



# Whistleblowers: Defending Academic Freedom

## The Threat to Public Research

Public-private partnerships in university research are on the rise. Private corporations have taken advantage of public-private funding models to save money and generate proprietary research outcomes.

The federal government has contributed to the rise of private influence in Canadian universities by introducing programs intended to maximise the commercialisation of research. By stipulating that research projects must have a private sponsor before receiving matching public funds, programs such as the Canadian Foundation for Innovation have vastly increased corporate involvement.

As research institutions have become more reliant on private sector money, private corporations have come to influence both the direction and the reported results of research. Some researchers who have been unwilling to tailor their work to the needs of private sponsors have become the targets of academic censorship and, in some cases, reprisals and public smear campaigns. Student researchers are particularly vulnerable because they lack the protection mechanisms like collective agreements.

## Sounding the Alarm on Corporate Influence

Over the last decade, the negative effects of corporate sponsored research have become apparent. A recent survey of researchers in the United States revealed that scientific misconduct had become commonplace.<sup>1</sup> Of the researchers surveyed, 33% had engaged in some kind of significant misconduct including data falsification, plagiarism, and violation of ethical requirements. 15.5% of respondents had changed the research design, methodology, or results because of pressure from a funding source.

The research community has become more vocal over its concerns with the private sponsorship of university research. In a letter to the journal *Science*, 40 prominent scientists wrote that matched funding requirements were “eschewing scientific excellence”<sup>2</sup> by prioritising funding those projects deemed commercialisable. The Canadian Society of Biochemistry, Molecular, and Cellular Biology is petitioning the federal government to address these concerns.<sup>3</sup>

## Corporate Interference: The Olivieri Case

Scientific inquiry requires the free flow of information, but industry-sponsored contracts often include non-disclosure clauses to prevent the dissemination of research. In some cases, this non-disclosure poses a serious threat to the health of Canadians.

While working at the University of Toronto affiliated Hospital for Sick Children (HSC), Dr. Nancy Olivieri signed a contract to test a new drug for the pharmaceutical company Apotex. Upon discovering that some of her child subjects were experiencing high levels of iron toxicity that could lead to life-threatening liver cirrhosis, Olivieri immediately stopped the tests and insisted that the health risks be communicated to her patients’ parents. Citing the contract’s non-disclosure clause, Apotex not only refused to communicate the risks, but also halted all further drug trials at the HSC, confiscated the trial medicine, fired Olivieri from the study, and threatened her with litigation if she divulged any information to her patients.

Acting on her ethical obligations, and confident that the University and the Hospital would support her, Olivieri informed her patients of the risks. A bizarre series of events ensued that the *Globe & Mail* would later refer to as “Canada’s worst academic and research scandal in decades”.<sup>4</sup>

Olivieri began receiving anonymous threatening letters from a co-worker receiving Apotex funding. Anonymous letters containing unfounded allegations against Olivieri were also sent to the media and the HSC disciplinary committee. Apotex, as well as some hospital and University administrators, used these allegations to level charges against Olivieri and discredit her work.

Six years after the first signs of problems with the drug were detected, the Independent Committee of Inquiry<sup>5</sup> exonerated Olivieri of all allegations of misconduct. The Committee’s report recommended that universities be prohibited from entering into research contracts that restrict the communication of results. The report was explicitly critical of the University and the HSC for failing to protect Olivieri’s academic freedom. It later became public that, at the time Olivieri came under attack, the University of Toronto was in negotiations with Apotex over a \$20 million building investment.

As a result of her experiences, Olivieri helped found the organisation Doctors for Research Integrity and works to oppose the adverse influence of corporate interests on public research.

## Misconduct in Research on Drinking Water

In another example of corporate interference in the dissemination of critical research results, a drinking water experiment that took place in Warton, Ontario has led to questionable results that could have significant public health risks.

**“The whistleblower is an essential element in the effort to protect the integrity of [government] supported research because researchers do not call attention to their own misconduct.”**

U.S. Dept of Health and Human Services, Office of Research Integrity

**“It is [the university’s] duty to act strongly in support of their researchers if the researchers’ independence or academic freedom is threatened.”**

*Report of the Committee of Inquiry on the Case Involving Dr. Nancy Olivieri, the Hospital for Sick Children, the University of Toronto, and Apotex Inc.*

For nearly a month in summer 2000, a large chemical company collaborated with the Ontario Ministry of the Environment, the Ontario Clean Water Agency, a Canadian university’s drinking water research group, and the Warton municipal government to test chlorine dioxide as an alternative to traditional chlorination in the town’s drinking water. Warton residents were not informed of the experiment in advance, even though the chlorine dioxide disinfectant by-product levels in their drinking water were above the United States Environmental Protection Agency’s “maximum contaminant level.”<sup>6</sup>

During the study, Warton residents filed dozens of complaints about bleach stains on laundered clothing, taste and odour problems, and even the death of pets. The study was only terminated following headlines in the *Globe & Mail*, *National Post*, and *Toronto Star*.

Despite the widespread and well-known dissatisfaction of Warton residents, researchers’ submissions to academic publications following the experiment lauded it as a success, claiming that “no customer taste and odour complaints were reported during the study period”.<sup>7</sup> Even the university publicised the “novel and successful trials to improve Warton, Ontario’s drinking water”.<sup>8</sup> In May 2005, Health Canada proposed new Canadian drinking water quality guidelines, citing the study as evidence that chlorine dioxide could “maintain water quality”.<sup>9</sup>

Efforts to expose the discrepancies in reports on the Warton experiment by a former graduate student, Chris Radziminski, have been ignored by the university. Although the Natural Sciences and Engineering Research Council partly funded the project, it insists that the complaint was “purely a private matter” and that NSERC has no mandate to protect whistleblowers. The Canadian Federation of Students sought a federal court ruling challenging the granting council’s inaction, but a judge upheld NSERC’s decision to not seek an investigation from the University of Toronto.

The ruling exposes an alarming gap in accountability for publicly-funded research. Although NSERC technically has a duty to demand ethical behaviour from universities that receive funding, there is virtually no pragmatic oversight by NSERC, even in the face of complaints. The judgement confirms that universities are responsible for policing

themselves, and no appeal mechanism is available for whistleblowers who have evidence of misconduct and procedural abuse.

## **Towards Whistleblower Protection**

Despite the critical role of whistleblowers in ensuring integrity in university research, they have no formal protection in Canada. With increased corporate influence in publicly-funded research, university administrators seem disinclined to support researchers who stand up for academic integrity.

The federal granting councils are responsible for overseeing the ethical frameworks of universities to ensure that research “meets the highest international standards of excellence”.<sup>10</sup> However, the councils’ Integrity in Research and Scholarship policy statement does not include a provision that would protect whistleblowers from retaliation.

In contrast, national regulations in the United States of America recognise the role of the whistleblower as essential for upholding research integrity. The Whistleblower’s Bill of Rights states: “Institutions have a duty not to tolerate or engage in retaliation against good-faith whistleblowers”.<sup>11</sup> The absence of Canadian guidelines for whistleblower protection undermines university research integrity.

## **Sources**

1. Martinson et al. *Nature*. 435,9, June 2005, 737-738.
2. Tyers et al. *Science*. 24 June 2005. 308(5730):1867.
3. Visit [www.sciencefunding.ca](http://www.sciencefunding.ca) for more information.
4. *Globe and Mail*. Thursday, December 23, 1999.
5. Thompson, J., P. Baird, and J. Downie. “Report of the Committee of Inquiry on the Case Involving Dr. Nancy Olivieri, the Hospital for Sick Children, the University of Toronto, and Apotex Inc.,” 2001.
6. USEPA. “List of Contaminants & Their MCLs.” 2002.
7. Volk, C.J.; and R. Hofmann, C. Chauret, G.A. Gagnon, G. Ranger, & R.C. Andrews. *J. Environ. Eng. Sci.* 1:323-330, 2002.
8. Andrews, R., B. Karney and G. Ranger. “Chlorine dioxide disinfectant in Warton, Ontario.” 4th International Symposium on Chlorine Dioxide, 2002.
9. Health Canada. “Chlorite and chlorate in drinking water: Document for public comment”. Water Quality and Health Bureau, May 2005.
10. Tri-Council Policy Statement: Integrity in Research and Scholarship. [www.nserc.ca](http://www.nserc.ca)
11. U.S. Department of Health and Human Services, Office of Research Integrity.

