

15 APRIL

2.30 P.M. ROOM POVO 1

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Understanding the remote control of gene transcription: lessons from the pluripotency gene Sox2

Sophisticated control of gene expression programs during development is brought about by enhancers, elements which can activate target promoters over large genomic distances. Despite great progress in identify and characterizing enhancers, it is still not clear how exactly they regulate transcription with such specificity. Chromatin conformation capture experiments suggest that enhancers physically contact their regulated genes via "looping" interactions, but recent microscopy experiments raise questions over this simple model. Using the pluripotency gene Sox2, and its embryonic stem cell-specific enhancer, the SCR, as a model locus, we have uncovered different aspects of the spatiotemporal regulation of gene expression.

CIBIO EXTERNAL SEMINAR





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