



Lessons learnt from the halls of academia

By Chris Tighe and Andrew Bounds

Published: October 26 2008 16:47 | Last updated: October 26 2008 16:47 FT

With the UK entering a recession, regional economies and the businesses that are their economic engines need to harness all their strengths, including fully exploiting the huge potential of their universities.

UK universities are well aware of this wider role; only last week John Denham, the government's innovation, universities and skills secretary, held a private meeting with vice-chancellors to stress the contribution their institutions could make in the current financial climate.

But as Professor Brian Tanner, dean of knowledge transfer at Durham University, says: "If you want to make money you don't become an academic."

However, while most research-orientated academics remain driven by publishing their work and peer esteem, Prof Tanner notes there has also been a "sea change in attitude" over the past decade towards the potential for universities to commercialise their research and knowledge.

In north-east England, the universities play a crucial role in the region's economic strategy. In fact, growth of knowledge-based industries is fundamental to regional development agency One NorthEast's ambition to raise regional economic performance.

But as Chris Pywell, One's head of strategic economic change, says: "It's not as straightforward as – 'you have knowledge in universities and it's transferred into business'. It's a more messy process."

Some UK universities have sought to make that process less problematic by signing deals that grant intellectual property "first look" rights to specialist companies.

Sheffield University, for example, has taken a direct stake in listed company Fusion IP and 10 universities, including Leeds, York and Oxford, outsource this role to the IP group. This Aim-listed company took over Transtech, which Leeds University set up in the 1980s to develop and spin out companies.

In contrast, north-east England's five universities have chosen not to sign such umbrella deals. However, the region's approach to commercialising its university-based knowledge is far from random, thanks partly to several important region-wide structures – the Centres of Excellence created by One and the £33m of early stage funding, from One and European Regional Development Fund sources, available through Newcastle-based North Star Equity Investors.

The three centres of excellence, covering renewables, life sciences and the process industries, provide focus, practical assistance and a bridge, "a pull from the market" as Mr Pywell puts it, between existing companies' technology and skills needs and the potential for technology transfer out of the universities.

Hull University's business school this year launched a £23m logistics institute, ranging from incubator space to research, to capitalise on Humberside's position as the UK's largest port.

Large employer groups also inject realism into northern universities' priorities. Teesside University, for example, is working closely with bodies such as the north-east chamber of commerce and the National Skills Academy for Process Industries, which it currently houses. Sunderland University has close links with Nissan, the carmaker.

Graduate entrepreneurship too makes a powerful contribution to economic vigour; graduates account for most of the 70 digital sector companies that have emanated from Teesside University, and Northumbria University lays claim to having the fastest-growing enterprise support among north-east universities.

However, spin-offs have a particular allure, although the route from university research to profitable company can be extremely long and hazardous. NSEI's Proof of Concept Fund, offering up to £90,000 support in the grey area between research and commercialisation, has provided much-valued early stage support.

The Technology Transfer Offices at Newcastle and Durham Universities have assisted, respectively, 29 and 21 spin-offs since 2000.

The highest profile include materials technology and imaging specialist Kromek, formerly Durham Scientific Crystals, which has in the past year raised £5.1m from investors including venture capitalist Amphion Innovations, Aim-quoted drug discovery and development company e-Therapeutics and Reinnervate.

Reinnervate, which is revolutionising how cells are grown in laboratories, last month raised £750,000, including £550,000 from NSEI's Coinvestment Fund and £200,000 from angel investors.

Ultimately however, spin-offs that go commercial must also fight their corner commercially, as X-ray metrology business Bede, spun out from Durham University in 1978, illustrates.

Bede's technology was, arguably, too far ahead of its market. After some difficult years the Aim-quoted company went into administration and was in April acquired by Israeli-owned Jordan Valley Semiconductors UK.

The deal saved 40 jobs and Bede's IP but physicist Professor Tanner, its co-founder, does not dissemble the pain Bede's struggles caused him. "If the bits had been thrown in the bin or nobody wanted to know, that would have broken my heart."