

SATELLITE MEETING

Regulation of gene expression from a distance: exploring mechanisms

The Royal Society at Chicheley Hall, home of the Kavli Royal Society International Centre

Organised by Professor Wendy Bickmore and Professor Veronica van Heyningen FRS

Wednesday 24 – Thursday 25 October 2012

DAY 1				DAY 2			
SESSION 1 Enhancer assays – transgenes, genetics, and interactomes Chair: Professor Nick Hastie CBE FRS		SESSION 2 Quantitative and dynamic analysis of transcription Chair: Professor Anne Ferguson-Smith		SESSION 3 Quantitative & dynamic analysis of protein binding at regulatory elements Chair: Professor Constance Bonifer		SESSION 4 Defining enhancers and their mechanisms of action Chair: Dr Duncan Odom	
09.00	Welcome by RS & lead organiser						
09.05	The evolution of global enhancers Professor Denis Duboule	13.30	Dynamic use of enhancers in development Professor Mike Levine	09.00	Design rules for bacterial enhancers Dr Roe Amit	13.15	Massively parallel functional dissection of mammalian enhancers Dr Rupali Patwardhan
09.30	Discussion	14.00	Discussion	09.30	Discussion	13.45	Discussion
09.45	The pluripotent 3D genome Professor Wouter de Laat	14.15	Gene expression genomics Dr Sarah Teichmann	09.45	Complex protein dynamics at eukaryotic regulatory elements Dr Gordon Hager	14.00	<i>HERC2</i> rs12913832 modulates human pigmentation by attenuating chromatin-loop formation between a long-range enhancer and the <i>OCA2</i> promoter Dr Robert-Jan Palstra
10.15	Discussion	14.45	Discussion	10.15	Discussion		
10.30	Coffee	15.00	Tea	10.30	Coffee	14.15	Tea
11.00	Maps of open chromatin from association signals to function Dr Panos Deloukas	15.30	Exploring gene expression at the single cell level Dr Jon Chubb	11.00	Transcription factors and DNA regulatory elements Dr Martha Bulyk	14.45	Variant enhancer loci in cancer Dr Peter Scacheri
11.30	Discussion	16.00	Discussion	11.30	Discussion	15.15	Discussion
11.45	Deciphering the <i>cis</i> -regulatory code Dr Eileen Furlong	16.15	Transcription factor search kinetics explored at the level of single molecules Dr Johann Elf	11.45	Controlling long-range genomic interactions to reprogram the β -globin locus Dr Gerd Blobel	15.30	Panel discussion
12.15	Discussion	16.45	Discussion	12.15	Discussion	16.00	CLOSE
12.30	LUNCH	17.00	CLOSE	12.30	LUNCH		