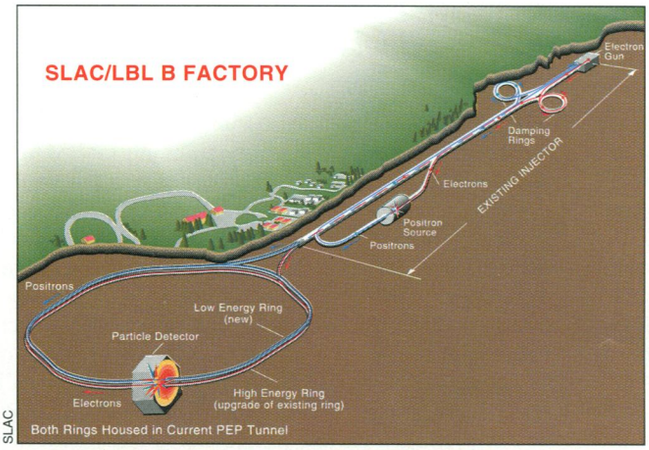
Plans for SLAC's B Factory Return From the Dead

■ Plans for a B factory at the Standard Linear Accelerator Center (SLAC) are back on track—at least in the mind of director Burton Richter, who recently proposed that SLAC dramatically curtail its current operations in order to redirect money for the proposed $150 million facility.

The project seemed dead just a few weeks ago when officials at the Department of Energy (DOE) and the National Science Foundation nixed any new money for a B factory until at least 1997. But on 22 February, Richter presented a plan to DOE's High Energy Physics Advisory Panel (HEPAP) for constructing the facility anyway.



"We have to have it," he says.

Under the proposal, SLAC would operate its Linear Collider only 6 months a year instead of the normal 9 to 10, a move that would slow existing experimental programs. The cutbacks would save an estimated 25% to 30% of SLAC's $143 million annual budget—money that could pay for a B factory by 1998, says Richter.

Next week, a HEPAP subpanel will discuss the SLAC proposal along with those for other high-energy experiments. In mid-April, it will present the recommendations from its week-long retreat before the full panel.

Space Spies Go Green

■ The United States has spent far more money on spy satellites over the past 30 years than on public spacecraft like Landsat, but the output of the high-priced, classified R&D program has long been kept locked away. Now quiet efforts are under way that may one day open these vast archives to scientists doing research on the environment.

Despite the waning of the cold war, the keepers of satellite reconnaissance data have so far been unwilling to release them. As a result, Senator Albert Gore (D–TN) and a band of civilian scientists have begun exploring ways to liberate this information for the analysis of long-term variations in the ice pack, deforestation, and the buildup of industrial waste dumps. But Gore and his allies are so loath to offend the intelligence agencies that they won't say more than that the talks have been under way for months.

Outsiders, however, are not so reticent. Frederick Doyle, a retired U.S. Geological Survey scientist familiar with classified data sources, says it should have been possible to make some of this information available 20 years ago. He says at least three internal government reviews have recommended that selected satellite data be made public, but that higher-ups always intervened to prevent public release not only of the data, but also of the reviews themselves.

Building a Better Mouse for Cancer Research

■ In a few months, toxicology laboratories will begin hearing the pitter-patter of a powerful new tool for testing potential human carcinogens—a transgenic mouse that carries disabled copies of a crucial tumor-suppression gene.

Molecular geneticist Allan Bradley and molecular virologist Larry Donehower, both of the Baylor University College of Medicine, have created a line of transgenic mice that carry both functional and disabled copies of the p53 gene. Although cancer researchers are unsure how it works, mutations of the p53 gene are the most common mutation linked with human cancers, says Bradley.

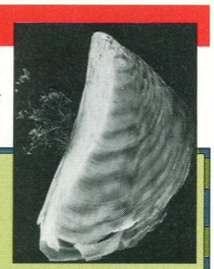
The p53 mouse, which will be marketed by Silicon Valley-based GenPharm International, is already kindling interest in the toxicology community. Unlike many other transgenic mice that tend to grow tumors only in certain tissues when exposed to carcinogens, the p53 mouse should sprout tumors in a variety of tissues. Because of this predicted "ubiquitous effect," the p53 mice "should reduce both the time and number of animals it takes to conduct mutagenicity and carcinogenicity tests," says physiologist Jeff French, a scientist with the transgenic model systems evaluation program at NIH's National Institute of Environmental Health Sciences, which is testing the mice with GenPharm.

Funding Squeeze Threatens Zebra Mussel Research

■ Apparent disinterest on the part of the Bush Administration could bring most federal research on zebra mussels and similar aquatic "biological invaders"—described by some as one of the biggest threats to aquatic biodiversity—to an abrupt halt later this year.

The mussels, carried to the United States from Europe in the ballast water of a tanker, have gained a stronghold in the Great Lakes, pushing out other species and costing industry billions to clean up clogged water pipes (*Science*, 21 September 1990, p. 1370). Federal law currently authorizes several agencies to spend $30 million to combat the problem. Yet President Bush's 1993 budget request contains almost none of that money, and congressional aides say Congress is unlikely to restore it without a strong signal from the White House.

Officials at the National Oceanic and Atmospheric Administration (NOAA), one of the agencies addressing the zebra mussel problem, explain that other budget items like updating the national weather system and improving their fleet of research vessels demand higher consideration. A staffer to Senator John Glenn (D–OH) calls this view "short-sighted," pointing out that the government spends hundreds of millions to control foreign insects but ignores similar aquatic dangers.



The zebra mussel (right) *threatens biodiversity in the Great Lakes region.*

SOURCE: MINISTRY OF NATURAL RESOURCES, ONTARIO ILLUSTRATION: J. CHERRY PHOTO: U.S. FISH & WILDLIFE SERVICE

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