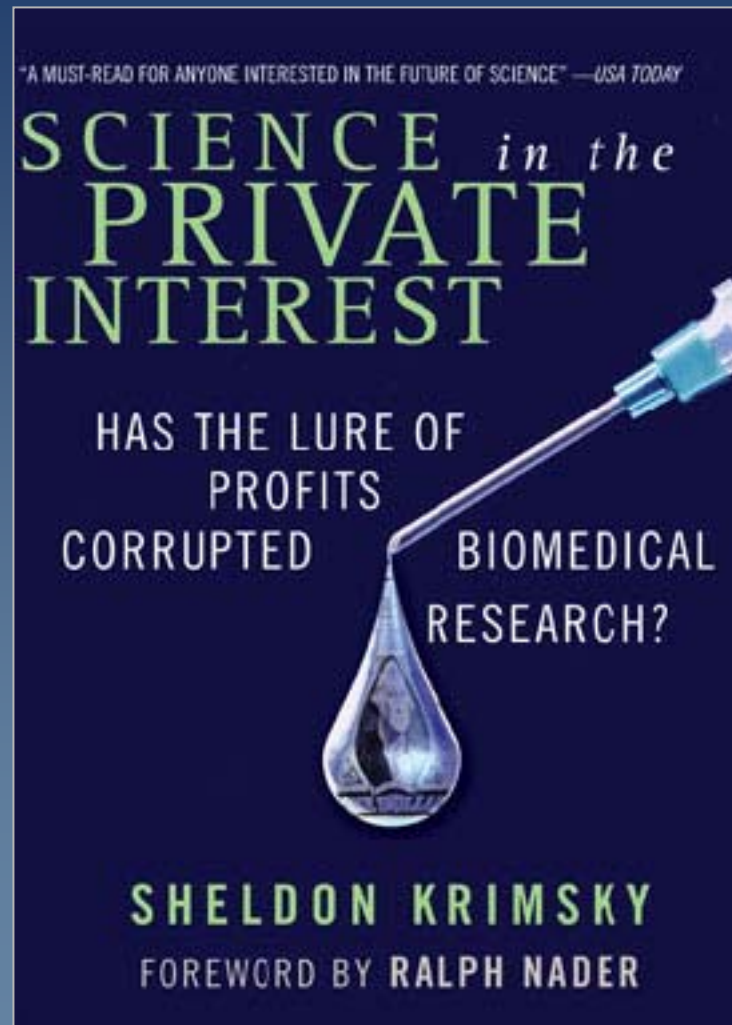


CORRUPTED SCIENCE

Corporate Influence in Academic Science





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The Corporate Connection to Science

- How American corporations come to view their patronage relationship to science.
- How corporations influence the outcome of academic research.
- How corporations suppress publication of undesirable research results.
- How corporations fund academic science to attack credible scientific studies.



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Corporations view science not as a generator of truth but as one among many inputs into production

- Science can help or hinder a company's profit margins because of its impact on litigation, regulation or marketing.
- Cigarette companies are known to have purchased scientific studies that disputed the health risks of tobacco.
- Other industries including drugs, agriculture and the chemical sector have used their funding of science to discredit criticisms of those who have uncovered risks associated with their products.
- Corporations have also suppressed data of studies they funded when the conclusions were not consistent with their financial interests.



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Drug companies influence who speaks at professional meetings

“In the days leading up to the American Psychiatric Association’s annual meeting here this past week, pharmaceutical companies mailed attendees hundreds of free phone cards, as well as invitations to museums, jazz concerts and fancy dinners.”

“And in several dozen symposiums during the weeklong meeting, companies paid the APA about \$50,000 per session to control which scientists and papers were presented and to help shape the presentations.”

* Shankar Vedantam. Industry Role in Medical Meeting Decried. *The Washington Post*, May 25, 2001.



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The Tobacco industry campaigned against WHO science

“The tobacco companies planned an ambitious series of studies, literature reviews and scientific conferences, to be conducted largely by front organizations or consultants, to demonstrate the weaknesses of the IARC* study and of epidemiology, to challenge ETS [environmental tobacco smoke] toxicity and to offer alternatives to smoking restrictions”
(p. 197).**

* IARC: The International Agency for Research on Cancer, World Health Organization.

** World Health Organization. Report of the Committee of Experts on Tobacco Industry Documents. Tobacco Company Strategies to Undermine Tobacco Control Activities at the World Health Organization. July 2000.

http://www.who.int/tobacco/media/en/who_inquiry.pdf

Exxon buys peer-reviewed science to support its litigation

Sociologist William Freudenburg writes about how Exxon sought to pay for science that would support its conclusions.

“A large corporation facing a multibillion-dollar court judgment quietly provided generous funding to well-known scientists (including at least one Nobel laureate) who would submit articles to “open,” peer-reviewed journals, so that their “unbiased science” could be cited in an appeal to the Supreme Court.” *

* William R. Freudenburg. Seeding science, courting conclusions: Re-examining the intersection of science, corporate cash, and the law. *Sociological Forum* 20:3-33 (March 2005).



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Companies seek to repress publication of research that does not support their bottom line

“A California company [Immune Response Corporation] tried to block publication of a scientific paper that showed its H.I.V. vaccine was not effective, and it has asked for damages of more than \$7 million from the universities and researchers who published the findings.”*

* Philip J. Hilt. Company tried to bar report that H.I.V vaccine failed. *New York Times*, November 1, 2000.

U. C. - Berkeley scientist describes how a corporate sponsor tried to buy his silence

Endocrinologist Tyrone Hayes studied whether low concentrations of the herbicide atrazine interferes with the normal functioning of frogs.

He found that minute amounts of atrazine inhibits the development of the larynx and feminizes male frogs.

His original research received funding from Syngenta through a consulting firm, Ecorisk. Hayes disassociated from the company when he claimed they tried to delay release of his results.

Hayes finally got his data to the EPA by having a meeting at Starbucks after being warned not to go to the EPA.

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“ Mr. Hayes maintains that Ecorisk Inc., the consulting company that hired him and several other academic scientists to study atrazine on behalf of Syngenta, stalled and delayed his research progress once he began finding that the substance had damaging effects on frogs.

It turned out that in the contracts covering Mr. Hayes's work and that of many of the other researchers, Syngenta and Ecorisk retained final say over what and whether the scientists could publish.” *

* Goldie Blumenstyk. The story of Syngenta & Tyrone Hayes at UC Berkeley: The Price of research. *Chronicle of Higher Education* Vol 50, Oct 31, 2003.

Research pharmacologist withdraws paper under threat of lawsuit from corporate sponsor

Dr. Betty Dong, a professor of clinical pharmacy at the University of California at San Francisco, signed a contract with Flint Laboratories (taken over by Boots Pharmaceuticals and then Knoll pharmaceuticals) and ignored the small print, which gave the company rights over publication.

When the study results comparing the generic with a trade medication for hypothyroidism did not satisfy the sponsor, the company threatened to sue Dr. Dong; she withdrew the paper after it was reviewed and accepted for publication in the *Journal of the American Medical Association*. *

* Drummond Rennie. Thyroid storm. *Journal of the American Medical Association* 277:1238-1243 (April 16, 1997).



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University pharmacologist is paid by a company to discredit studies finding their drug caused strokes

The ingredient PPA (phenylpropanolamine) was used in dozens of cold remedies and in appetite suppressants as early as 1936. In the 1980s PPA was linked to a slight risk of stroke in young women, which doctors theorized was from its role in constricting blood vessels and raising blood pressure.

John P. Morgan, a professor of pharmacology at City University, conducted studies of PPA for industry and disputed the stroke theory. Morgan “acted as a reviewer for medical journals considering whether to publish reports on PPA, while he was on the payroll of the leading diet pill manufacturer, Thompson Medical Company. His anonymous critiques helped relegate some articles that questioned PPA’s safety to little-known journals.” *

* Jef Gerth & Sheryl Gay Stolberg. Another part of the battle; keeping a drug on the shelves of stores. *New York Times*, December 13, 2000, A17.



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In exchange for research samples of a drug,
a company wants control over publication

“When...a bacteriologist at University College Hospital, Ireland, wrote to Bayer in November last year [2000] asking for a supply of pure ciprofloxacin and related products for his research into antibiotic resistance, he was asked to sign a document stating that, “We declare that we will inform Bayer AG in writing of our test results and will not publish or commercialize them without written permission of Bayer AG.” *

* Editorial. The tightening grip of big pharma. *The Lancet*, April 14, 2001.

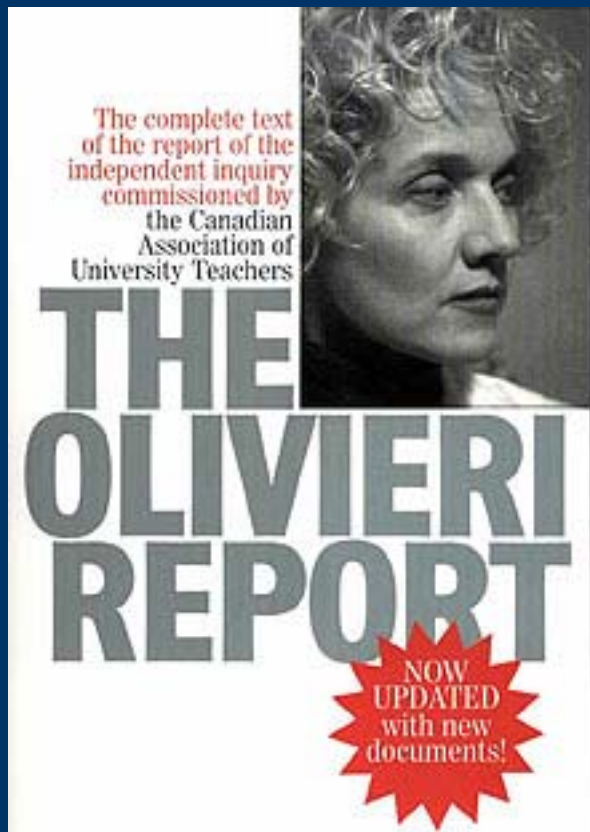
Hematologist pressured to withhold information on adverse effects in a drug trial

In 1996, Dr. Nancy Olivieri, a hematologist at the University of Toronto Medical School identified an unexpected risk to her patients who participated in a drug trial for which she was a co-investigator. The drug manufacturer and sponsor of the trial, Apotex, disagreed with her findings and issued legal warnings to deter Olivieri from disclosing these risks to her patients and colleagues, and from publishing her findings... *

* Jon Thompson et al. *The Olivieri Report*. Toronto: James Lorimer & Co., 2001, p. 37.

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...Drug company pressures Dr. Nancy Olivieri to withhold adverse effects in a drug trial



According to the Canadian Association of University Professors:

“This case demonstrates the importance to the public interest that in hospitals affiliated with universities, hospital staff who have academic appointments have the right to academic freedom and its protection to ensure their independence.”

* Jon Thompson et al. *The Olivieri Report*. Toronto: James Lorimer & Co., 2001, p. 37.

Survey of Scientists' Misbehavior

In a survey of several thousand early and mid-career scientists in the United States funded by the National Institutes of Health, scientists were asked to report on their own behaviors.

When asked whether they ever change the design, methodology or results of a study in response to pressure from a funding source: 20.5% mid-career scientists and 9.5% early-career scientists answered affirmatively.

* B.C. Martinson, M.S. Anderson, and R. de Vries. Scientists behaving badly. *Nature* 435:737-738 (June 9, 2005).