You’re wondering about the safety of genetically modified food, or its harmful environmental impact; you’re confused about whether to continue taking Vioxx for severe arthritic pain; you’re mystified by the apparent scientific controversy concerning climate change; you’re apprehensive about the cloning of Dolly the sheep and wonder whether catastrophe beckons when this new technology is used to create a clonal human being.

Who’re Ya Gonna Call?

In the past, you might have turned not to Ghostbusters but to the impartial expertise and deep knowledge of university plant biologists, arthritis researchers, climatologists, or ethicists. These are certainly the experts to whom our mass media turn for help as THEY ATTEMPT, on our behalf, to understand and interpret the world.

These days, however, relying on the so-called impartial expertise of the professoriate might not be such a wise decision. The problem, and it really is a serious problem, is that virtually all of the research being carried on at our universities is floating on a sea of corporate money. Researchers increasingly see themselves as knowledge-entrepreneurs. Universities themselves have staked their future on “partnerships” with industry.

Many Canadians see the entrepreneurial university as A Good Thing. After all, when corporations fund research and/or donate huge sums for university buildings and equipment, then “the beleaguered taxpayer” saves a pile of money. That’s the dominant story, anyway, and in Canada it’s peddled for all it’s worth by the political right in general and the Fraser Institute in particular.

Let’s return to the question with which we began: Who’re Ya Gonna Call? When the great majority of Canadian university plant biologists is funded by international biotechnology companies, such as Monsanto and Bayer, it becomes fiendishly difficult to find any scientist who is willing to raise critical safety issues that might alienate corporate sponsors. What is true for university research in agricultural bio-technology is doubly true for university medical research. Can we trust the researchers who assured us that the anti-arthritis drugs known as Cox-2 inhibitors (Vioxx, say, or Celebrex) WERE wonder drugs, DESPITE STRONG EVIDENCE THAT THEY TRIPPED OR QUADRUPLED THE CHANCES OF HEART ATTACK AND STROKE?

Virtually all these researchers (and their universities) are funded by pharmaceutical companies such as Merck and Pfizer. Climate change research at many North American universities is funded by, (who else?), the petro-chemical industry. Even that smug university ethicist - who appears on your television screen to analyse the significance of embryonic stem cell cloning - is more than likely on the take, travelling first class and living high off the corporate hog, courtesy of one or other biotechnology company.
Honest-to-God, even I, not known for my undying love of corporate Canada, have been offered lucrative drug company consultancies. All I have to do, in return, is agree to become a Key Opinion Leader [KOL] for the company and thereby legitimate their new drugs. I’m still holding out, waiting for a better offer, but many of my North American colleagues have already succumbed to the lure of corporate gold.

Scandal at the University of Toronto: the Olivieri Affair

Occasionally, brave university researchers surface - scholars who are willing to blow the whistle on the corporate sponsors who fund their research. Interestingly, the greatest academic scandal in Canadian history, involving haematologist Nancy Olivieri, occurred at our country’s largest and wealthiest research university: the University of Toronto. Olivieri is famous for refusing to suppress doubts about an experimental drug with which she was treating thalassemia patients. Apotex, the drug company which tried to silence her, has attracted international opprobrium. The company repeatedly threatened to sue Olivieri if she publicly revealed her fears about the inadequacy of their drug, deferiprone. SHE SUED THEM FOR LIBELING HER; THEY SUED HER FOR “SLANDER OF GOODS [THEIR DRUG]. THE ACTIONS HAVE NOT YET GONE TO TRIAL.

Olivieri’s hospital, The Hospital for Sick Children, and the University of Toronto have both taken a public drubbing for failing to provide her with effective support as she struggled with Apotex. Actually, not only was Olivieri denied effective support, she was fired from her position as the director of the Hospital’s hemoglobinopathy programme, and both she and those colleagues brave enough to support her experienced harassment of many kinds. In the words of the CAUT Olivieri Report: “Neither HSC nor the University …took effective action to defend principles of research ethics, clinical ethics and academic freedom.” When it was discovered that the university was negotiating with Apotex for a huge financial donation, well, SOME people drew their own conclusions, and these were not flattering to the university.

Indeed, the scandal is even deeper than this, for it was subsequently revealed that the University of Toronto’s then president had gone so far as to lobby the Government of Canada on behalf of Apotex. In a private letter to the Prime Minister of Canada, President Robert Prichard stated that the government’s proposed changes to drug patent regulations would adversely affect Apotex’s revenues and could thereby jeopardise the building of the university’s new medical research centre. President Prichard was unsuccessful in persuading the federal government to change its drug patent laws, but his lobbying activity demonstrated the lengths to which the university was prepared to go in appeasing the company or promoting its interests. When Prichard’s conduct became public knowledge, he apologised to the executive committee of the University for acting inappropriately in this matter.

This embarrassing episode illustrates dramatically the dangers that can ensue from university reliance upon industry “philanthropy”. When career success for university
presidents and deans is measured in significant part by their ability to raise vast sums of money from corporate donors, such fundraising can easily become a dominating priority.

**Scandal at the University of Toronto: the Healy affair**

In December of 2000, while the Olivieri affair was still capturing public attention, a second major scandal, also raising basic issues of academic freedom and patient safety, was brewing at the same university. The University and one of its affiliated hospitals, the Centre for Addiction and Mental Health [CAMH] had eagerly recruited Dr. David Healy to be part of the Department of Psychiatry and Head of the Hospital’s Mood and Anxiety Disorders Clinic. Healy’s appointment was withdrawn, however, immediately after he made a speech critical of Prozac. Healy’s presentation warned that Prozac might cause agitation, suicidal thoughts or suicide in some patients, and he called for more research on possible side effects of the class of anti-depressant drugs known as SSRIs. Further research, over the past few years, has amply confirmed Healy’s worst fears. Unfortunately, being proven right isn’t the same thing as keeping your job. Coincidentally, or not, the company which makes Prozac had donated 1.5 million dollars to CAMH, and the Eli Lilly Wing of the Hospital was opened shortly after Healy lost his position. There is no evidence that the company directly intervened in the scandalous un-hiring of Healy.

The administrations of both the University of Toronto and CAMH claim that the un-hiring of David Healy had nothing to do with academic freedom. Instead, they contend, his lecture gave rise to “clinical concerns” and revealed that he would be a “bad fit” with his new colleagues. It may be worth quoting a key paragraph from the email which the University of Toronto sent to Healy by way of explaining their decision to rescind his contract:

> Essentially, we believe that it is not a good fit between you and the role as leader of an academic program in mood and anxiety disorders at the centre. While you are held in high regard as a scholar of the history of modern psychiatry, we do not feel your approach is compatible with the goals for development of the academic and clinical resource that we have. This view was solidified by your recent appearance at the centre in the context of an academic lecture.

University of Toronto officials later denied that Healy was un-hired because of fears on their part that, if Dr Healy were allowed to take up his position, drug companies might be reluctant in future to donate money to or fund research at the Centre. Notwithstanding their strenuous denials, however, many people understood the above quoted words to mean that the university was worried about risking financial inflows to the Department from pharmaceutical company sources.

Unsurprisingly, when corporate donors make substantial donations to universities they often expect to gain substantial influence. Indeed, it is the legally mandated duty of corporate executives and board members to act in the “best interests” of the corporation, which is commonly interpreted to mean that they have a legal duty to maximise overall profitability. Corporate donations to universities are typically viewed, at least in part, as
an investment. This, in turn, raises the questions: What exactly is being bought by such investments? What exactly is being sold?

David Healy, himself, feels little doubt about the most important lesson to be learned from his experience at CAMH, and he insists that it is the same lesson that should be learned from the experience of Nancy Olivieri at Sick Kids Hospital: “What is involved is a contrast between the values of science and the values of business”.

The sad truth is that, at virtually every leading North American university, top officials are now required to ride two horses: their fundraiser’s horse and, simultaneously, their academic horse (as guardians of core university values). Unfortunately, those who attempt to ride two horses can come to grief when, as sometimes happens, the horses pull in opposite directions.

Some Historical Perspective

The fifties and sixties in America were a golden age for government funding of basic scientific research. Scientists enjoyed a high degree of research independence and were comparatively free from commercial pressure to produce short term results. During this period, less than five per cent of university research funding came from private industry. Thus, direct interaction between academic scientists, on the one hand, and for profit corporations, on the other, was rather limited. By the late seventies, however, academic science came to be viewed by both industry and government as a potentially powerful commercial weapon in an increasingly competitive world economy. Laws were passed to strengthen intellectual property rights.

In the fifteen year period between 1974 and the early 1990s, corporate support for academic biomedical research increased from less than five million dollars to hundreds of millions. By the beginning of the new millennium, for-profit companies in North America were providing financial support for 70 per cent of clinical drug trials.

So called “strategic alliances” between universities and the pharmaceutical industry flourished, in part because of the perception that federal research funds were declining—which turned out to be true in Canada, though untrue in the US. The corollary belief was that lost federal funds could only be replaced by the private sector. In addition, there were also technological developments that helped to promote such partnerships: Gene splicing made it possible to go rapidly from the lab bench to commerce. This technological development in the life sciences, sometimes referred to as “the genomics revolution”, had the effect of blurring the distinction between “pure” and “applied” research.

For these reasons, large scale “scientific entrepreneurship” moved, almost in one fell swoop, from being an oxymoron to becoming the prevailing norm on university campuses across America. The pharmaceutical industry became the major source of grants for researchers carrying out clinical trials and a major financial contributor to medical schools and universities, via donations of capital and equipment.
A Few Lessons

This gives us the context, then, within which to understand the Olivieri and Healy scandals at the University of Toronto. It doesn’t take many such “punishments” - in which researchers find their careers in ruins because their findings do not enhance their sponsors’ bottom line – to shape up the rest of the academic community.

Keep in mind, also, that even without explicit threats, companies have subtle ways of communicating to the research community what sort of performance is likely to enhance future opportunities for collaboration. Since, increasingly, the Canadian Government will not fund research, no matter how excellent, unless the researcher is able to find an industrial “partner”, to be on the wrong side of potential corporate sponsors is to face the end of one’s research career.

There is a large and rapidly growing body of evidence to show that when research is sponsored by industry - whether pharmaceutical, petro-chemical, tobacco or bio-technology – the results tend to be heavily skewed in favour of the commercial sponsor’s products. As your grandmother sensibly warned you: He who pays the piper calls the tune. Professional integrity is a rapid casualty of the system we have so eagerly embraced.

What is true at the micro-level, for individual university researchers, is also true at the macro level. That is, when universities compete for corporate research sponsorships and donations, it becomes increasingly difficult for them to guard and protect traditional institutional values. In the pursuit of “scientific excellence” through industry funding (and donations), universities all too often find themselves unwittingly allied with wealthy companies against their fundamental mission to pursue truth wherever it may lead.

Indeed, corporate money has become so important to the modern university that presidents and deans have become exquisitely sensitive to the corporate agenda. Companies, in general, don’t need to issue behavioural instructions to our universities. As the Healy affair demonstrated, corporate influence permeates every orifice of the modern university. When the university becomes a business, its top officials are virtually required to adopt commercial values as an adjunct to their academic values. Institutional conflict of interest par excellence.

The solution

One short and simple solution to the problem of protecting the research integrity of investigators and universities alike would be to prohibit outright the conflicts of interest which are responsible, in large part, for generating the problem.
If the community values public science in the public interest then it will have to be paid for by public tax dollars. Other (reformist) solutions, however plausible they may appear, are very unlikely to succeed in practice.

Can we afford it?

The answer to this question may lie in changes to the tax system. If industry profitably exploits the public’s investment in scientific research, it cannot legitimately complain when a fair share of its profits from such research are recaptured through special taxation. This would constitute a partial answer to the question: If university research is no longer to be funded by industry, from which alternative source will they draw financial support? The government could provide such support through special taxes raised from corporations which make use of discoveries originating from university scientific research.

The current unholy “partnership” between university and industry has produced alarming results: Universities have become adjuncts of large corporations, while researchers are reduced to the role of handmaidens to industry. The integrity of scientific research has been severely compromised.

In the long run and overall it cannot serve the public interest to have the university research agenda dictated by the corporate imperative of short run profitability. In the long run and overall it cannot be in society’s interest to permit universities to forfeit public trust in the objectivity and independence of university research. We can’t afford not to act.

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