

DEPARTURE FROM TRADITION

ADDRESSING THE NEEDS OF INDUSTRY

Dr Marcel de Matas

Drug Delivery to the Lung 2009

The presentation will provide insight into the evolution of research in the inhalation field at the University of Bradford and reflects the strategic incorporation of Knowledge Transfer (KT) as a core activity for the Institute of Pharmaceutical Innovation (IPI). Developments over the previous 5 years have focussed on a multi-pronged approach to interactions with industry through basic research, contract based knowledge transfer activities and a systematic approach to development of new business opportunities. This approach was catalysed by the establishment of the IPI following the success of Bradford Particle Design, and has evolved through recognition of the changing needs of industry including, for example, increased outsourcing of research and development and reduced reliance on historical relationships with academia. Notable investment has been made in developing more commercial facing research groups whilst maintaining the quality of fundamental and applied research. To maintain both academic achievement and provide a platform for financial sustainability, Bradford has focussed on providing discrete resources to develop and deliver contract research. Initial activity has focussed primarily on the evaluation of orally inhaled products. In turn, these activities have centred on evaluation of solid phases through analytical interrogation with integrated microscopic, spectroscopic and crystallographic approaches with a view to increasing fundamental product understanding. Activities have more recently encompassed the in-vitro evaluation of new drug-device combinations and investigation of more complex drug products with emphasis on formulations that require higher levels of analytical development. Typically these studies have formed part of larger multi-disciplinary projects involving both commercial and academic partners with the more traditional elements of research supported by conventional industry and grant funding. Although financial support from pharmaceutical companies for basic academic research at Bradford has diminished over the last decade, fundamental research continues to focus on providing enhanced understanding of inhaled dosage forms with an ambition to improve both the quality and performance of medicines delivered by the pulmonary route.