

Richard Lambert
The Lambert Review of Business-University Collaboration,
1 Horse Guards Road,
London, SW1A 2HQ, UK.

15th April 2003

Dear Richard

I am writing on behalf of the Committee for Cambridge Freedoms, which I chair. Our organisation successfully blocked attempts by the outgoing Vice-Chancellor of Cambridge University to assert ownership of all intellectual property rights generated by academics in the course of our employment. We believe that we speak for most Cambridge academics in these matters; as evidence of this, I was elected to Council (the University's ruling body) last December.

We would like to invite you to Cambridge to meet us and discuss a number of issues arising from university-business collaboration. We feel this could be of mutual benefit. We would like to discuss a number of examples of good practice that should be emulated, point out a number of emerging roadblocks, and debunk some fashionable pieties.

We feel that the Government has to take a fundamental strategic decision in the way it finances research. Does it wish to maximise employment and growth, or does it wish to increase its control of universities? Many recent initiatives seek to micromanage what academics do; and while they may be justifiable individually in terms of policy goals, the cumulative effect is quite counterproductive. For these reasons, we welcome your enquiry's support by the Treasury and the DTI as well as the DFES.

It is inevitable that most Government initiatives will fail, like most business plans and indeed most research ideas. But while businesses and academics have mechanisms for killing off the ideas that don't work, Government initiatives tend to accumulate like marine growth on the hull of the ship of state. We badly need better mechanisms for evaluating the performance of these initiatives and for killing most of them off once they have clearly failed. So we welcome your comments to the Education and Skills Select Committee that you are interested in finding ways to measure success.

An example of an initiative over which you might care to run your slide-rule is Link. This is a DTI initiative for ring-fencing research money for industrial collaborative projects. In our experience, it is crowding out both academic and industrial research in both computer science and biology. It leads to Potemkin collaborations in which the industrial partners mine the subsidy, while the academics are expected to produce research that provides a cover story for this subsidy rather than having intrinsic scientific value.

On the positive side, there are a number of positive examples of good private-sector practice for innovative companies.

* The Cambridge Phenomenon has created a huge amount of wealth. The definitive study, by Segal, Quince and Wicksteed, concluded that the large number of high-tech businesses spun off from the University owed a lot to academic ownership of patents and copyrights, so those who were inclined to doing business start-ups could do so without having to appease University bureaucrats at every step and hand over most of the resulting profits. (The second edition remarks that it is probably already harder, from an IP perspective, for academics to drive spin-out creation.)

* Microsoft Research Cambridge was probably the largest inward R&D investment secured recently by the UK. Microsoft's brief to its first managing director, Roger Needham, was simple: 'hire the brightest people you can find and let them do whatever turns them on'. Roger had previously been the University's Pro-Vice-Chancellor, and remarked that the main difference with working for Microsoft was that he was trusted.

We will discuss more such examples, and plan to introduce you when you visit to senior people from Microsoft and other local companies. The overall message is that excellent research teams are founded on elitism and trust. A good researcher is vastly more productive than a mediocre one; our business is quite unlike manual trades, where an excellent bricklayer might be only 2-3 times as productive as a mediocre one. Just as most of the money in football is earned in the Premier division, so also in academia most of the good scientific ideas come from the elite. Excellence means recruiting, developing and retaining the very best people.

This has implications for governance. Organisational theory suggests that universities (like professional partnerships) tend to be self-governing communities for reasons of cost and efficiency, as well as for less tangible reasons such as academic freedom. So we welcome your spelling out to the Committee that universities and business are different. We hope we can provide you with much more data on this, including economic analysis.

Governance also affects terms and conditions of employment. The main responsibilities of academic staff in Cambridge are currently research and teaching. Individuals have considerable autonomy over how we disseminate and publish our work. This will not be the case if we are required in future to commercialise it. To take one example: if academics are under a duty to patent our findings wherever possible, we will no longer be free to publish as we see fit (since prior publication normally rules out the granting of a patent). This is not being unduly alarmist. Already, as part of the debate over changes to IP rights in Cambridge, proposals have been made which, were they to be accepted, would result in far reaching changes to our basic employment contracts and a substantial reduction in our autonomy over when and how to publish. Such changes would probably have a severe adverse effect on recruitment and retention. Your review will provide a valuable opportunity for these vitally important issues to be more widely discussed.

We also welcome your interest in IPR issues. These have recently

become a serious barrier to industrial sponsorship of research at Cambridge; over-enthusiastic attempts by the outgoing Vice-Chancellor to make more money out of IPR have done significant harm. In addition to trying to expropriate patents and copyrights traditionally owned by faculty members, his regime has imposed rules on external funding of research that prevent the sponsoring company from owning the patent rights in resulting ideas - instead, they have to pay for the University to patent the ideas and then pay again to license them. This has caused significant damage to relationships with sponsors and lost us a lot of industrial funding. Given that the University gets a third of its income from industrial sponsorship of research and only one-hundredth of that from patent royalties, this is a completely unsustainable strategy. We intend to return Cambridge to the policy pursued successfully from 1927-2001, under which individual faculty members negotiate whatever sponsorship deals they wish subject to approval by their head of department of cost recovery. We hope that this can be done quietly by negotiation with the new Vice-Chancellor, but if it cannot then we are confident that we can muster the necessary majority in the Regent House (the University's parliament).

As well as the major barriers created recently by issues surrounding IP and governance, there are many minor barriers to collaboration and spin-out. For example, one of my students raised \$3m in 1999 to commercialise the thesis work he had done with me. He wanted to set up shop in Cambridge but, being a Korean national, he could not get visas for his family - even on the back of a (well financed) business plan. The company was established in Vancouver instead. We hope that exposure to a number of case histories such as his will help you transcend the conventional pieties of the UK tech transfer industry.

Finally, short-term economic analysis alone is insufficient. Our core business is the provision of public goods, and given that the UK accounts for only 5% of Gross World Product, it should surprise no-one if 95% of the long-term benefits of scientific research accrue to companies controlled overseas. In such circumstances a Chancellor might be tempted to cut spending reasoning that Britain could free-ride on the basic research done by others. However, a world-class university cannot be built from applied science alone; even at MIT, there are more theoretical than applied computer scientists. There are less tangible issues - which one might call vocation, or ethos, or esprit de corps - which also have to be got right. World-class private sector employers also value the traditional goals of education in developing the intellect, fostering curiosity, and promoting critical thought. These issues may not be strictly within your remit, but we hope that an appreciation of them will suffuse your enquiry.

In summary, there are good ways and bad ways to run relationships between universities and industry. Until very recently, Cambridge was a role model. We attracted huge sums of industrial sponsorship; many of our graduates are snapped up by industry; some of them (and some faculty members) set up companies which have created a vast amount of wealth. This has recently started to falter, but we know what's wrong and we're working to fix it - with support from local industry.

I'd like to formally submit as evidence for your review our web pages, which come in a short form:

<http://www.cl.cam.ac.uk/~rja14/ccf.html>

and a longer version:

<http://www.cl.cam.ac.uk/~rja14/expropriation.html>

I'd also like to submit the report of the debate in the Regent House on these issues:

<http://www.admin.cam.ac.uk/reporter/2002-03/weekly/5901/16.html>

as well as a paper on the law-and-economics aspects of governance:

<http://www.cl.cam.ac.uk/users/rja14/ccf/howarth.doc>

I think that you might also find it useful to follow up the links to relevant economic research in the longer version of our paper, especially those in the section on `patent rights': these give a view of the state of academic research into technology transfer as of last autumn when the page was compiled.

Regards

Ross Anderson