

Bon Vivant Scientists

Powerful outside interests have been infringing on the professions of science and medicine for most of the past century, contorting science to greater and lesser extents to support their own ends. For example, persistent litigation discovery disclosed, first, the editing of medical reports by the asbestos industry lawyers, cover-ups of asbestosis at the Canadian asbestos mines, and the suppression of experimental studies showing that asbestos causes cancer. Facing accumulating independent reports of evidence undermining its attempts at obfuscation, the industry was forced to adopt less crude tactics. During the past 50 years, these have included the exploitation of epidemiology to advance the argument that asbestos miners have no excess of lung cancer, using methods strongly criticized by Thomas Mancuso and described by Wilhelm Hueper as “statistical acrobatics.” With the increasing sophistication of science and its extension into such arcana as quantitative modeling of risk as a function of toxic exposures, there has been a growing problem for science to purify itself of manipulation by the best scientists that money can buy.

Readers of this journal will recall the raging controversy over a shift starting in the late 1990s at the International Agency for Research on Cancer (IARC), part of the World Health Organization. Articles and commentaries published in 2002–2003 and sent to IARC and the World Health Organization called attention to IARC’s failure to implement new WHO conflict-of-interest policies in the selection of expert panelists in IARC working groups. With the change in the leadership of

the IARC Monographs program and a new IARC Director, strong action has been taken to restore IARC’s reputation and prevent the manipulation of IARC by financially interested parties.¹

In the United States, there were some problems in the 1990s with corporate officials and consultants having strong influence in shaping government policy, acting through outside advisory panels to the Environmental Protection Agency and the Department of Health and Human Services. During the current Bush administration, there have been unprecedented extremes and more numerous examples of corporate influence through the stacking of these panels, frequently in violation of federal laws calling for disclosure of financial conflicts of interest and balancing of interests represented on federal advisory committees. These abuses have been publicized in leading science journals.^{2–6} *The Lancet* warned that a “terminal decline in public trust in the advice of scientists” was in danger of resulting from the pattern of industry links and right-wing ideology of scientists appointed to federal advisory panels.⁶

“Defensive research” by business interests is a prevailing condition in the arena of occupational and environmental health. In April 2005, it was disclosed in litigation that the oil industry’s trade association is financing a study of its own to counter a recent epidemiology report by the National Cancer Institute. It is anticipated that the American Petroleum Institute’s research will be designed to blunt efforts to lower the permissible exposure limit for benzene in the workplace and to provide evidence for use in defense of personal injury suits.⁷

During the 1970s, the Center for Science in the Public Interest had the idea of spotlighting food industry abuses by ceremoniously presenting the Bon Vivant Vichyssoise Award (a beat-up old garbage can) to food producers. The name came from a company that had gone out of business after selling cans of improperly processed vichyssoise soup containing *Clostridium botulinum*; some people who drank it died of botulism. Awardees have included: Gerber, for selling the first junk food encountered by many, baby food desserts; Oscar Mayer, for its salty, fatty, processed meats; and General Foods, for sugary breakfast cereals.

It was proposed at last year’s meeting of the International Society for Environmental Epidemiology that the ISEE issue its own counterpart token of disapproval, which could be called the “Tobacco Science Smoke-and-Mirrors Award” or something like that. But this would require a considerable effort, for committees of independent scientists would have to try to determine when other scientists had crossed the line and committed the design-and-analysis, ethical equivalent of fudging their data. This would be a major undertaking even if the “awardees” were not backed by global enterprises with much at stake in the scientific controversies and no restraint about deploying expensive lawyers.

Police, prosecutors, politicians, juries, and journalists are not by themselves capable of debunking the toxic defenders of the null hypothesis and studies fatally designed to confirm it. Public health and environmental activists often criticize public bodies such as IARC, WHO, and government reg-

ulatory agencies for not doing a better job, but with the goal of strengthening these institutions, not tearing them down. We all lose if the public reacts by losing faith in science and cynically concluding that the truth is hopelessly obscured by an impenetrable din of doctors of spin.

There is an increasing burden on independent scientists to confront science-for-sale and those who represent their sponsors' business interests by the opportunistic and misleading use of scientific instruments and credentials. Government regulation can deal with some extreme cases, but the scientific professions themselves have the obligation to protect their integrity and honor in ways they alone can.

ChevronTexaco's efforts to detoxify its Amazon pollution in the public mind in Ecuador, while a civil trial in the matter was proceeding, provoked a denunciation signed by occupational and environmental health scientists around the world, which appeared in the previous issue of this journal. The oil giant had paid for advertisements in Ecuadorian media, with excerpts authored by credentialed consultants, that contested published studies attributing elevated

rates of cancer, spontaneous abortion, and other problems to pollution arising from oil-extraction activities. The authors of the media critique of the published reports, at least two of whom participated in a press conference staged by ChevronTexaco, suggested that methodologic flaws in the published studies render them useless for identifying any health effects resulting from the crude oil and toxic waste pollution. There are numerous obstacles to conducting thorough epidemiologic studies in such circumstances, and the evidence of health effects is, of course, open to further consideration. However, ChevronTexaco's conflict of interest with the findings of the published studies could not be clearer. Holding a press conference and placing advertisements in the media while a trial on the issues is proceeding is not something most oil companies would dare do in countries such as the United States. Was this an effort to bypass the scientific literature altogether and manage the public perception of science as a market commodity?

As the success of the campaign for development and implementation of conflict-of-interest policies by the World Health Organization

shows, scientists who speak out and oppose abuses that threaten scientific objectivity and frustrate the search for truth can have an effect. The letter about ChevronTexaco's pollution of the environment and ensuing dissemination of advertising to the public in Ecuador is yet another instance of concerned scientists speaking up to defend science against such abuses.

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