

Academic / Industry / Spin out interactions – drivers for inhalation innovation

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The UK is a world centre for inhalation work, primarily due to the activities of companies such as GSK, Pfizer, AZ and others. There has been a long history in inhalation innovation, Fisons, 3M and others being early players. It is clear therefore that there is a symbiotic interaction in the inhalation field between big pharma and academia. Academia has to create scientists with the correct quality and skills to make the UK a significant player in the inhalation field in times of globalisation. It is also important that academia and big pharma work together to deal with the scientific basis of inhaled drug delivery and the related disciplines. There are many examples of this through materials science and particle technology. Our own work on amorphous content of micronized material is an example.

The academic world has moved on and spin outs and commercialisation of research are key drivers. The most high profile example is Vectura having grown from work of a collaboration of Professors and drug delivery to provide innovative patented delivery solutions that are now used by big pharma. Other companies, such as Pharmaterials, provide contract materials characterisation and formulation driven through the research links between academia and industry and now servicing the wide community of big pharma and SMEs.

The UK model has evolved rather than been planned, but it serves well providing for innovation and commercial exploitation of results. The future is not clear, as pressures on big pharma threaten university research funding and could bring this cycle to a halt with respect to future innovation, we must work to ensure that does not happen.