

International Conference on Medicinal and Pharmaceutical Chemistry

December 5-7, 2016 Dubai, UAE

A critical evaluation of assays in pre-clinical drug discovery

Sheraz Gul

Fraunhofer Institute for Molecular Biology & Applied Ecology – ScreeningPort, Germany

Workshop Overview:

This workshop will critically evaluate target-based biochemical assays and cell-based assays that are being employed in pre-clinical small molecule drug discovery research.

A typical small molecule drug discovery project will aim to identify chemical starting points that modify the functions of genes, cells, or biochemical pathways. In some but not all instances, these functions may be linked to disease processes, and an opportunity will exist to further develop the chemical starting points into novel therapeutic agents. A major output of these activities is identifying compounds that modulate therapeutic target activity in a desired manner with successful in-vivo translation. Various aspects of this will be discussed in the workshop together with relevant case studies.

As we have witnessed significant increase in pre-clinical drug discovery research activities outside the pharmaceutical industry, this workshop is designed for scientists at all levels within academic and industrial research organizations that have an interest in the development, validation and utilisation of assays in pre-clinical drug discovery and how to establish research programs for drug discovery projects.

Biography:

Dr Sheraz Gul is Head of Drug Discovery, Assay Development & Screening at the Fraunhofer Institute for Molecular Biology and Applied Ecology. He is responsible for the global management of drug discovery activities and has 23 years' experience in both academia (University of London) and industry (GlaxoSmithKline Pharmaceuticals). This has ranged from the detailed study of catalysis by biological catalysts (enzymes and catalytic antibodies) to the design and development of assays for High Throughput Screening for the major drug target classes. He is the co-author of numerous papers, chapters and the Enzyme Assays: Essential Data handbook and has been organising drug discovery since 2011 across the world (Brazil, Hamburg, Italy, Portugal, Saudi Arabia and U.S.A) and thus far has been involved in the training of over 350 scientists.

In addition, he has been appointed to the editorial boards of the European Pharmaceutical Review and International Drug Discovery, is the Scientific Editor of Drug Target Review, a scientific co-founder of Transcriptogen Ltd and is an advisor to a number of biotech companies.