

Breaking Good

Pharma City

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The ground-breaking TV series *Breaking Bad* has recently completed its run with its unique blend of suburban middle-class American hypocrisy, black humour, and a body count Bruce Willis would be proud of.



Walter White, Los-Alamos trained Über-chemist turned school teacher turned methamphetamine drug lord is the 'hero' of the saga assisted by junkie side-kick Jesse Pinkman and criminal 'criminal' lawyer Saul Goodman ("S'all good, Man!" geddit?) and mackerel-eyed

hit-man Mike Ermantraut.

Several commentators have noted that *Breaking Bad* has done more for the image of chemistry than any amount of Gove-induced fiddling with the National Curriculum. Of course there may be some who carp that chemistry harnessed so clearly in the service of evil is not the image they may want for their science, but luckily in Oxford we

have the antidote – chemistry in the service of good – specifically in drug design.

The chemistry department of the University has for years been a gold mine of entrepreneurial talent. One individual in particular stands out, Professor Steve Davies.

Steve Davies is a familiar figure around the South Parks Road science area of the University, with his mane of fine grey hair and mutton-chop sideburns. Unless you know his work however you would probably not realise that he is, in the words of the magazine *Chemistry World*, Chemistry's Millionaire. Davies



has spent most of his career in Oxford, having started as an undergraduate there in 1969, staying on for a Dphil then an ICI fellowship. After a stint working in France in 1980 he was invited back to Oxford as a lecturer in Chemistry. He is now Waynflete Professor of Chemistry.

Davies' entrepreneurial talents grew out of a frustration which many, if not all Oxford academics will recognise, the grinding, thankless, endless need to write grant applications. His Damascene conversion came in the late 1980s when, as he told *Chemistry World*, "I sat back and looked at what I was doing, and about 60 per cent of

my time was spent applying for money, probably 25 per cent teaching, and the remaining 15 per cent was taken up by admin,' he says. 'What fun is that?'

At that time the Thatcherite revolution was sweeping Universities and Davies spotted an opening for the commercialisation of his work. With that realisation, his first company, Oxford Asymmetry, was set up in 1992.

Davies re-mortgaged his house and started with three people working in a small lab in Oxford. It was a pure chemistry service company making molecules on a contract basis, using whatever tools were needed from anywhere within the giant swirling world of chemistry. It was a unique approach, chemistry in the service of industry, applied science at its purest. Davies was not interested in being directly involved in drug discovery. That, he reasoned, was the job of the people who came to him.

Davies business model was simplicity itself. As he told *Chemistry World* 'We said to customers, "give us all the molecules that you've employed other companies to make and they've failed. If we don't succeed, you don't pay us." We made every single one of them, and this established the reputation of the company.' The company was an immediate success and Davies approach meant the business was instantly sustainable, with more staff being taken on in response to additional contracts rather than on spec.

With the help of two far-sighted business angels the company grew rapidly and eventually moved into larger premises on the Milton

Science Park near Abingdon. The angels helped to find a chief executive and the rest of the management team. 'I'm a scientist – I want to do chemistry, not run companies myself,' Davies told *Chemistry World*.

Three years later Davies had another idea for a company, this one specialising in producing libraries of millions of single compounds for discovering new drugs. It was a time of the explosion of Big Pharma and pharmaceutical giants were buying up these so-called combinatorial companies at a rate of knots. One, unable to find a suitable company to buy, approached Davies who immediately saw the potential. He named it Oxford Diversity.

In 1999 the two companies were merged into one: Oxford Asymmetry International and floated on the stock exchange. In 2000 they merged with German giant Evotec. In eight years Davies' vision had grown from a £100,000 investment based on re-mortgaging his house to a company worth £316 million.

But what is Davies most proud of? As he told *Chemistry World*, '[In the nineties] The Pharma industry was on a downturn, and there were few jobs available, except in my company, we kept a lot of chemists in chemistry over that period. Some are still with Evotec, and some have moved on, but at least they're still in chemistry.'

A legacy that Walter White would be proud of, and all done by a man whose chemistry is all about Breaking Good.

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