



110th CRC Seminar

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”A versatile *in vitro* system to study translocation and functional integration of bacterial outer membrane proteins”

時間 : 2017年12月4日(月) 14:00~15:30

場所 : 総合教育研究棟 1F 遠隔講義室
(生命系スペースC)

Because outer membrane proteins in Gram-negative bacteria play a key role in immunogenicity, virulence, and antimicrobial resistance, understanding of outer membrane protein biogenesis and protein translocation across bacterial outer membranes are the basis of new antimicrobial strategy development. However, the mechanisms of outer membrane protein translocation and integration are still poorly understood particularly because of the lack of a convenient biochemical assay. To this end, we have developed a versatile *in vitro* system to investigate these fundamental biological events. We could demonstrate the versatility of this *in vitro* biochemical assay with various examples including the assembly of β -barrel outer membrane proteins, two-partner secretion and autotransporter translocation. Thus, this system will be valuable for an in-depth analysis of these bacterial outer membrane related events.

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