

Target Identification & Validation FRIDAY 14TH OCTOBER: HALL 1C

We are entering into a new era for target identification and validation, where genomics and proteomics are meeting head-on to reveal the real complexity of life. The advent of next generation sequencing technologies has enabled a wealth of functional genomics studies such as ENCODE and BLUEPRINT. Reinterpretation of the wealth of genetics data generated over the last decade is now starting to identify many new targets at both general and individual therapeutic levels, and an explosion in transcriptomic and proteomic information has created a wealth of additional information.

In parallel, our ability to build more complex in-vitro and ex-vivo cell/tissue systems is enabling us to explore and validate these targets in systems that are ever-more representative of (patho) physiological niches where they operate. Critically, the development of CRISPR and TALENs technologies promises the ability to edit target genes for precise 'gold-standard' chemical biology target validation at scale and across species, from bacteria to humans. These complex (and costly) technologies are generating new types and scales of data, which will have the effect of creating more and more target identification and validation work. To support this need, new working models are developing, with industry and academia working together in this pre-competitive space.

CHAIRS: Chris Larminie, GlaxoSmithKline and Patrick Eyers, University of Liverpool		
TIME	SPEAKER	TITLE
9:00 - 9:15	Session Chairs	Introduction and Welcome
9:15 - 10:00	Paul O'Neill University of Liverpool	From Artemisinin to a Tetraoxane-Based Antimalarial Drug Candidate
10:00 - 10:30	Alessio Ciulli University of Dundee	On-Target Validation of Chemical Probes: Bump-and-Hole and PROTACs
10:30 - 11:00	COFFEE BREAK	
11:00 - 11:30	David Michalovich GlaxoSmithKline	Integrated Genomic and Genetic Approaches to Drive COPD Target Discovery
11:30 - 12:00	POSTER TASTERS	
12:00 - 12:30	SNAPSHOT PRESENTATIONS - INTEGRA Biosciences Ltd, Horizon, ReproCELL, Pelago Bioscience , NanoTemper Technologies Ltd	
12:30 - 14:00	LUNCH - EXHIBITION - POSTERS	
14:00 - 14:45	PLENARY KEYNOTE: ROOM 3 Professor Carol Robinson Professor of Chemistry, University of Oxford	Mass Spectrometry and its Role in Membrane Protein Drug Discovery
14:45 - 15:15	Luke O'Neill Trinity College Dublin	Metabolic Reprogramming in Macrophages During Inflammation: Prospects for New Therapeutics
15:15 - 15:45	Ed Tate Imperial College London	Chemical Proteomics as a Tool for Target Identification and Validation
15:45 - 16:15	COFFEE BREAK	
16:15 - 16:45	Jon Moore Horizon Discovery	Can Genome Editing Find Novel Synthetic Lethal Targets for Cancer Therapy
16:45 - 17:15	CLOSE OF CONFERENCE REMARKS - WITH PRIZE DRAW	

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