

medical research on a patient's tissues unrelated to treatment nor to commercial exploitation of the patient's tissues."

The full effect of this decision may not become clear for years. Allen B. Wagner, a University of California attorney, says the decision could be appealed to the state supreme court. The university's decision will be based at least partly on an analysis of the dissenting opinion written by appeals court Judge Ronald M. George.

George contended that his colleagues on the panel have interpreted the state's property law statute too broadly. "A patient who consents to surgical removal of his bodily substances," he said, "has no reasonable expectation as to their subsequent use other than an understanding that licensed medical personnel will comply with applicable medical standards and legal restraints." George asserted that the issue of human tissues property rights should be addressed by the state legislature instead of the court. Said George, "... that body has shown itself willing, able and best suited to regulate areas involving comparable competing interests."

While the ultimate outcome of this legal tangle will not be decided for some time, John Fletcher, former chief of the bioethics program at the National Institutes of Health, predicts the appeals court ruling will have some near-term impact. "The immediate effect will be to make investigators think three or four times about the potential use of their research materials," he says.

Indeed, attorneys for Genentech, Inc., say they and other firms began changing their disclosure forms and sought to explicitly define property rights on cell lines, tissues, and related materials after Moore brought suit in 1984. The Office of Technology Assessment estimates that one-third of the country's biotechnology companies make use of human tissues and cells.

While expanding the property rights of patients who provide tissues to researchers has been portrayed by University of California lawyers as creating an administrative burden for researchers, the impact is overstated, Genentech officials say. It should not have a chilling effect on biomedical research, says Stuart Weisbrod, a biotechnology analyst with Prudential-Bache Securities.

Michael H. Shapiro, a law professor at the University of Southern California who studies biomedical questions, agrees. Only a small fraction of the tissues and cells of research patients are likely to yield breakthroughs of commercial value, he says. The notion of compensating tissue donors in unique cases is not unreasonable, Shapiro says. But resolving what donors are entitled to, he adds, is likely to be sticky.

■ **MARK CRAWFORD**

Britain Slashes Fast Reactor Program

European prospects for the commercial development of fast breeder nuclear reactors suffered a new blow last week when the British government announced drastic cuts in its fast reactor development program. Although some long-term research will be maintained, spending on the design and engineering part of the program will be reduced from \$85 million this year to only \$17 million in 1990, a move likely to lead to the loss of almost 3000 jobs in Britain's nuclear research establishments.

The government has also decided not to provide any funds for participation by the Central Electricity Generating Board (CEGB) in the construction of a new commercial prototype reactor that had been proposed as part of a joint program with French and German utilities. Announcing these decisions in Britain's House of Commons, Energy Secretary Cecil Parkinson said that the cuts are being made because the commercial demand for fast breeders is still "many decades" away.

He denied that the moves were a result of the government's plans to sell off the publicly owned CEGB, and added that the continuing research program would provide "a basis for continued collaboration with our European partners." However, Parkinson did say that the imminent privatization of the CEGB—part of a series of such moves by Prime Minister Margaret Thatcher's Conservative government—"has forced us to face up to questions that probably should have been asked a long time ago."

As a result of the cuts, the prototype fast reactor operated by the United Kingdom Atomic Energy Authority at Dounreay in northern Scotland—the focal point of Britain's fast reactor development program—will be closed down in either 1993 or 1994. It will be maintained up to then as a fuel test-bed. The reprocessing plant at the same facility will be shut down in 1997.

Atomic energy authority chairman John Collier said last week that he was "deeply disappointed" by the government's decision. "This is a technology in which we in the U.K., together with our European partners, can claim to be a world leader" he said, adding that "collaboration with Europe on the design of a full-size fast breeder is moving forward strongly." He said he would be seeking over \$150 million from the government to cover the costs of redundancies among research and technical staff.

The British decision comes at a time when Europe's overall fast breeder effort is already in considerable disarray. The French Super-

phénix reactor remains closed after the discovery of a leak in a liquid sodium container, while the German prototype reactor at Kalmar has still to receive an operating license.

France and Germany also remain locked in disagreement over which should build the next reactor. Furthermore, the Italian government, an important source of funds for both the French and German fast reactors, has been virtually instructed to withdraw from the field by a public referendum on nuclear power held early last year.

Some observers now feel that other European countries will follow the British strategy of withdrawing from any immediate commitment to building a new fast reactor, and concentrating research efforts instead on a long-term program designed primarily to reduce costs. The cost of fast reactors is estimated to be at least 20% higher than those of a comparable fission reactor.

■ **DAVID DICKSON**

New Head for CNRS

Francois Kourilsky, founder and director of the Institute of Immunology in Marseilles and one of France's best known biologists, has been appointed director-general of the French government's main research agency, the 25,000-scientist strong National Center for Scientific Research (CNRS). Kourilsky was one of the founders of the biotechnology company Immunotech SA, and has recently set up a new AIDS research laboratory for the National Institute for Health and Medical Research in Marseilles with the researcher Jean-Claude Chermann.

The 53-year-old Kourilsky will be the first biologist to head the CNRS after a long line of physical scientists. He was vice chairman of the government's national research advisory committee from 1983 to 1987. He succeeds Serge Feneuille, who was appointed CNRS director-general in 1986, and resigned last month shortly after the Socialist party's victory in the general elections—although subsequently claiming that his resignation was "non-political".

■ **D.D.**

Journalistic Credit

Through inadvertence, the article "Crisis in AID malaria network" in last week's issue failed to refer to the first public report on the case, in the 15 June issue of *Science and Government Report*, by Daniel Greenberg.