

Title: The rise and rise of biotech and life sciences in Nottingham

Will Rossiter, David Smith, & Daniel McDonald-Junor, Nottingham Business School

Notable in this years' Top 200 list are an increasing number of local companies involved in the applications of biotechnology and life sciences – companies like Fresenius Medical , Source Bioscience Limited, and Robinsons Healthcare. Indeed this phenomenon has come to symbolise Nottingham's reinvention as a post-industrial economy. Recent research at Nottingham Business School has started to explain how it happened.

At the start of the millennium, Nottingham looked to be a city facing serious industrial decline. Former mainstays of the local economy like Raleigh, Players, and Royal Ordnance had ceased large scale manufacturing operations in the City and employment in the sector continued to shrink as the balance of the economy shifted towards the service sector.

Move forward a decade or two however, and you'll find a different story. A new development path has been forged through the application of biotechnology and life sciences. That this should have happened in a former manufacturing city in the North Midlands is remarkable.

The most obvious symbol of this is BioCity, where more than 75 bioscience-related companies have been established since 2003. Although modest in scale by the standards of bioscience concentrations in London and the South East, the emergence of bioscience in Nottingham is significant. Not least because this momentum has been sustained over a 15-year timeframe and shows no signs of slowing. Indeed BioCity is now the country's largest life science themed business incubation facility. So how has this come about?

The answer brings together developments in a number of different spheres:

Firstly, changes in the worldwide pharmaceutical industry saw a succession of high profile mergers in the 1990's. As part of this consolidation, the model of R&D used by many pharmaceutical companies changed due to the inherent cost of drug development.

In-house development was being replaced by external R&D - leading to a rise in the number of specialist biotechnology companies offering these services. Closed models of innovation were being replaced by more 'open' and outward looking models, creating a market opportunity for exactly the kinds of biotech firms that would later come to occupy BioCity.

Secondly the changing fortunes and focus of Boots also had a significant role to play in the emergence of this new development path for the City. Despite becoming one the UK's leading pharmaceutical companies, by the 1990's, Boots was facing several challenges including leadership changes and regulatory problems. In 1995, Boots sold its prescription only drug business to BASF, which, just four years later, sold its Knoll Pharmaceuticals business to Abbott Laboratories. The deal included the intellectual property rights but not the Nottingham site – later to become BioCity - and around 450 highly-qualified scientific staff were made redundant.

Finally developments in other sectors were also significant. The first purpose-built teaching hospital to be constructed in the UK, Queen's Medical Centre, opened in 1977 following the creation of a new medical school at the University of Nottingham. Both acted to boost the local science-based labour market and stimulate demand for health-related bioscience services and expertise.

The cities two universities also contributed in other ways. The University of Nottingham as one of the UK's leading research-intensive universities, with major departments in bioscience and healthcare.

Nottingham Trent University had for a long time played an important role in training technicians and laboratory staff working in local companies like Boots.

But the key window of opportunity emerged in 2001 when BASF struggled to find a buyer for the then redundant ex-Boots Pennyfoot Street laboratories. Clearing up the site for property development proved prohibitively expensive. So what to do?

Former BASF employees who had established spin-off businesses were keen to rent laboratory space, giving rise to the idea that the redundant research laboratories might be turned into an incubator, housing small start-up bioscience businesses. This was the solution that won the day.

BASF announced in August 2001 that it was gifting the laboratories to Nottingham Trent University, which would partner with the University of Nottingham and the East Midlands Development Agency in putting the facility to new use. Thus 'BioCity Nottingham', now the largest bioscience incubator in the UK, was borne – giving focus and momentum to the emergence of biotech in Nottingham.

Words 695