

# Industry Dollars and the Pursuit of Truth

Does corporate funding of university research compromise academic integrity?

by Alison Azer

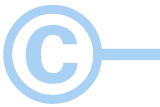


THE UNIVERSITY OF ALBERTA SCORED AN ACADEMIC COUP WHEN IT RECRUITED eminent diamond researcher Dr. Thomas Stachel. German-born Stachel arrived in Edmonton in September 2001 under the splendid title of the Canada Research Chair in Diamonds. He presumed the necessary funding for his laboratory accoutrements was awaiting his expenditure. It wasn't.

"I was dismayed to learn that government grants for laboratory equipment had already been spent for 2001," Stachel recalls. "I was in a bit of a difficult situation and wrote to DeBeers—the South African diamond company—asking for \$100,000 to purchase a critical piece of equipment. I said that if they gave me the funding, I would name my lab after them." What Stachel didn't know was that sponsorships involving naming rights require approval from university administration.

"On campuses across Canada and certainly in this province, academics are having their tongues tied. This silencing of debate violates the scholar's basic duty to society, which is to speak the truth regardless of political opinion or corporate influence."

—Jim Byrne



Stachel also didn't know that the Students' Union president at the time, Mike Hudema, was an anti-globalization activist extraordinaire. Hudema learned about Stachel's *quid pro quo* when it was placed on the agenda of the Board of Governors meeting in the category of "rubber stamp required" business.

Hudema's outrage over the DeBeers donation was based on the company's less than illustrious reputation. "Despite the romantic images of its 'diamonds are forever' campaign, DeBeers has a record of human rights abuses, including support for South Africa's apartheid regime, displacement of the Kalahari bushmen, and complicity in conflict diamonds [diamonds used to buy arms in wartorn countries]," says Hudema.

In the end, the donation was approved and the university issued a press release headlined "Diamonds Are a Researcher's Best Friend." Stachel got his equipment, and DeBeers, its name etched on his laboratory door.

Hudema sees the diamond donation as emblematic of the increasing corporate influence on Canadian campuses. His concerns go beyond the frustration of not being able to buy a Pepsi on the Coca-Cola-branded U of A campus. "We have entered the era of public/private partnerships. Corporations want what universities have—research expertise and public trust—and they are buying it for a song," says Hudema. "Cherished values of academic freedom, research integrity and public safety are under attack."

At universities, curiosity and the pursuit of knowledge and truth are supposed to reign supreme. Universities have an esteemed history upon which to draw. The first Western university is considered to have been the Academy, founded in 387 BCE by the Greek philosopher Plato, who revered the art of asking questions.

Two and a half millennia later, universities still hold "the question" in high academic esteem. But under corporate influence, questions—and worse, answers—are being sold to the highest bidder. Critics of corporate sponsorship for research contend that the university's quest for knowledge and truth is fundamentally opposed by the corporation's goal of profit. If universities are shifting toward a model guided by the market's "invisible hand," who decides which questions get asked, and who gets to ask them, who finds out the answers, and who gets to own them?

Recent fiscal and public policy decisions on post-secondary

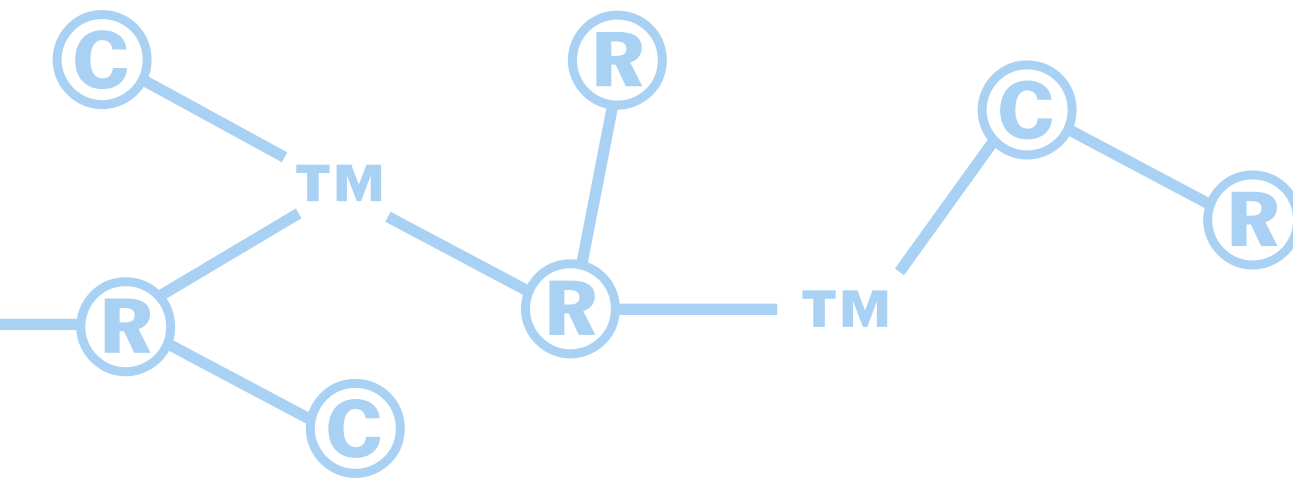
education (PSE) provide some context. The fiscal restraint of the early to mid-1990s led to decreased government support for PSE. The federal government imposed massive cuts to PSE transfer payments. In 1999, the federal government released a report from the Advisory Council on Science and Technology entitled *Public Investments in University Research: Reaping the Benefits*. It urged the commercialization of university research to create jobs, generate wealth and enhance corporate Canada's performance in the global economy. Universities, it said, should develop new goods and services for the market from those inventions and discoveries made by its researchers that are judged to have market potential.

In *The Corporate Campus: Commercialization and the Dangers to Canada's Colleges and Universities*, editor James Turk questions whether it is merely "a simple matter of cause and effect: lack of funding necessitates higher fees, commercialization and private sector involvement in higher education." Turk takes a "wag the dog" perspective and asks, "what if the *reverse* is true? What if the *cause* is actually the desire to link universities more closely to industry; to privatize public higher education and subject it to market forces; to harness and manage university research as an engine for economic growth in the so-called knowledge economy? What if underfunding is the *effect*?"

Turk's theory about the federal government's motivation for tightening the purse strings on public education is consistent with the tone of *Reaping the Benefits* and with the federal funding bodies' prerequisites for obtaining government research grants. The federal government now expects applicants to its major research granting agencies to raise matching funds from other sources, including industry. Researchers eager for funding frequently find themselves at industry's door soliciting support. Advocates say that exposing university research to the invisible hand of the market ensures relevancy, accountability and efficiency. Critics counter that it gives industry veto power over the research being conducted at public institutions.

If all research is subjected to the rigours of return on investment, will work on such commercially tenuous inquiry as river blindness, 17th century portraiture or the roots of domestic violence be pursued? What about research critical of industry and its practices?

Then there is the litigious fine print that industry sponsorship and commercialization generate. Its syntax and related



acronyms—intellectual property rights (IPR), non-disclosure agreements (NDA), conflict of interest (COI—why not?)—seem to expect partnerships to go awry.

According to RESEARCH Infosource’s rankings of research universities, in fiscal 2003 (the last year for which national figures are available), Canada’s top 50 universities enjoyed an increase of 12.6 per cent in sponsored research. Sponsored research includes grants awarded and funds raised from all government, industry and private sources outside of the universities themselves. The University of Alberta, University of Calgary and University of Lethbridge ranked 6th, 9th and 40th respectively on RESEARCH Infosource’s list.

At the University of Alberta, the Research Services Office pledges to help researchers negotiate the complexities of sponsored research relationships, and to ensure that the rights of the researchers and the university are protected. Over the last decade, the U of A has witnessed an almost fivefold increase in research funding from industry—from \$8-million in 1994/95 to \$39.1-million in 2003/04. As a proportion of total sponsored research, this represents a jump from 6.6 per cent to 10.4 per cent.

Dr. Peter Robertson, the associate vice-president of research and industry relations and the CEO of TEC Edmonton, says the university’s policies regarding industry-sponsored research are beyond reproach. “The fundamental principle of academia is the freedom to publish results of scholarly inquiry regardless of who funds the research. We prohibit our researchers from engaging in secretive deals with corporations and require them to disclose all relationships that may be perceived as conflicts of interest.”

Robertson denies that university administrators are intentionally courting industry funding to compensate for government cutbacks to post-secondary education. “While it’s true that governments have cut funding to operations, they are putting considerable funds into research,” says Robertson. “Our experiences tell us that donors—whether they are governments, individuals or corporations—are attracted to research excellence, so that’s what we focus on creating.”

According to Robertson, academic freedom will always prevail. “We expect researchers to publicly disclose their findings independent of the commercial interests of the sponsor. We would not allow them to conduct studies on behalf of industry that relinquished control over the dissemination of the results.”

In other words, Robertson believes that a “Nancy Olivieri”

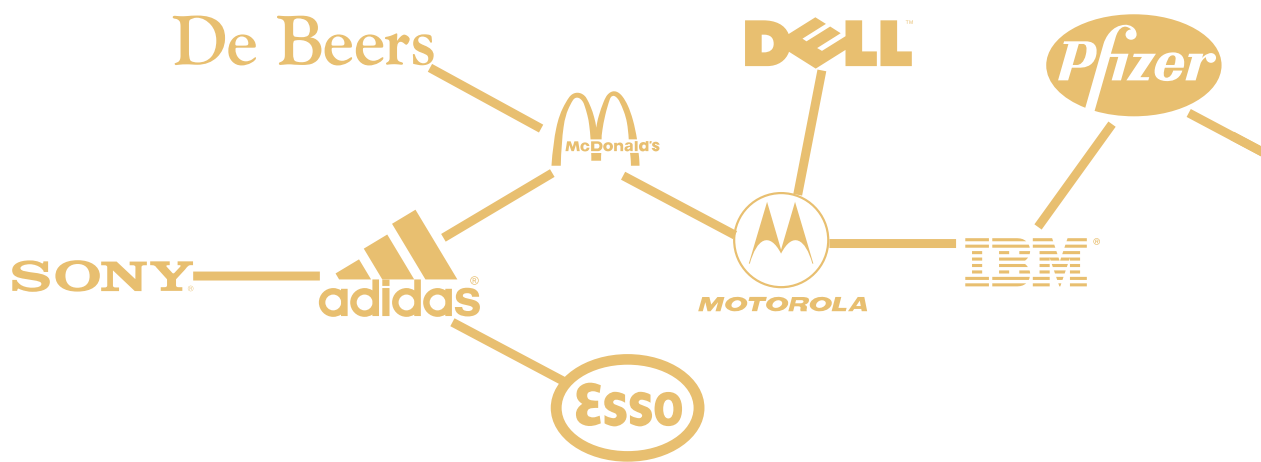
could not happen at the University of Alberta.

The Olivieri case is frequently cited as an example of the dark consequences of industry-funded research. An eminent medical researcher in hematology at Toronto’s Hospital for Sick Children, Dr. Olivieri received funding from the generic drug company Apotex to conduct a clinical trial on its drug deferiprone. Initially results were positive, but Olivieri claimed her later results suggested the drug was neither safe nor effective. Olivieri informed Apotex of her findings, but the company disputed her analysis. She then advised the company that she would notify her patients and peers of the potential dangers of the drug. Apotex countered that Olivieri had signed a confidentiality provision which legally prohibited her from disclosing data to third parties. Olivieri went public with her data and her experience, and unleashed a maelstrom of controversy.

Toronto’s Hospital for Sick Children and the University of Toronto did not support Olivieri during her battle with Apotex. Dr. Ella Haley, an assistant professor of sociology at Athabasca University, writing about the Olivieri case in *Inside Corporate U: Women in the Academy Speak Out*, suggests competing interests were at stake. “The University of Toronto was in the midst of negotiations to receive a multi-million-dollar donation from Apotex. One catch was that Apotex requested the University of Toronto president to lobby the Canadian government against proposed changes to drug patent regulations that would hurt the company’s revenues. President Prichard wrote to the Prime Minister noting ‘the proposed government action could jeopardize the building of the university’s proposed new medical sciences centre.’”

“This is not a story about justice being served,” says Olivieri, speaking from her office at the Hospital for Sick Children. “I don’t want the public to be lulled into a false sense of security that this was the one time the pharmaceutical industry tried to hoodwink a researcher and that, in the end, truth prevailed. I would guess that there are probably thousands of researchers who are being pushed into fudging their clinical trial data. Not a week goes by that I don’t receive e-mails from medical researchers grappling with the gag-order culture of conducting clinical trials on behalf of the pharmaceutical industry,” she says.

Critics of industry-sponsored trials claim that researchers supported by corporations are more likely to report positive findings than those funded by disinterested sources. A recent study from the Royal Society, the UK’s national academy of



science, concludes that one in ten research scientists admits to falling prey to corporate pressure to tailor their findings.

For his part, Dr. Christopher Mody, professor and chief of respirology at the University of Calgary, has witnessed only ethical public/private partnerships. Mody, a jovial figure, with a deep voice and loud laugh, has been at the U of C since 1990. His work on microbial immunology has garnered prestigious government grants but little interest from pharmaceutical companies. “My research is at the back-end of the product pipeline,” says Mody. “Although I would welcome the opportunity to partner with industry, my research has only fit into one sponsored clinical trial in the last 15 years.” Mody describes the binary character of medical research. “Bench research explores how diseases work. This is what I do. Applied research looks at how to treat disease—this interests pharmaceutical companies.”

Of Alberta’s three universities, the University of Calgary attracts the largest proportion of its total sponsored research from industry sources. Over the last decade, industry support has jumped from \$10.3-million to \$39-million.

Dr. Martin Kirk, director of research services, predicts, “industry will increasingly turn to the U of C for collaboration on important research questions.” However, Kirk says that if a corporate sponsorship ran counter to the university’s values, the donation would be turned down with thanks. “I cannot remember a situation where we turned down funding over ethical concerns, although we have discussed not accepting funding from the tobacco industry.”

The question of tobacco industry funding has been posed at several Canadian universities. According to a study published in the *Canadian Journal of Public Health*, the tobacco industry has a disconcerting relationship with Canadian medical schools. Of the 16 schools that participated in the study, not a single one had a policy banning tobacco industry research funding or donations. Indeed, 70 per cent of the medical schools reported accepting tobacco money. This invites the question, what would a company have to do to run counter to a university’s values?

The U of C recently received a \$1-million donation from pharmaceutical giant GlaxoSmithKline (GSK) to establish a professorship in inflammatory lung disease. The funds will be used to provide salary and infrastructure support to an eminent

researcher—a position the university would not otherwise be able to support. As for whether the company will be able to influence the research agenda, Mody says absolutely not. “GSK has placed but one condition on the funds—that they be used to fund research that is done with integrity and objectivity.” Such noble principles can only be tested in hindsight. Mody predicts that the provincial government may leverage GSK’s donation to create even more amenities for the position. “This is one example of the new collaboration among industry, academia and government. It’s the direction of the future.”

If Mody is right about the future, Dr. Jim Byrne is nostalgic for the past. Byrne, a blustery fellow with a quick wit, is an associate professor in the department of geography at the University of Lethbridge. He believes that separating the pursuit of knowledge from the pursuit of profit is essential to the preservation of public trust. He didn’t always see it this way. Early in his career, Byrne accepted corporate funding for his research. “I thought it was the way to go,” he recalls speaking from his office on Alberta’s windiest campus. “I soon learned just how many strings were attached to the funding, and I cut my ties with industry.”

The University of Lethbridge attracts proportionately less corporate funding than the province’s other universities. Over the last decade, industry funded an average of 2.3 per cent of all externally sponsored research. According to grants officer Christine Picken, “we can’t expect governments to fund our entire research portfolio. We are eager to enter into partnerships with industry that benefit the public good. Of course, we would never compromise on our standards of academic freedom and research integrity.”

Byrne wishes it were so. He has gained a reputation for keeping his mouth open and railing against what he describes as the disciplining of dissent. “On campuses across Canada and certainly in this province, academics are having their tongues tied. This silencing of debate violates the scholar’s basic duty to society, which is to speak the truth regardless of political opinion or corporate influence.”

Byrne has felt the sting of not keeping his fiery opinions to himself. “A while back, I signed an open letter to [Premier] Ralph Klein expressing concern over the province’s position on climate change. Weeks later, I learned that the Water Resource Institute, of which I was the director, was being closed by university administration.” Such experiences have dampened

“There are probably thousands of researchers who are being pushed into fudging their clinical trial data. Not a week goes by that I don't receive e-mails from medical researchers grappling with the gag-order culture of conducting clinical trials on behalf of the pharmaceutical industry.”—Nancy Olivieri



Byrne's belief in coincidence, but not his willingness to speak out against the dangers of corporations infiltrating universities.

Dr. Michel Fattouche, a professor in the University of Calgary's department of electrical and computer engineering and chief technical officer of Cell-Loc Location Technologies Inc., disagrees that there is any problem with corporate research sponsorship. Although his expertise is wide-band orthogonal frequency division multiplexing, Fattouche is as fluent in the principles of high finance as any MBA graduate. Speaking last spring at the U of C, he applauded Alberta's culture of entrepreneurship and willingness to open up the ivory towers and usher in the spirit of innovation and investment.

Fattouche calls himself a true-blue capitalist and he's got a portfolio of patents—16 at last count—to prove it. His passion is wireless technology and if he's right in calling Calgary a “silicon mountain” then he's definitely a sherpa. “My first collaboration with industry occurred when someone I knew at AGT asked me a question regarding the application of wireless technology. It intrigued me to the degree that I not only answered his question but developed technology with vast commercial potential.”

His is a tale of how far universities have come in the last decade in exploiting the commercial value of the knowledge they foster. “Before filing my first patent, I met with the people at University Technologies International (UTI), U of C's commercialization venture, to discuss my invention,” recalls Fattouche. “I wanted to spin my ideas into a commercial venture, and in recognition of the role the university played in supporting my intellectual development, I proposed that it take an equity position in the enterprise.” Initially, UTI resisted, saying it wasn't interested in the venture capital model, but eventually it accepted Fattouche's offer.

Alberta's three universities have endorsed the Canadian Association of Colleges and Universities' goal of tripling the revenue from commercialization within the next decade. In the fall of 2004, the U of A's technology transfer unit and Edmonton Economic Development Corporation launched TEC Edmonton to foster the development of inventions, innovations, entrepreneurs and business opportunities. Like researchers at half of Canadian universities, researchers at the U of A own their inventions. TEC Edmonton works with them to represent the interests of the taxpayers, who have helped fund the research,

and to recover a portion of any future revenue.

Fattouche believes governments and corporations have a responsibility to fund research that creates jobs. In his view, translating the Dead Sea Scrolls or exploring the migration patterns of Laplanders are research luxuries that can only be afforded if the Canadian economy is outpacing its global competitors. But, what does this somewhat Darwinian approach to research hold for scholars whose work has little commercial cachet? Like the aphorism “if you think education is expensive, try ignorance,” we should be asking not whether we can afford to fund non-commercial research, but whether we can afford *not* to.

The general consensus is that if current trends continue, research that does not attract the corporate eye will get left behind.

STACHEL, THE DIAMOND RESEARCHER, SAYS, “I AM FEARFUL that curiosity-driven research will be sacrificed because it won't be able to attract industry sponsors. It will become difficult to do great research without corporate partners, especially if governments continue to require matching funds.” Hudema, the activist, now working on a documentary to expose the effects of corporatism on Canadian campuses, says, “universities are falling prey to the corporate model. We must act now to reinstate the integrity and independence of publicly funded education in this province.”

Are Alberta's universities destined to a future dominated by public/private partnerships and untold corporate influence over their research agendas? Will academic freedom, research integrity and public trust be placed on scholarship's endangered list? Before answering, Alberta's universities, and those who love them, should seek inspiration from their mottoes: “I will lift up my eyes” (*Mo Shùile Togam Suas*—University of Calgary), “Whatever things be true” (*Quaecumque Vera*—University of Alberta), “Let there be light” (*Fiat Lux*—University of Lethbridge). May the spirit of inquiry, the quest for truth and the search for knowledge prevail.

---

Alison Azer is a writer, researcher and activist exploring the incongruity of corporate dominance and citizen leadership. She recently returned to her native Alberta from Vancouver and is stunned by the supersized parking spots here in SUV-friendly wild rose country.