

This work has been submitted to NECTAR, the

Northampton Electronic Collection of Theses and Research.

http://nectar.northampton.ac.uk/3656/

Creator(s): Nick Petford

Title: Flying high under the radar

Date: 3rd November 2010

Originally published in: Research Fortnight

Official URL: http://www.research.com/fortnight

Example citation: Petford, N. (2010) Flying high under the radar.

Research Fortnight, 356, p.22.

Version of item: Published version.

view from the top nick petford

Flying high under the radar

There is only one university in the UK with its own purpose-built tannery. It is no surprise to find that this is located in Northampton, the historical centre of the country's leather industry.

The University of Northampton has used this facility to carry out some of the sort of applied research that will develop the products needed to pull the UK economy out of recession. In this case, that product is an enzyme used to relax leather during processing, so that it spreads, allowing tanners to increase their area yield without damaging the material's underlying structure.

By increasing the area of leather obtainable from each hide by up to 5 per cent, the enzyme can potentially increase the profitability of the global industry by up to \$1 billion (£0.6bn). The university licensed the rights to market the product to an international supplier of industrial enzymes, which it is hoped will provide a lasting source of royalty income.

While its leather research centre is unique, the financial challenges confronting this university are exactly the same as those facing the rest of UK higher education. The relatively tender treatment meted out to the science and research budget in the government's Spending Review still means that there will be about 9 per cent less public funding available by 2014-15. Then there is also the matter of a 40 per cent reduction in the overall higher education teaching budget.

If, as the prime minister insisted in his 25 October speech to the Confederation of British Industry, research and innovation have such a key function in growing the economy, what will be the universities' role? Certainly against a backdrop of flat budgets, they cannot rely entirely on public support to maintain their research teams. With the state playing a smaller role in funding science, universities must seek out new allegiances and strategic partnerships.

There is a huge challenge for UK higher education institutions in seeing beyond the 'entitlement

'Many of the smaller, less research-intensive universities have managed without significant state funding.'

culture' that has developed as a result of decades of public funding. They need to use the outcome of the spending review to build new and meaningful business-university relationships that exist not just to plug public funding gaps but as core activities in, and of, themselves.

Which is exactly what we have been doing at Northampton. The research that produced the enzyme for the leather industry was carried out without a penny of government support, all the money came from our local, national and international industrial partners.

There are other products that have been developed through collaborations with industrial partners and we also sell our expertise through consultancy work in other highly technical fields, such as designing lifts able to cope with the stresses experienced in high-rise buildings in strong winds.

The path that we have taken has been trodden before. Many of the smaller, less research-intensive universities have managed (albeit often under the radar) without significant state funding for research by exploiting their intellectual capital to clear financial advantage.

But while most successful research-intensive universities have forged similar relationships they sometimes fail the value-for-money argument whereby small amounts of state funding can be used to lever significant long-term investment in commercial R&D.

Another aspect of the current environment relates to a lack of interaction between the various university mission groups and business. Indeed this very point was addressed by David Cameron in his speech to the CBI on how to "bridge the gap" between universities and business such that innovation can be turned into commercial success.

The proposed solution is to invest £200 million over four years in Technology and Innovation Centres that sit between universities and business. But this sounds all rather familiar—weren't the soon-to-be-defunct regional development agencies supposed to be doing this?

Besides, many universities, including my own, already have spin-out companies in campus-based innovation centres designed and funded specifically to bring universities and business closer together.

So what's new? One answer could be that the impending reduction in state funding will force universities to look again at how best to play to their strengths through collaboration based not on perceived rank but as equal partners with a common goal underpinned by research complementarity.

In other words, an unintended consequence of the cuts could be the fostering of more meaningful relationships not just between universities but with potential business partners where naked self-interest and the reality of financial survival are the drivers, not state investment or kudos. Could this be the silver lining that helps overcome current obstacles to collaboration?

More to say? Email comment@ResearchResearch.com

Nick Petford is vice-chancellor of the University of Northampton. He is a speaker at the Research Fortnight event From Recession to Recovery on 3 November.