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Science and politics—a broken union

Their country has been a democracy for nearly 800 years and has an outstanding scientific history, but instead of deriving mutual support from such solid roots, Britain's scientists and politicians have clashed badly this year. Issues such as the BSE crisis and embryonic stem cell research reveal a large gulf between parliament and the scientific establishment (see pages 1301 & 1303). This gap must be bridged if the British public is to benefit from the exciting new medical advances that this century could yield.

Biomedical science is at a crucial juncture. The complete sequence of the human genome should be known within the next few months and lead to new medical possibilities such as individually-tailored drugs, genetic testing for early diagnosis of disease, effective gene therapies and preimplantation diagnoses to ensure healthy people from the outset.

The public stands to benefit from these advances and some groups in the UK, such as the Wellcome Trust and the Royal Society's COPUS unit, have put considerable effort into explaining the new technologies to the public. But that is not the main purpose of government, whose remit instead is to decide what is best for its people, and to place the interests of society before those of the individual.

This, according to the Phillips report into the BSE epidemic, is what the government of the day tried to do. Rightly, it sought expert scientific advice when BSE was identified in 1986. Wrongly (with hindsight) it censored much of that information. "[The] possibility of a risk to humans was not communicated to the public or to those whose job it was to implement and enforce the precautionary measures," reads the Phillips report. Thereafter, even in the face of mounting scientific evidence to the con-

trary, the government proceeded to tell the public that beef was safe to eat. Whether it acted out of an overriding desire to protect a lucrative meat industry or whether it genuinely believed that there was no chance of zoonosis is open to interpretation. The Phillips report errs on the side of the latter.

For years now, newspaper articles have quoted family members of Creutzfeldt-Jakob disease victims as saying that if they had known the risks involved, they would have stopped eating meat. The ability of the public to evaluate scientific data and judge risk for themselves is discussed on page 1307.

But the UK is not the only country in which politicians fail to pass on scientific information to their public—or deliberately withhold it—to the detriment of public health. The president of South Africa, Thabo Mbeki's refusal to state openly that HIV causes AIDS has perpetuated a culture of confusion about the disease. His choice to act against the counsel of his chief medical and scientific advisors, and not to relay their expert knowledge to his people, has doubtless added to the numbers of infected individuals. Likewise, South African Minister of Health Manto Tshabalala-Msimang refused to acknowledge evidence from Uganda that nevirapine reduced vertical transmission of HIV, which may have prevented the deaths of thousands of children from HIV in her own country.

At the time of writing this editorial, the identity of 43rd president of the United States depended on results of a double re-count of electoral votes in the state of Florida. George W. Bush or Al Gore will be the head of state in a country that has the largest biomedical research expenditure. How would each influence the relationship between science and the public?

Vice President Gore's policies are expected to be largely in line with those of the Clinton administration, which despite what some regard as an overly favorable allegiance to the pharmaceutical industry, has demonstrated its support for biomedical research by approving large increases in funding to the National Institutes of Health (NIH).

Bush also has pledged to double the NIH budget, spending \$67 million in the next 10 years. He promises to extend an R&D tax credit to US companies at a cost of \$24 billion over the next decade. However, a Bush administration would operate contrary to some of the current scientific wisdom, and in doing so would deprive its public of potential health benefits. It would almost certainly overturn the current NIH guidelines—introduced under the Clinton-Gore Administration—and ban federal funding for stem-cell research because of its pro-life, anti-abortion principles.

Back in the UK, political parties are gearing up for a general election next year. In making the Phillips BSE report public, the present government took the opportunity to stress its own policies for handling scientific information: "We put scientific advice to Government in the public domain, encouraging a culture of openness, trusting the public and stimulating informed public debate," stated agriculture minister, Nick Brown.

Whether the newly-elected governments in the UK and the US will freely release data that might harm a major industry, such as the cattle or pharmaceutical industries, has not yet been put to the test. We can only hope that they will have the courage to handle the emerging technologies and diseases with common-sense policies based on sound science that will protect and enhance human health.