

House Approves SSC Construction

Supporters of the Superconducting Super Collider (SSC) broke out the champagne last week. After years of planning and lobbying, they came a big step closer to seeing the \$6-billion project become a reality when the House of Representatives approved funds to begin constructing the megamachine next year. The Senate is expected to follow suit later this summer.

The project easily survived a last-ditch effort, led by Representative Dennis E. Eckart (D-OH), to send it back to the drawing board. Eckart offered an amendment that would have knocked out all construction funds for the project, leaving only \$90 million for R&D. "Building the Super Collider would be a super mistake," said Ekhart, noting that the budget for the project will balloon from \$200 million next year to \$900 million in 1991. That would take a huge bite out of other research funded by the Department of Energy, he warned.

Representative Sherwood L. Boehlert (R-NY) chimed in, pointing out that research proposals at the National Institutes of Health, the National Science Foundation, and elsewhere already are going unfunded. "So the question becomes, is the SSC the kind of good science we most need right now?"

But these pleas were overwhelmed by endorsements of the 53-mile proton-proton accelerator by key leaders such as Representative Robert Roe (D-NJ), chairman of the House Science, Space, and Technology Committee. "If we are not willing to invest in [science], we are not going to create the new wealth of tomorrow," Roe advised members.

Even more critical to the SSC winning construction funds was the backing of Representative Tom Bevill (D-AL), the chairman of the appropriations subcommittee that oversees the SSC program. Only a few months ago, Bevill was threatening to hold up construction funds until the Department of Energy got solid commitments from foreign countries to ante up as much as 40% of the project before committing U.S. dollars to construction. Bevill changed his mind a few weeks ago after meeting with President Bush in the White House and being assured that foreign commitments were on the way.

Eckart's amendment sank by a vote of 330 to 93.

The \$110 million in construction money approved by the House will be used for preliminary site preparation, the construction of some laboratory facilities, and advanced design work. The machine will be

built in Waxahachie, Texas. An additional \$90 million was approved for research on superconducting magnets, particle detectors, and other accelerator activities.

The funds were embedded in the 1990 appropriations bill for energy and water projects, a measure that provides the cash for all DOE's research activities.

In addition to protecting the SSC, Roe also succeeded in getting \$25 million in funding restored to the magnetic confinement fusion energy program. Earlier this month the Appropriations Committee vot-

ed to cut the program by \$68 million.

Roe also won a battle with Robert O. Hunter, the director of the Office of Energy Research. Hunter proposed only a few weeks ago (*Science*, 23 June p. 1434) to freeze plans to construct a new fusion reactor, the Compact Ignition Tokamak. The House bill specifies that \$5.3 million of the 1990 fusion budget must go toward construction of the project. It is not clear whether the Senate will go along with this.

Material scientists also emerged with a new project. After years of delay, the House approved \$40 million to start construction of a new synchrotron light source at Argonne National Laboratory, the Advanced Photon Source. ■ **MARK CRAWFORD**

Europe Says No to Animal Patents

London

In a move that has dismayed the biotechnology industry and delighted its critics, the European Patent Office has decided that it cannot grant patents on animals.

As a result, the Munich-based Patent Office has turned down an application from Harvard University for a patent on a transgenic mouse developed by researchers Philip Leder and Timothy Stewart. The mouse contains a human cancer gene that increases the animal's sensitivity to carcinogens.

The so-called "Harvard mouse" made headline news in the United States last year when, thanks to a landmark decision by the U.S. Patent Office, it became the first ever patented animal.

Harvard and the chemical company Du Pont, which sponsored the research and therefore owns the rights to the patents, had been hoping for a similar decision in Europe. But the university has now been told that patents on animals are not allowed under the terms of the European Patent Convention. An international treaty first approved in 1973 and since ratified by all major European countries, the convention provides continent-wide protection for patented discoveries.

The sticking point is a clause that prohibits the granting of patents on "plant and animal varieties." London-based patent lawyer Richard Bizley, who has been arguing the university's case before the Patent Office, says he does not accept the office's ruling that the clause prohibits patenting animals as such. The university is widely expected to appeal the Patent Office's decision.

Bizley argues that if this clause is interpreted narrowly to mean that a variety applies only to "the product of a breeding process [alone]," then it should not be turned into a broader prohibition on ani-

mals produced by other means, such as genetic engineering.

The commission of the European Economic Community recently sent out a directive supporting this narrow interpretation. But the Patent Office disagrees. Pointing to background debates that took place at the time the convention was drafted, it has told Harvard that the wording should be interpreted broadly, so that the convention "rules out patents on animals per se."

The Patent Office's decision has delighted public interest groups that have been mounting a campaign against the patenting of plants and animals—a campaign that is expected to get a big boost from the successes registered by Green parties in the recent elections for the European Parliament.

"I am very happy about this decision, since this refusal opens up once again the whole question of whether animals should be patented, and shows that the commission went far too fast," says Henk Hobbelenk of the Brussels-based International Coalition for Development Action.

The research community, on the other hand, has reacted with disappointment, claiming that the failure to achieve patent protection on animals produced by genetic engineering and other modern techniques could act as a brake on new developments in the field.

"Although we understand the reasons given by the Patent Office for rejecting this application, we are disappointed with their decision," says Scott Laurie, a patent specialist with Britain's Agricultural and Food Research Council. "We are currently being strongly pressed by the government to make sure that our work is able to produce more commercial benefits, and this decision will not make this any easier."

■ **DAVID DICKSON**