

problem without systematics collections."

The American response included not only individuals but also institutions. In a letter of 14 June, the Senate of Scientists of the Smithsonian charged that the Chalmers plan ignores the museum's traditional strengths and will "further contribute to the disassembly of a world-renowned group of scientists."

But Chalmers thinks the critics are way off base. In particular, he thinks that a trans-Atlantic cultural gap may get in the way of Americans understanding what he's up to. "People in the States may not understand what we mean by research and what we mean by curation," he asserts. In particular, he points out that biodiversity will be a

major focus. No single institution can research all forms of life, he argues, and adds that curation will improve, despite the loss of some research.

But those assurances haven't fully calmed the waters. And some scientists are concerned not just about the British Museum, but also about the effect that cuts there may have, directly or indirectly, on research elsewhere. As the Smithsonian's Funk says: "It could have a definite impact elsewhere. We're all running a little scared around here."

■ ELIZABETH CULOTTA

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Mouse Facility Makes a Comeback

Bar Harbor, Maine

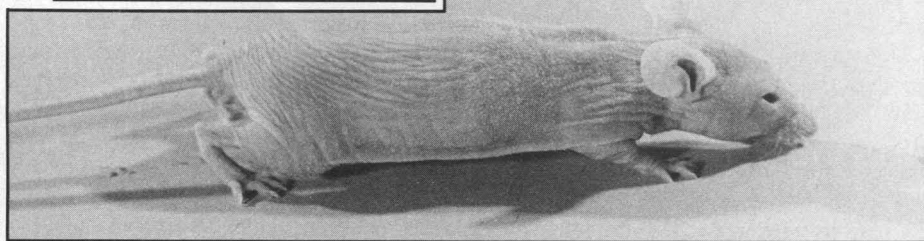
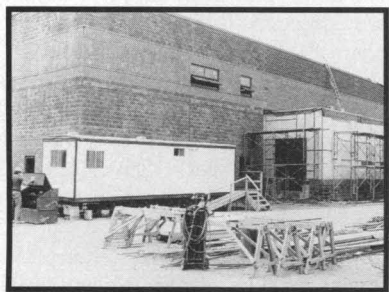
Thanks to a combination of resourcefulness and financial derring-do, the mouse breeding operation at the Jackson Laboratory in Bar Harbor, Maine, has risen from the ashes. Just 15 months after a fire wiped out all of the lab's production offices and sterilization facilities, and most of the mouse rooms and breeding stock, the lab has returned to nearly 80% of its prefire production capacity. But precarious financial times lie ahead, and there are lingering questions about the propriety of a \$10-million federal handout that the nonprofit lab is counting on to proceed with its recovery.

The Jackson Laboratory is an unusual hybrid. On the one hand, it is a research institute, carrying out basic genetic studies on mice. On the other, it has become a unique repository and supplier of rare inbred and mutant strains of mice to researchers around the world. Before the 10 May 1989 fire, the lab was producing approxi-

mately 2 million mice per year. It has foundation stocks for some 1700 genetically different strains, and in 1988 it distributed 490 strains to other laboratories. According to a survey commissioned by the lab, when fire interrupted the supply of JAX mice, research valued at \$600 to \$700 million per year was affected. Many research projects simply ground to a halt.

Kenneth Paigen, who left the University of California at Berkeley to become the Jackson lab director shortly after the fire, says the lab's first decision was whether to rebuild at all, or simply use the insurance settlement as an endowment for the research institute. Convinced that the lab provided a crucial research resource, Paigen says the lab decided to rebuild—and do it as quickly as possible. "We assumed we could build faster than the mice could breed," he says.

The first step was to commandeer every space remaining anywhere on the campus for mouse production. The lab bought several 28 by 75 foot house trailers, and outfitted them as temporary breeding rooms while architects designed a new permanent facility. With practically unheard of zeal, local construction crews began putting in foundations for new mouse breeding and clean processing facilities in the dead of a harsh Maine winter.



Mouse house. Jackson Lab's nude mice have a new \$30-million home (inset).

But putting things on the fast track meant spending money—lots of it. The lab estimates that the \$10.8-million insurance settlement will cover only about a third of the final recovery costs. So they looked for a benefactor, and found one in Congress. Congress authorized \$15 million in new construction authority for the National Institutes of Health, \$10 million of which was made available to anyone who wanted to build a new mouse breeding facility. The legislative language was chosen carefully to avoid charges of pork barrel politics, but lab officials say as far as they know, the Jackson Lab is the only one competing for the money. Even if they get the \$10 million, as seems likely, the lab still must find an additional \$10 million to finish the reconstruction program. Paigen says he is hopeful that Congress will ante up a second time, but the recently approved House appropriation for NIH does not contain the construction money. Paigen thinks the Senate will add it in its version of the appropriations bill, and that it will survive in the final version approved by both houses.

Not everyone is pleased with the decision to make federal money available to Jackson Lab. Commercial mouse breeders like Charles River Laboratories and Harlan Sprague-Dawley have maintained that the lab is a commercial competitor and is getting an unfair boost. They say Jackson Lab officials spurned their offers of help following the fire and have consistently refused offers to sublicense some of the more popular JAX mice strains to prevent supply interruptions in the event of future catastrophes.

Lab officials counter that they need to keep selling the popular strains to subsidize the rare mutant lines that could never generate adequate revenue to keep the lab going. They also point out that by keeping a large volume of breeding mice, they have been able to identify and isolate approximately 20 new naturally arising mutant strains each year. For example, a mutant mouse with lysosomal storage disease now being studied by Edward H. Birkenmeier at the lab arose in a normal C57BL/6 mouse. A commercial facility might simply have discarded the unhealthy animal.

NIH officials made a site visit to Bar Harbor last week to review the lab's application for a federal grant. A decision is expected before the end of the fiscal year, 30 September. Paigen says taking a conservative financial course would have delayed returning to full capacity by 2½ years. Instead, he says they decided to start building and gamble they would recover the funds later. With so much research waiting on JAX mice, "We didn't feel we had an option," he says.

■ JOSEPH PALCA