

Ten tips for spotting industry involvement in science policy

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Industry influence on research has been well documented.^{1,2} Corporate interests influence science by driving research agendas, manipulating the design, methods and conduct of research, and selectively publishing findings or affecting interpretation of findings.³ One of the most disturbing ways that industry influences science is by attempting to change the evaluation of science, particularly for its use in policy. For example, the tobacco industry worked with established and existing business coalitions including the American Petroleum Institute, National Rifle Association, and the American Iron and Steel Institute to legislate changes in how research should be evaluated before it could be cited as evidence supporting a policy. Their goal was 'to promote legislative solutions to ensure that public policy is based on sound science'.⁴ These solutions included '(1) to gain passage of federal law on criteria/standards for epidemiological studies; and (2) to legislate public access to epidemiological data used in support of federal laws and regulations'.⁴ To advance this agenda, the tobacco industry identified potential supporters and opponents of data disclosure in the food, health, pharmaceutical, chemical, energy, transportation, insurance and waste products industries. These activities were part of the tobacco industry's campaign to promote their version of 'sound science' and 'good epidemiology'.⁵

McCambridge and colleagues⁶ provide yet another example of how two industries, apparently working together, have influenced a policy that is ostensibly meant to advance the use of evidence in policy. Their analysis of the development of the *Brussels Declaration on ethics and principles for science and society policy-making* shows that it 'fails to address the need for safeguards to protect the integrity of science or policy from corporate interests'. In fact, their analysis suggests that

corporate interests shaped the Declaration to enhance the ability of industry to influence evidence and policy. Nevertheless, the Brussels Declaration received favourable support from key scientific organisations, including a launch at the American Association for the Advancement of Science and a letter in *Nature*.

Open access to data, rigorous methodological standards, disclosure of conflicts of interest and acknowledgement of bias align with the principles of research integrity that appeal to most researchers. Thus, academics and public health researchers can unwittingly support industry initiatives disguised as ways to promote research integrity. Given the ongoing revelations about industry influence on scientific evaluation and standards, it is surprising that scientists and public health researchers remain unaware of the role of industry in shaping science policy to favour industry interests of profits and decreased regulation rather than public health interests.

The analysis of the Brussels Declaration and earlier studies of industry influence on science policy offer 10 tips for spotting industry involvement in science policy. Scientists should view invitations to participate in initiatives aimed at improving research standards or methods through the lens of these tips.

1. The initiative originates with a communications or public relations firm. Communications firms have led many campaigns to disseminate industry messages, such as more research on pharmaceuticals is required to meet unmet needs, newer drugs are more beneficial than older ones, tobacco is not harmful, and sugar is an important part of diet. The Brussels Declaration disseminates industry messages focused on harm reduction and addiction to tobacco, alcohol and drugs. A scientist should ask how messages about these products have morphed into messages about the integrity of science.

2. The initiative claims to be a 'bottom up' effort, as described in the preamble of the Brussels Declaration. It is important to investigate the role of industry in 'grass-roots' efforts. The tobacco industry has backed a number of 'astroturf' initiatives to attempt to influence regulation.⁷ Pharmaceutical companies sponsor patient groups to lobby for approval and/

or reimbursement of drugs.⁸ The lack of transparency about industry support for 'bottom up' efforts can mislead the public and policymakers into thinking that the initiatives were not designed by industry.

3. There is a lack of disclosure of funding for the initiative or funding for the participants in the meetings. McCambridge and colleagues draw conclusions about tobacco and alcohol industry involvement in the Brussels Declaration based on their finding that 20 of 165 names in the Declaration directly represented tobacco or alcohol industry organisations. But this may be only the tip of the iceberg. The extent of undisclosed financial ties of researchers is hard to estimate, but recent comparisons of internal industry documents or transparency databases with disclosure statements show that a variety of industries provide undisclosed financial support to scientists who are involved in critiquing methods or research.⁹

4. The document illustrates a fundamental misunderstanding of conflicts of interest. A conflict of interest is commonly defined as a secondary interest (such as financial support from a company) that could bias a primary interest (such as the results of a study on the efficacy or harms of the company's products).¹⁰ The Brussels Declaration and other industry-sponsored documents related to research integrity assume that any funding is a conflict of interest, even when the funder could not benefit in any way from the findings of the research. A federally funded researcher may have a predefined hypothesis, and, in fact, good theoretical grounding is expected in research. However, a reasonable expectation of a certain result is not a conflict of interest because the results of the project could not personally benefit the funder or researcher. On the other hand, industry funding for research about products made by the industry is a conflict of interest because the sponsoring organisation could profit from findings that the product is beneficial.

5. Statements that 'nonfinancial conflicts of interest' are more influential and harder to manage than financial conflicts of interest are used to divert attention away from industry. Scientists have personal experiences and beliefs, education, and intellectual commitments that contribute to their research, but these are distinct from conflicts of interest. Scientists cannot be separated from their interests or their social position in the world, but they can be free of financial conflicts of interest. Everyone has different individual interests, but industry sponsorship or investigator payments serve as a megaphone,

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amplifying and multiplying a set of interests, which align with the sponsor's, and thereby creating a widespread platform of influence from the sponsor.¹¹

6. The initiative invokes the names of large numbers of stakeholders and scientists, including 'thought leaders' and 'carefully selected influencers'. Multiple industries have a record of selecting and paying scientists who they believe to be 'key opinion leaders' in order to advance industry positions. For example, pharmaceutical companies identified 'movers and shakers' and 'key influencers' among physicians at major academic medical centres in order to communicate messages promoting the prescription of drugs for unapproved indications.¹²

7. Scientists involved may not know they are involved. In the case of the Brussels Declaration, eminent scientists who attended the first meeting had no subsequent involvement in the initiative as it became more industry-driven. Scientists are recruited and paid to serve on advisory boards that never meet or to be authors of papers they have not written, so that their names can be used to support industry positions.¹³ This is another way that corporate interests manufacture false support for their positions.

8. Phrases such as 'More than XX individuals from YY countries' support the position create a sense of false consensus when the majority of the participants are affiliated with industry. Industry initiatives also often refer to their position being backed by a 'broad consensus of scientists' when, in fact, scientists who are independent of industry are not part of the consensus.¹⁴

9. The language in the document is critical of scientists, but not of industry. Scientists are described as 'aloof' and 'arrogant' in the Brussels Declaration. Other industry documents question the use of 'experts' and even impugn the integrity of independent scientists. On the other hand, positive statements, such as 'vested interests can be beneficial' in the Brussels Declaration, are used in industry-backed initiatives. Industry initiatives suggest that industry-sponsored research is more relevant than independent research and that industry should be lauded for the amount

of money it spends on research. However, industry research budgets often include money spent on promoting products or countering and distracting from independent research on harms of a product.¹⁵

10. One of the biggest tip-offs to industry involvement in science policy may be that the tobacco industry is one of the players. The tobacco industry is often the leader in building industry coalitions to attempt to influence science policy. In the case of the Brussels Declaration, the tobacco industry was working primarily with the alcohol industry. In the development of the data access and quality and sound science initiatives, the tobacco industry coordinated a coalition across multiple areas including energy, forestry and fisheries, and food.⁴ The tobacco industry has partnered with the pharmaceutical industry to tailor messages about nicotine replacement therapy.¹⁶ The tobacco industry exploits cross-industry needs to redefine scientific standards in order to decrease regulation. Even after the WHO Framework Convention on Tobacco Control, when governments try to insulate policymaking from tobacco industry influence, the tobacco industry can bring together other industry partners to reshape policy debates. Beware of tobacco industry involvement.

Why are scientists so gullible? Collectively, scientists need to learn to recognise when genuine commitments to research integrity are being hijacked to advance industry agendas. Investigating new initiatives based on the 10 tips above should make it easier for scientists to expose such initiatives and walk away from involvement with them.

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