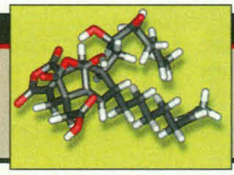
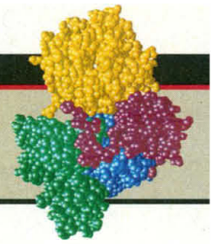
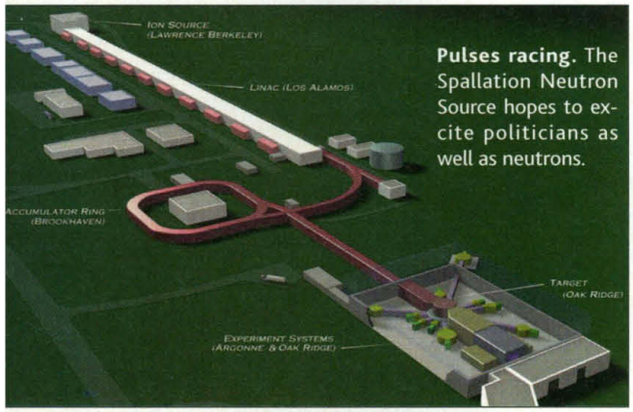




SPALLATION SOURCE

DOE Project Survives Close Call In Preliminary House Budget Vote

Neutron scientists are breathing a bit easier after their flagship U.S. construction project, the Spallation Neutron Source (SNS), walked a political tightrope last week in Congress—and survived. The key vote was cast by the House Science Committee, which reversed a thumbs-down verdict earlier in the day and agreed on a $100 million budget to begin construction. That authorization, combined with $169 million approved the previous week by a Senate spending panel, puts the $1.36 billion accelerator on firmer footing for budget battles later in the year.



Pulses racing. The Spallation Neutron Source hopes to excite politicians as well as neutrons.

The SNS, if built as planned at the Department of Energy's Oak Ridge (Tennessee) National Laboratory, will give scientists a uniquely powerful tool to probe the structure of matter, from proteins to metals, using a pulsed beam of neutrons (*Science*, 23 January 1998, p. 470). But as the largest new science project in the U.S. budget, it has drawn close attention from Congress. In particular, Representative James Sensenbrenner (R–WI), chair of the science committee, wants to make sure that the project's management structure, which teams five Department of Energy (DOE) national laboratories, won't produce a junior version of the failed $12 billion Superconducting Super Collider, an atom-smashing megaproject killed in midconstruction. As a result of that debacle, "the SNS is being held to a higher standard of review," says Martha Krebs, head of DOE's Office of Science.

Indeed, reports earlier this year that the project was becoming hobbled by management troubles and delays led DOE to reshuffle its supervisory lineup. It recruited neutron scientist David Moncton from the Argonne National Laboratory in Illinois—where he successfully delivered the $812 million Advanced Photon Source on time and under budget—to lead the project. "We have recruited a manager whose record cannot be questioned," crows DOE Under Secretary Ernest Moniz.

However, Moncton's arrival wasn't enough to satisfy Sensenbrenner. In late March, after a visit to Oak Ridge, he announced his opposition to DOE's 2000 budget request for $196 million in construction funds until the project passed a July review and implemented other planned reforms, including giving Moncton greater authority over the project. At a 25 May committee meeting, he unveiled a bill that prohibited any SNS construction spending and challenged DOE to deliver on its promises before he would consider authorizing any money. "If DOE can get its act together, we can authorize this project," he said.

But rather than wait to start the clock, Representative Jerry Costello (D–IL) proposed an amendment that would have restored $150 million in construction funds sooner. Sensenbrenner's bill "would effectively pull the plug on the nation's number one science project," Costello charged, adding that the fiscal uncertainty would scare away recruits. He also warned that House appropriators—who actually set DOE's budget—would use Sensenbrenner's stance as an excuse to starve the project. After a heated debate, the amendment failed on a 17–17 vote and the committee recessed for lunch.

During the break, Representative Bart Gordon (D–TN) drew up a compromise plan that included $100 million for construction once DOE met all of Sensenbrenner's conditions and offsetting cuts in other DOE programs. The amendment passed, 28–0. "At the end of the day, the committee had no reason to block construction," Gordon said. "This is good news for maintaining the project's momentum," Krebs declared.

Even so, the House vote virtually ensures that the SNS will receive less construction money next year than the $196 million requested. And that could pose a problem, say DOE officials, who argue that the project needs at least $150 million to stay on track. A final decision on the 2000 budget may not come until late this year. –DAVID MALAKOFF

ORGAN TRANSPLANTS

New Drug Blocks Rejection in Monkeys

People with failing kidneys face a difficult choice: chronic dialysis or a kidney transplant with a lifetime of immunosuppressive drugs, which boost the risk of cancer and are themselves toxic to kidneys. But that choice may someday be easier, if tests of a new drug in monkeys eventually pan out in people.

In monkeys, blocking a key immune system signal for only a few months after a transplant leads to long-term acceptance of the new organ—with no detectable side effects, according to a report in the June issue of *Nature Medicine* by transplant immunologist Allan Kirk and endocrinologist David Harlan of the Naval Medical Research Center in Bethesda, Maryland, and their colleagues. Human trials are just getting under way, but the primate results are "really, truly amazing," says transplant immunologist Norma Kenyon of the Diabetes Research Institute at the University of Miami in Florida.

The scientists caution that it's too soon to know if the monkeys have permanently accepted their new organs. The animals have developed antibodies to the transplanted kidneys, and although after more than a year those antibodies don't seem to be doing any harm, they may be the first signs of eventual rejection, says Kirk. But even with such caveats, "it is spectacular to have a monkey off of immunosuppression, with good graft function, for more than a year," says transplant immunologist Christian Larsen of Emory University in Atlanta, Georgia.

The new drug is an antibody that binds to a protein called CD154, one of two signals that the immune system's T cells need to launch an attack against an invader. When

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