

Science and Tech Policy: What Next?

In the next four years, the Bush administration will face some tough decisions on critical questions of science and technology. Although no one can predict precisely the challenges and opportunities the administration will confront—events overtake even the best predictions—a few guesses can be offered confidently.

First, the administration will continue to face the thorny dilemmas posed by advances in biotechnology. The principles that motivated the president's embryonic stem cell research funding policy and his strong support for a comprehensive ban on human cloning will certainly continue to move his thinking in this area, while the lack of legislative progress combined with the glut of scientific progress will make the need for action all the more urgent. (See the editorial earlier in this issue for our sense of how he could proceed.)

Second, the administration will confront several major issues related to energy and the environment. President Bush will likely push for new pollution caps and revisions to the Clean Air Act. And although a comprehensive energy bill seems very unlikely, some components of the Bush administration's first-term energy plan—like the notion of drilling for oil in the Arctic National Wildlife Refuge—might see new life as separate legislation. But in other areas, action is less certain. Will close Bush ally Tony Blair manage to persuade the president to make a new move on climate change? Will the administration forge ahead on plans for a nuclear waste repository in Yucca Mountain, even with Nevadan Harry Reid leading the Senate Democrats?

Third, the administration will have to continue to make strides in using new technologies to keep America secure. Work on missile defense has progressed in the last few years, and the country will soon have a limited missile defense system based in Alaska. But nuclear proliferation remains a glaring problem, with North Korea and Iran making ominous progress.

Fourth, even though NASA has been grounded since the *Columbia* accident in early 2003, the first Bush term has seen remarkable progress in space—the end of the old go-nowhere paradigm of the space shuttle and station, a bold new American vision for manned space exploration, and the apparent birth of a private space travel industry. The Bush administration will have the next four years to secure these advances and to remake NASA.

Finally, the administration will continue to face a number of questions related to technology and globalization: the off-shoring of jobs, the legal and illegal importation of pharmaceuticals and illicit drugs, and the growing worldwide crisis of pirated intellectual property.

This is by no means an exhaustive list, but making progress on any of these fronts would constitute a serious and lasting political achievement.