



CDB SEMINAR

Speaker: **Jose Silva**

<Institute for Stem Cell Research, University of Edinburgh>

Title: **“Reprogramming of a differentiated genome into a pluripotent genome”**

Date: Monday, November 14

Time: 14:00 -15:00

Place: 7F Conference Room of Building A,CDB

Summary:

During embryo development, pluripotent cells differentiate into many distinct cell types. These are defined by the specific subsets of genes that are either activated or repressed, the epigenome. Significantly, a differentiated epigenome can be reverted to pluripotency by either nuclear transfer into enucleated oocytes or cell fusion with Embryonic Stem (ES) or Embryonic Germ cells. Reprogramming of the genome also occurs *in vivo*, in Primordial Germ cells entering the genital ridges and in the cells of the blastocyst that will give rise to the pluripotent epiblast. To investigate putative factors involved in reprogramming we used cell fusion of ES cells with ES, Neural Stem cells, Mouse Embryonic Fibroblasts and Thymocytes and determined the ability of manipulated cells to produce pluripotent ES-differentiated cell hybrids.

Host: Shin-Ichi Nishikawa <Stem Cell Biology, CDB>

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