than a significant timesaver for NSF.

Even if FastLane meets its goals, however, electronic grantsmanship must still overcome concerns about equal access, adequate security, and the system's ability to reproduce accurately what has been transmitted before it can be widely adopted by the government. There's also the question of control. "An earlier prototype of FastLane allowed faculty to push a button to transmit material to NSF," recalls Julie Norris, the Massachusetts Institute of Technology's director of sponsored programs. "That left us [the MIT administration] out of the loop. Now it says that, when they are done, the proposal is ready to be submitted to the appropriate institutional channel."

Given these problems, officials who are trying to move research agencies into the electronic age warn that the process could still take time. "Part of my job is to pour a lot of cold water on the idea [of electronic grant processing]," says Nicholas Suszynski, chief of the information systems branch for NIH's Division of Research Grants, which handles 40,000 applications a year. "We can do some things, but there's an awful lot that we still can't do. And anybody who says we can do it all is kidding themselves."

–Jeffrey Mervis

SCIENCE IN THE COURTS

Bendectin Case Dismissed

The birth defects lawsuit responsible for changing the standards for admissibility of scientific evidence in the courtroom was defeated last week by the very rules it helped to set. Relying on a 1993 U.S. Supreme Court decision that requires judges to think like scientists in deciding what scientific evidence is admissible in court, a three-judge panel from the 9th U.S. Circuit Court of Appeals in San Francisco ruled that the plaintiffs' evidence in the lawsuit known as *Daubert* v. *Merrell Dow* was not valid, effectively throwing the case out of court. The *Daubert* case is one of some 200 in which the 1993 decision has been applied, and legal experts say the ruling has generally led courts to be more skeptical of unconventional scientific evidence.

The *Daubert* case was brought in the mid-1980s on behalf of two children whose birth defects were allegedly caused by the morning-sickness drug Bendectin. To try to prove that the drug was responsible, the plaintiffs' lawyers brought in eight expert witnesses who attempted to refute multiple published epidemiological studies that concluded Bendectin does not cause birth defects. They based their testimony on test-tube and animal data, as well as a reanalysis of the existing epidemiological studies that, they claimed, disproved the conclusions of those studies.

But the lower courts found the plaintiffs' evidence inadmissible based on the Frye rule, the 70-year-old standard which says that, to be admissible in court, scientific evidence must be obtained by methods that are "generally accepted" in the scientific community. The courts reasoned that the animal and test-tube data were superseded by the human epidemiological studies, and they rejected the re-evaluation of those studies because it had not been published or otherwise subjected to peer review.

The plaintiffs appealed to the Supreme Court, which decided that Frye is too rigid. It lifted "general acceptance" as the sole rule governing admissibility of scientific evidence, instead requiring judges to use a more flexible set of considerations, similar to those used by scientists, to decide whether evidence is scientifically sound. The high court then sent *Daubert* back to the 9th U.S. Circuit Court of Appeals, which followed the new guidelines to conclude once again that the evidence was inadmissible.

Plaintiffs' attorney Barry Nace calls the decision a "slap in the face" for the Supreme Court. He says the high court intended to allow a wider range of scientific testimony to be brought in front of the jury for scrutiny. "The purpose ... was not to preclude people having their day in court," he says. But Charles Fried, attorney for Dow, calls the decision a "straightforward application" of the Supreme Court decision.

Others not necessarily aligned with Dow say the Supreme Court's ruling has tightened standards for admitting evidence. When the decision was announced, "there was legitimate concern that there was a lot of license provided to lower courts to either admit or exclude evidence," says Washington attorney Richard Meserve, who filed a "friend of the court" brief in the Supreme Court case on behalf of the American Association for the Advancement of Science (*Science*'s publisher) and the National Academy of Sciences. But those fears have proven unfounded so far, says Bert Black, vice chair of the American Bar Association's section on science and technology. "The Supreme Court was telling trial judges to look more closely at evidence ... to determine whether it is really scientific or not," says Black. "That is by and large what is happening."

–Marcia Barinaga

INSTITUT LAUE-LANGEVIN

Critical ILL Back From the Dead

After a nearly 4-year break in its operations, the world's most powerful source of neutrons for research, the nuclear reactor at the Institut Laue-Langevin (ILL) in Grenoble, France, started up again last week. The hiatus was caused by the discovery of cracks in the reactor's cooling system in 1991, which prompted a complete overhaul.

The restart came as an enormous relief to the ILL staff, which had been struggling for more than 2 years to complete the difficult overhaul against a background of budget feuding among the facility's three main funders—France, Germany, and the United Kingdom. "It's great. There's a completely different atmosphere," says ILL Director Reinhard Scherm.

The reactor, which first started up in 1971, supports research in physics, chemistry, biology, and materials science. Its closure was a major blow to neutron beam research. Just before it shut down, about 2000 scientists visited ILL each year and 800 experiments were carried out annually on the more than 30 instruments clustered around the reactor.

The discovery of cracks in metal grids that diffuse the reactor's heavy water coolant came at a difficult political juncture for ILL. The United Kingdom had just asked that its contributions to the lab be reduced to below those of France and Germany—all three countries were then contributing equal amounts—and for a while ILL's future looked very bleak. In the end, however, the three partners agreed to a 15% cut in ILL's overall budget, and the United Kingdom's share was reduced by the largest percentage. ILL was forced to trim staff, and the number of instruments was limited to 25. But the partners did agree to go ahead with a complete refurbishment of the reactor, to be carried out largely by ILL staff.

This was completed last July at a cost of $33 million, from within ILL's normal budget. Researchers then had to endure a frustrating 6-month wait for the results of a public safety inquiry and a decree from the French government, signed by three ministers, before France's nuclear safety authority gave the go-ahead on 3 January. The reactor went critical 3 days later. With the future of the U.S. Advanced Neutron Source in doubt as budget cuts hang over the Department of Energy (see p. 164), ILL is looking forward to a long reign as the world's premier source of neutron beams. "Technically, it could last 25 years more," says Ekkehardt Bauer, head of ILL's reactor division. "We have rebuilt all the active parts—it's virtually a new reactor."

–Daniel Clery