



# CDB SEMINAR

Speaker: **Robert Kay**  
< MRC Laboratory of Molecular Biology, Cambridge >

Title: “Pattern formation in development  
without positional information”

Date:	Monday, September 27
Time:	16:00 P.M. - 17:00 P.M.
Place:	7F Conference Room of Building A

## Summary:

During development small groups of cells in the embryo become organized into distinct regions, which have different fates and patterns of gene expression. This patterning can be brought about by gradients of morphogens, so that a cell's fate depends on its position: by 'positional information'. I shall describe an alternative way of producing pattern in which different types of cells first appear intermingled with each other, and then sort out into discrete tissues by physical movement. In *Dictyostelium* development, there is strong evidence that this is the method used to produce the prestalk/prespore pattern, with the diffusible signal DIF-1 as one of the key regulators of cell-type proportioning. I shall also raise evidence from other laboratories that such a non-positional system may work in vertebrate development. The *Dictyostelium* genome project has just been completed, and I shall briefly describe this as an introduction to the organism.

Host: **Asako Sugimoto** <Developmental Genomics, CDB>  
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