary Carcinoma Cells

Cofilin is an actin severing protein, involved in cell migration and metastasis. Using intravital and high resolution imaging, Drs. Jacco van Rheenen, John Condeelis, and their colleagues showed that cofilin gets locally released from the membrane and activated upon phospholipase C-mediated PIP2 hydrolysis. Based on these and other observations, they conclude that these processes that occur at the cell cortex is a critical step for initiating EGF-induced migration and metastasis.

講演者2: Dinah Loerke, Ph.D.

Assistant Professor Department of Physics & Astronomy University of Denver, U. S. A.

演題: Correlative Intensity Timecourse Analysis in Endocytosis

Using total internal reflection fluorescence microscopy (TIR-FM) and automated detection-tracking, Drs. Dinah Loerke, Gaudenz Danuser, and their colleagues have measured the maturation dynamics of large populations of clathrin-coated pits (CCPs). While fluorescence intensity timecourses of clathrin and other coat proteins contain valuable information, intensity analysis is far from trivial due to the high noise. They have developed an intensity analysis assay that retains heterogeneity between different lifetime CCP cohorts, and preserves fast dynamics within the cohort, clarifying the association of endocytic factors with cortical actin dynamics across the entire CCP lifetime.

主 催: 京都大学 物質-細胞統合システム拠点(iCeMS=アイセムス)

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