Op-Ed/Editorials: Private Interest vs. Public Interest: Science Caught in the Crossfire

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As public policy makers and scientists address modern public health problems such as obesity, they acknowledge the negative impact the tobacco industry had on public health policy discussions of the past (Danynard, 2003). For the past few decades, the tobacco industry introduced industry favoring scientific evidence to public policy discussion, slowing legislation addressing health issues such as second hand smoke. This harmful effect coupled with allegations of biased research has sparked debate among the research community as to the moral integrity of accepting private funding, especially from industries producing negative health consequences (e.g., tobacco, fast food; Adams, 2007). This debate also strengthened the belief that government funded research is inherently more invested in the public interest than privately funded research (Moskalewicz, 2007), and therefore is more genuine. This editorial argues that discrediting all privately funded research as vulnerable to bias is just as much of an oversimplification as viewing all government funded research as trustworthy. All sources of funding have the power to create a conflict of interest among scientists. To illustrate this issue, this editorial contrasts two poor scientific activities of "the worst of the worst" in private funding (i.e., Big Tobacco) with recent scientific activity of a respected US federal government agency.

Tobacco Industry Funded Research

Censorship

Censoring data is one symptom of a conflict of interest. The tobacco industry funded research in response to the growing body of scientific evidence showing the ill health effects of second hand smoke, but prohibited publication of unfavorable results. For example, an editor of Psychopharmacology requested

revisions of a 1983 article entitled "Nicotine as a positive reinforcer in rats," submitted by three authors employed by the Phillip Morris Research Center. In their reply to the editor's request, the authors withdrew the manuscript, and later stated Phillip Morris issued an injunction against publishing the article (Barry, 2006). Not releasing information with important health consequences is a form of censorship that the tobacco industry achieved by creating a conflict of interest among the authors.

Approving Flawed Findings

Before academic journals publish scientific evidence, a panel of the journal's scientists typically reviews the evidence to verify methodological and presentational integrity, an approval process that adds credibility to published scientific data. A second effect of the conflict of interest, however, is scientists' approval of flawed findings. Therefore some findings from tobacco-related research disrupted this peer review process. For example, the tobacco industry was able to publish research with faulty methods and incorrectly attributed results in Inhalation Toxicology, a peer reviewed journal. One of the editors of this journal is Dr. David Doolittle, Director of Biological Research at RJ Reynolds, a cigarette company (Inhalation Toxicology Homepage, 2007; Tong & Glantz, 2007). The journal's uncharacteristic permissiveness points to a conflict of interest.

The Reason

The tobacco industry created a conflict of interest among scientists to manipulate scientific evidence and the reason is clear: evidence demonstrating ill health effects could influence legislation and public opinion and, as a result, limit cigarette sales.

White House Funded Research

Before government officials present findings to Congress, the White House Office of Management and Budget (OMB) reviews all testimonies to ensure the testimonies are consistent with the President's budget and policies. Last October, the director of the Centers for Disease Control and Prevention (CDC), Dr. Julie Gerberding, submitted testimony to the OMB on climate change's ill effects on health before speaking to the Senate Committee on Environment.

Censorship

According to an anonymous CDC official, the OMB "eviscerated" her testimony:

editing out key scientific evidence and informed health recommendations, including the CDC's position that "climate change [is] a serious public health concern" (Associated Press, October 24, 2007). Four pages remained after editing the original 14-page manuscript (Associated Press, October 24, 2007). This apparent censorship mirrors censored reports produced by tobacco funded scientists, as neither released important health information inconsistent with the goals or policies of the funding sources.

Approving Flawed Findings

Just as Inhalation Toxicology published flawed findings due to a conflict of interest on the peer review panel, Dr. Gerberding also denied flaws in her presentation, reporting she "[i]s absolutely happy with my testimony" (Associated Press, October 24, 2007). Dr. Gerberding's opinion contrasts with Senator Barbara Boxer's, the chairman of the committee to which Dr. Gerberding presented, who declared "this is not a country that should be censoring science" (Reuters, October 25, 2007).

This incident provides evidence for a conflict of interest because data were censored, and because a scientist endorsed this flawed presentation of censored information. Indeed, Dr. Gerberding's cooperation with the OMB coincides with a recent bonus issued by the Bush administration (Harris, September 17, 2006).

The Reason

The Committee on Oversight and Government Reform released a report last month that quoted internal documents from the American Petroleum Institute (API); these documents provide the Institute's rationale for manipulating scientific evidence on climate change. According to the API, "climate is at the center of industry's business interests. Policies limiting carbon emissions reduce petroleum product use" (Committee on Oversight and Government Reform, December 12, 2007). Both President Bush and Vice President Cheney are former executives of oil companies and have an interest in the stability of that industry. According to the Center for Public Integrity, the oil industry gave \$67 million in campaign contributions from 1998-2004, of which George W. Bush received over \$1.7 million (Pilhofer & Williams, July 15, 2004). A separate internal API document described the API's communication plan: "Victory will be achieved when... average citizens 'understand' uncertainties in climate science." The congressional committee's report responded that "the Bush administration has acted as if the oil industry's communication plan were its mission statement" by

censoring science, media access to scientists, and congressional testimonies (Committee on Oversight and Government Reform, December 12, 2007). The reason for manipulating scientific evidence, according to the congressional committee's data, is because it could change legislation and public opinion towards improving the environment by limiting demand for oil.

Concluding Thoughts

The tobacco industry served as a litmus test for understanding the ethics of researchers and private funding sources, and recent problems with government funded research expand the scope of this understanding. The potential risks of close partnerships between scientists and any type of funding source calls into question our ability to evaluate the quality of research and our persistence in accessing censored research. If even the White House biases research findings, disclosing the source of funding for research is a poor shortcut by which consumers can measure its credibility.

These problems with private industry and scientists accepting private funding are not, however, monolithic. These industries and these scientists do not represent all funding sources, all scientists, and do not represent these scientists throughout their entire careers. The integrity of science relies on the continued responsibility of individuals: scientists; those directing the funding sources; and vigilant audience members with sophisticated means of evaluating possible research biases in every study.

Any funding from a private company "invariably contains the seeds of direct or indirect profit motives" (Batra, 2007); these problems are common to any field accepting money from private sources, such as politicians seeking financing for campaigns. As the United States increasingly relies on private funding, so does science, but the empirical degree to which this funding biases research is largely unknown (Etter, Burri, & Stapleton, 2007; Moskalewicz, 2007).

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