



# CDB SEMINAR

## Yojiro Yamanaka

Program for Stem Cells and Developmental Biology  
Hospital for Sick Children, Toronto, Canada

Thursday, April 17, 2008  
13:30~15:00 C1F CDB Auditorium

### **Live imaging analysis of morphogenesis and lineage formation in the early mouse embryo**

Early vertebrate development proceeds by a series of distinct developmental processes. After fertilization, the embryo goes through cleavage, blastula, gastrula and neurula stages. At each stage, the embryo establishes various cell lineages and progressively acquires its unique morphology. Because it has been difficult to continuously observe single embryos throughout development, knowledge of early mouse morphogenesis has been limited and the timing of transition from one stage to the next is sometimes ambiguous. Using a combination of live imaging and genetics, I have analyzed morphogenesis and lineage formation at the level of individual cells. Continuous observation of single embryos throughout processes provides novel insights into early mouse development. I will present my work on preimplantation and gastrulation mouse embryo development.

**Host:**  
**Masahiko Hibi**  
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