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Unfortunate oversight

Scientists must remember that however irrelevant their involvement in industry might seem to them, others will see it differently — only full disclosure will avert the taint of scandal.

ydraulic fracturing, or 'fracking', a technology that revolutionized the natural-gas industry, has been surrounded by controversy in recent years. So, when environmental experts at the University of Texas at Austin produced a report in February that gave the technique a fairly clean bill of health, they received widespread news coverage, including in the pages of *Nature* (see *Nature* 482, 445; 2012). The study was billed as an independent analysis. Yet last week it emerged that its lead author is a well-paid board member of an energy company that is actively involved in fracking.

The failure to declare this involvement was an unfortunate mistake to make, not least because the man who made it is a respected senior scientist who headed the US Geological Survey under US presidents Bill Clinton and George W. Bush — and is therefore experienced enough to understand the role that politics and perception have in sensitive issues such as energy development. Yet Charles 'Chip' Groat, associate director of the University of Texas at Austin Energy Institute, failed to disclose that he holds a significant number of shares in the Houston-based Plains Exploration & Production Company, and that he earned more than US\$400,000 from the company last year. In a 23 July statement to Bloomberg news, he said that disclosing his position on the board "would not have served any meaningful purpose relevant to this study".

Groat says that his position on the board did not affect the outcome of the study and that he did not interfere with the findings of his colleagues. The study found no evidence of groundwater contamination from fracking, which pumps fluid into the ground at high pressure

to fracture geological formations and release natural gas or oil. The technology has been in use for decades, and practised properly, the report suggested, it is safe and poses little risk to the environment.

This over-arching conclusion seems reasonable in view of what we know today, although scientists continue to sift through contradictory evidence. And Groat's explanation of his role also sounds plausible — but that is all the more reason for him to have openly disclosed his ties to the industry.

After the link was revealed by the Public Accountability Initiative, a non-profit watchdog in Buffalo, New York, university officials announced plans to review the study. But even if the review exonerates the panel and endorses its findings, it is unlikely to remove the taint of scandal. Rather than cutting through the confusion on fracking, the report is likely to contribute to it.

Experts in many fields bounce between academia, government and industry during their careers. Universities could not exclude people who have industry connections from their ranks, nor would they want to. The same goes for government. There is also nothing inherently wrong with universities accepting donations from industry to conduct studies, as long as the proper protections are put in place. The key is transparency, because that is the basis for trust between institutions and the wider public, which is especially important when people are buffeted by confusing, contradictory and inflammatory information. What the public needs, and what scientists must deliver, is reliable information that is honest about both its methods and its inevitable biases. What it needs is full disclosure.

Marching orders

Scientists unhappy with policy are right to take to the streets.

he mock funeral — an idea so good that scientists had it twice. Last month, about 2,000 researchers marched on Parliament Hill in Ottawa, carrying a coffin that signified, they said, the "death of evidence". The scientists were protesting against a series of cuts by Canadian Prime Minister Stephen Harper's conservative government that they believed threatened basic research and undermined expert advice in areas such as environmental policy. And in May, physical scientists drove a horse-drawn Victorian hearse to the British Prime Minister's residence in Downing Street, London, this time to mark the demise of UK science.

The Downing Street stunt was to protest against moves made by the

main public funder of UK physical-sciences research, the Engineering and Physical Sciences Research Council (EPSRC), to cut the number of proposals it receives and to prioritize research that addresses national priorities or comes with economic spin-offs (see page 20).

Echoing their Canadian counterparts, the scientists argued that the changes would endanger blue-skies research in chemistry, physics and mathematics. But unlike Canada's protests, the UK campaign has yet to win support from the wider scientific community.

In part, that is because the campaign targets a single, specific funder and so is not seen as relevant to UK science as a whole. Some researchers have dismissed the coffin parade as an overreaction to a spat between a few disenfranchised scientists and the EPSRC. Others worry that a public protest that exposes disunity in the ranks of science at a time of economic chaos could result in cuts to the science budget.

Perhaps, but if it is an isolated spat, then why did people with little personal stake in the EPSRC's policies join in the protests? And the calls by dissenters to close ranks — to keep calm and to carry on — ignore the fact that science funding is a political question. To make a point in a political arena, scientists must stand up and be counted. ■