a way that was more protective to the patient?' " says Lurie, an M.D. who studies ways to slow HIV's spread with behavioral interventions. Lurie adds that "I don't think the intrapartum treatment made any sense from the get go." He contends that these drugs take several days to build up to levels high enough to have an impact, so giving them just hours before delivery and not treating the baby would not be expected to work.

Lynne Mofenson, a pediatrician at the National Institute of Child Health and Human Development who has been involved with many of these transmission studies, scoffs at this. "He doesn't know what he's talking about," says Mofenson. Studies have shown that AZT is quickly transmitted from a pregnant mother to her infant, she says, and although it may take a few days to reach "peak" levels of drug in the blood, that does not prevent it from working right away. "There was good reason to think that the intrapartum regimen might be effective," says Mofenson. "Many of us were very sorry to see it didn't work."

These results are not the last word from the PETRA study. About 70% of the mothers enrolled in the study breast-feed—another route of HIV transmission—so the researchers will analyze transmission rates again when the babies are 18 months old.

–JON COHEN

NUCLEAR PHYSICS

MIT's Bates Lab Gets Sudden Reprieve

Massachusetts Institute of Technology (MIT) officials say they were "shocked" last Monday to learn that the Department of Energy (DOE) planned to end its support of the university's Bates Linear Accelerator Center. Although they knew the facility, part of the school's nuclear science laboratory, would be vulnerable in a tight budget, they were optimistic that money would be found to keep it running. But there was no mistaking the message: The shutdown was mentioned several times in the president's budget request, released on 1 February.

Shock quickly turned to elation, however. Within minutes of the budget's formal release, Energy Secretary Bill Richardson was on the phone to MIT President Charles Vest explaining that the department had changed its mind. The proposed budget for fiscal year 2000 would be amended to continue support for the 30-year-old facility, the secretary told Vest, including funds for a new detector to study the magnetic properties of atomic nuclei. Instead of spending $2.5 million next year to decommission the accelerator, DOE now plans to request $14.5 million for the Bates Large Acceptance Spectrometer Toroid (BLAST) and for other experiments that will keep the lab running until 2004 or 2005. It is not clear, however, where DOE will find the additional money in a budget that holds funding for high-energy and nuclear physics essentially steady. And congressional appropriators still get the last word.

Bates and switch. Energy Secretary Richardson quickly rewrote last week's budget request to fund MIT's Bates lab.

By all accounts, Richardson, a former Democratic congressman from New Mexico and good friend of the president, made a unilateral decision. The original plan to close Bates followed a recommendation from DOE's Nuclear Science Advisory Committee (*Science*, 16 October 1998, p. 389) that other facilities should receive priority in a tight budget. Department R&D managers had accepted the advice and decided to concentrate scarce resources at the department's new flagship nuclear physics facility, the Thomas Jefferson National Accelerator Facility in Newport News, Virginia. White House budget officials had even mailed letters, in response to inquiries from concerned scientists, saying that the budget would contain money only to decommission the lab. "Bates will cease operations at the end of FY 1999," notes DOE's FY 2000 budget document, "and fabrication of the BLAST detector is discontinued."

But even as those words were being readied for publication, says Martha Krebs, head of DOE's Office of Science, Richardson was reviewing the decision to close Bates. Krebs says she learned about the reversal for the first time on Tuesday morning—1 day after she had briefed the media on a research agenda that did not include Bates. Several factors were working in the lab's favor, she noted: "They're doing good science, they train a lot of students, and MIT is managing the facility effectively. In addition, it's the only university-based accelerator that DOE supports." In the end, Krebs says, "the Secretary decided that [flat funding] should not be a limiting factor in whether or not to operate Bates."

Richardson's phone call meant a last-minute wardrobe change for MIT's dean of science, Robert Birgeneau, who was scheduled to be the bearer of bad tidings during a visit to the lab Tuesday afternoon. "I had picked out a black tie to reflect the somber message I would be conveying," he says. "After President Vest called, I decided to switch to a pink shirt and brightly colored tie."

A dimmer view of the reversal comes from Claus-Konrad Gelbke of Michigan State University in East Lansing, chair of the Nuclear Science Advisory Committee. "The operation of Bates would be impossible at the president's budget request [for nuclear physics]," he says. "I just hope that they aren't planning to solve the problem by taking the money from Peter to pay Paul."

And although the new plan may be good news for the lab's 85 staff members and collaborators, even its supporters say that Richardson's sudden change of heart reflects poorly on the department's decision-making process in setting scientific priorities. "I've never seen anything like that in my 28 years here," says one science lobbyist. "In the end, I think they did the right thing. But it makes DOE look pretty bad."

–JEFFREY MERVIS

SOLAR PHYSICS

SOHO Learns the Cruder Arts of Navigation

Like an explorer forced to rely on landmarks after losing his compass, the Solar and Heliospheric Observatory (SOHO) is now taking its cues from the sun thanks to an innovative solution to an equipment failure that had threatened to end the spacecraft's mission. SOHO's latest problem began on 21 December, when the last of its three gyroscopes failed (*Science*, 8 January, p. 155). But last week, ground controllers at NASA's Goddard Space Flight Center in Greenbelt, Maryland, beamed aboard SOHO a jury-rigged software program that has reoriented the spacecraft. By relying on a sun sensor instead of the gyroscopes, engineers say, the craft should be able to keep its bearings for at least four more years.

After the gyroscope failure, the craft started spinning slowly and tripped into a safety

Steady eye on the sun. Image from SOHO probe.

CREDITS: (TOP) SAM KITTNER; (BOTTOM) SOHO/EIT