

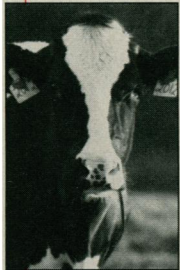
Milk Muddle

■ An upcoming report from the Office of Technology Assessment (OTA) will aim a pointed question at agricultural leaders for their decision to promote genetically engineered bovine growth hormone—namely, why did they invest in cheap milk production as the first high-profile animal biotech drug when other, potentially more beneficial, products were viable?

When research began on the hormone—also known as recombinant bovine somatotropin (rBST)—the nation already had a surplus of milk at existing prices, which were not considered high. Furthermore, rBST does nothing to improve the quality of milk and could drive some small dairy farmers out of business. So why the big push to develop rBST? OTA won't answer that question, but will suggest that the agriculture industry might have been wiser to select other, more clearly beneficial biotech products for its first highly visible animal drug, such as genetically engineered growth hormones that could produce leaner meat.

In the future, the report will suggest, funding agencies and industry officials should do a better job of setting priorities for animal biotech R&D. In the meantime, the Food and Drug Administration is expected to make a final decision on rBST by the end of the year.

■ Astute readers probably noticed that the color photograph of a Cray supercomputer on this page last week was printed upside down. The error—a chastening reminder of the costs of scientific illiteracy—occurred at the typesetting house, which mistook the Cray for a floating point machine.



Monsanto Corp.

Space Station Shrinkage to Affect Scientific Mission

■ Space scientists have long doubted whether NASA's proposed space station will live up to its billing as a research platform. Now, in light of a soon to be completed project "descoping," the Space Studies Board at the National Research Council is drafting a letter to NASA that could phrase the question even more sharply. Board members traveled to the Jet Propulsion Lab last week to hear NASA officials describe the station's reduced technical capabilities, and, says one attendee at the public session, "It was pretty feisty...the members were asking a lot of hard questions."

Since last fall, NASA engineers have been cutting the space station down to a more affordable size. Early reports say three parameters that affect science will suffer—power level (down 25%), digital data-handling capacity (down 80%), and crew (down 50%). Astronomy and microgravity may suffer new cuts. Only

life science research enjoys continued strong support.

One board member says many of his peers agree that station-based research should focus on the life sciences, but adds that the board has always been "highly skeptical" of the sta-

tion's scientific value. "[The station] is not something the scientific community has ever wanted," he said. In the 1980s, scientists wondered whether it was a productive use of R&D funds. Today, some wonder, "Is it worth it at all?"

Academy Embraces Bigthink in Exchange Program

■ Look for a shift in the way the National Academy of Sciences runs U.S.-Soviet exchange programs in 1991. The old system, which sought primarily to move researchers across the world and back, is "winding down," according to an Academy official. The reason: it no longer takes much clout to spring scientists from their Eastern bloc institutes. Restrictions on speech and travel have faded away, so it's become easier for researchers to arrange visits themselves.

The Academy's new thrust will be to launch a series of workshops on issues that con-

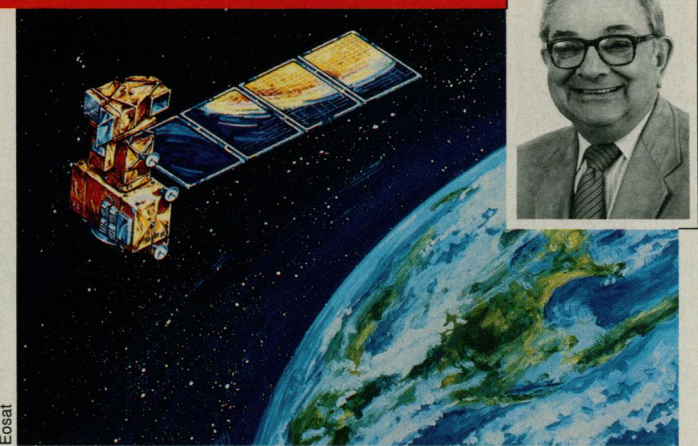
cern Washington and Moscow. One of the first topics for discussion will be the trade in "dual use technologies" which have both military and commercial applications.

This shift in emphasis won't reduce support for the traditional exchanges, however. The Academy will continue to manage short-term visits to and from the Soviet Union and Eastern Europe sponsored by the National Science Foundation. And the NSF is planning to spend more on long-term exchanges, increasing the total from 14 to about twice as many next year.

Landsat Orphans

■ The Landsat program—the United States' quasi-commercial satellite observation system—has teetered on the brink of budgetary oblivion for years. Now Representative George Brown (D-CA), chairman of the science committee, wants to resolve Landsat's uncertain future, and has planned hearings—possibly as early as mid-April—at which legislators will press officials from NASA, the National Oceanic and Atmospheric Administration, and Eosat (the company that markets Landsat photos) to come up with ways to make Landsat a viable concern.

The biggest problem right now is finding someone to pay for a successor to Landsat 6, which should reach the end of its effective lifetime in 1997. Although NOAA is paying for the development of Landsat 6 (scheduled to be launched next year), neither it nor any other civilian agency has shown inter-



Artist's conception of Landsat 6; Representative George Brown

est in building Landsat 7. Eosat will operate Landsat 6, but cannot afford to develop Landsat 7. The problem is time-critical, too, since that program should be under way.

If no one steps forward soon, 1997 could mark the end of the Landsat program. "Landsat... must either get better or be killed," Brown said last month. Some legislators have privately

suggested that the Pentagon—Landsat's biggest customer—should help pay for it. But Brown disdains this option, since public access would likely sink under military censorship. While he looks favorably on other long-term options—such as an international consortium—to support Landsat, his more pressing challenge is to get someone to foot the short-term bill.