



# CDB SEMINAR

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Thursday, June 12, 2008  
16:00~17:00 A7F Seminar Room

## Characteristics of Epithelial Intercellular Adhesion and Cell Proliferation

### Summary

Epithelial cell sheets are sheets of cells that cover the internal and external surfaces and form compartments in the bodies of multicellular organisms. The sheet-like divisions consisting of epithelial cells are not just septa for division; they also allow the selective permeation of substances and ions, while excluding unnecessary or toxic ones to maintain homeostasis. Disorders of epithelial cell sheets lead to various pathological states. Thus, study of how epithelial cell sheets develop is important for an understanding of the function of each individual organ.

The cell-cell adhesion characteristics of epithelial cells have important roles in the formation of the epithelial cell sheets and in their functioning as such septa. Here, I will present topics concerning analyses of the formation of the cell-cell adhesion apparatus, based on the role of ZO-1 molecules. I will also discuss the regulatory mechanism of epithelial cell proliferation, based on the compartment formation by adherens/tight junctions formed as a result of intercellular adhesion.

### Host:

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