

Science in the U.S. Government: Interim Report

The unsettled state of science in and around the U.S. government continues; herewith a summary accounting of where progress stands, or doesn't.

Earlier, *Science* was most troubled by the lateness of major appointments; we are now only somewhat relieved. A year and 3 months in office went by before the Bush administration finally found a Surgeon General and a director for the National Institutes of Health (NIH), and half a year before it appointed a Science Adviser to the President. Still among the missing, however, is a commissioner for the Food and Drug Administration, and no less than six directorships are open at NIH. The Smithsonian Institution, a science asset of, but not quite in, the U.S. government, continues to be plagued by a brain drain of its own. Several directors have left during the tenure of Secretary Small—most recently his second in command, Dennis O'Connor. The dissatisfaction with Small, who was also criticized for some controversial fund-raising adventures, ought to concern the institution's regents.

Elsewhere, the administration contributed to an unnecessary dispute with the international scientific community by its opposition to the reelection of Robert Watson as chair of the Intergovernmental Panel on Climate Change (IPCC). That campaign, jump-started by a memo from Exxon-Mobil shortly after the inauguration, rested on the charge that Watson is a holdover from the Clinton White House. He's guilty of that, all right, but the Third Assessment Report produced by the IPCC is a consensus document, with input from about 200 scientists. Its consensus on the realities of climate change is now robust enough to make denial look silly. Equally silly is the notion that Watson, the chief scientist at the World Bank, had some mysterious hold over his colleagues that made them do whatever he wanted. He has been succeeded by Rajendra Pachauri, a capable Indian economist who should not be blamed for the way he got there.

At difficult times in the past, we have learned to look to the U.S. Congress for solace, and the substantial improvement in the budget for NIH was indeed good news. But, as argued in this space earlier in the budget negotiations, a balanced science portfolio is more important than ever, and how the National Science Foundation and other agencies will fare is uncertain. That is because those budgets are hostage to a forthcoming allocation decision that will determine how much discretionary money (that is, dollars not committed to obligatory payments such as interest and welfare) will be available for purposes other than defense.

In the meantime, the Senate will have to make another kind of decision, nonmonetary this time, that will be vitally important to science. The president has announced his support for a bill sponsored by Senator Sam Brownback (R-KS). This legislation (S. 1899) is promoted as a ban on the cloning of human beings, but it does a great deal more than that. It prohibits reproductive cloning—okay so far—but also bans the range of experiments sometimes misleadingly described as "therapeutic cloning." Worse, like the equivalent House bill, it criminalizes reasonable scientific work.

Many scientists seem not to have realized what this law would do. Suppose, for example, that a cell biologist interested in mechanisms of reprogramming in human cells performs the following experiment. Using enucleated early stem cells derived from a line established before the president's 9 August 2001 ethical borderline, she transfers nuclei from cultured brain cells into those stem cells to follow their subsequent differentiation. Her objective is information that might be useful in developing therapies for genetic defects in brain chemistry, but under the terms of the Brownback law, she could be sentenced to a jail term of up to 10 years. That is downright chilling.

Perhaps it is not surprising that the president has supported the bill; it is both surprising and disappointing that Senator Bill Frist (R-TN), often a thoughtful voice for science and medicine, has joined in. Fortunately, a bipartisan alternative has arisen, cosponsored by such major players as Senators Ted Kennedy (D-MA) and Orrin Hatch (R-UT). The bill (S. 2439) manages both to interdict reproductive cloning, which we applaud, and to avoid the pitfall of criminalizing basic research aimed at therapy (see p. 997). We hope that scientists will be vigorous in urging its passage.

Donald Kennedy



Normally steadfast in his support of the president, Sen. Orrin Hatch, R-UT, second from left, joined fellow senators on Capitol Hill Tuesday, 30 April 2002, to discuss with the press their legislation that will prohibit human reproductive cloning yet allow cloning research. From left are Sen. Arlen Specter, R-PA; Hatch; Sen. Edward Kennedy, D-MA; and Sen. Dianne Feinstein, D-CA.