

Energy, also recommended building a 1-megawatt spallation source, but it gave ANS the higher priority. DOE, which could only afford one facility, began planning for the ANS and chose Oak Ridge National Laboratory in Tennessee as its home.

Last week, however, the Clinton Administration changed direction and opted for a spallation source. DOE and national lab sources believe the proposed source would have a power of at least 1 megawatt, cost about \$1 billion, and could be operating by the planned 2003 completion date of the ANS. But debates about where the machine should be built and whether it should serve as a tritium production facility could get in the way of that ambitious timetable.

The budget document says Oak Ridge is the "preferred site," despite its lack of experience with accelerators. The laboratory has not built any major facility in years, and "it's fair to say it's their turn," a manager at another lab concedes. "They have the strongest program of materials research," adds Jim Decker, deputy chief of DOE's energy research office. Administration officials note that Tennessee is also Vice President Al Gore's home state—and presidential science adviser Jack Gibbons is a former Oak Ridge

researcher. But other national labs—Brookhaven, Los Alamos, and Argonne—have their own proposals for spallation sources, and lab officials have been meeting with members of Congress and their staffs in the past 2 weeks to make their cases.

Another difficulty could arise if the Administration insists that the accelerator be used for both civilian research and producing tritium, a vital ingredient of nuclear weapons. The dual uses are tempting to White House officials eager to create a broader political constituency in an era of declining budgets. But Oak Ridge Director Al Trivelpiece rejects this idea as impractical. "These are two separate paths," he says. Decker agrees: "Our experience is that dual-use facilities just don't work. You can't just combine these two facilities and save a lot of money."

DOE also must decide whether a 1-megawatt accelerator will be powerful enough to keep U.S. scientists on the cutting edge of neutron-scattering research. There is considerable support for going straight for a 5-megawatt source, but it is not yet proven that such a powerful source is technically possible, and developing the technology could lead to even longer delays. The key problem is cooling the target. Taylor says that ISIS's

target—which he describes as "the most irradiated piece of metal on earth"—can only dissipate 350 kilowatts of heat.

DOE is also toying with the idea of upgrading one of its reactors to keep scientists busy. "A complementary facility would be very good, but it is a question of whether we can afford it," says Decker. Dennis McWhan, chief of basic energy sciences at Brookhaven, says upgrading Brookhaven's existing reactor could be done for about \$200 million.

Decker says he expects to have a revised plan for neutron-scattering research ready within a year. But until the next century, U.S. researchers will have to traipse across the Atlantic to conduct their experiments at the world's cutting-edge neutron-scattering facilities. And that will not be a happy solution. "Airplane tickets don't work," says Trivelpiece. "You need a center of gravity in this country." KFA's Richter agrees and says that researchers on both sides of the Atlantic should learn from the ANS' lesson. "We must do whatever is necessary to get a new source. But we must not go after something that again may fail."

—Daniel Clery and Andrew Lawler

Additional reporting by Alexander Hellemans.

CLINICAL TRIALS

Fisher Clashes With NCI—Again

Bernard Fisher, the University of Pittsburgh physician whose management of a major breast cancer study was investigated by Congress last year, is in another legal joust with the federal government.

Last March, Fisher and a research collaboration he then chaired—the National Surgical Adjuvant Breast and Bowel Project (NSABP)—got into trouble with their sponsor, the National Cancer Institute (NCI), over the handling of fraudulent data from an NSABP clinic in Montreal. Fisher had reported the fraud, but his refusal to impose new auditing rules and cooperate with NCI on a reanalysis of the data led to his removal as NSABP's chair (*Science*, 25 March 1994, p. 1679, and 10 June 1994, p. 1537). Now Fisher is refusing to buckle to an ultimatum that he publish the reanalyzed data, saying the job of incorporating data from a complete audit of the program last year cannot be hurried. This time he's invoking the Constitution in his defense.

In a series of scathing letters over the past 4 weeks, Fisher's attorney, Robert Charrow of Crowell & Moring in Washington, D.C., has charged that NCI is threatening to deprive Fisher of his First Amendment rights. Specifically, Charrow claims that NCI is trying to exercise "prior restraint" by dictating when and where Fisher must submit his revised analysis for publication. NCI had de-

manded that Fisher and his NSABP colleagues send a corrected analysis of their cancer data to the NCI and to the *New England Journal of Medicine* no later than 10 February.

NCI official Richard Ungerleider says the agency set this deadline because all the information for a reanalysis had been collected by the end of 1994, and "we feel that it's time that the data be made available to the pub-

"People seem to think this [reanalysis] can be done in an evening—but it can't."

—Bernard Fisher

lic." The deadline was issued in a 12 January letter to NSABP's current chief, Ronald Herberman. Although Fisher was dismissed from NSABP, Herberman regards him as lead author on the key study, a comparison of "lumpectomy" versus mastectomy in stopping breast cancer.

Previous analyses have shown lumpectomy to be just as reliable as complete mastectomy, and Fisher says the new analysis supports that conclusion. But he refuses to jump at NCI's

command. "People seem to think this [reanalysis] is the kind of thing that can be done in an evening—but it can't," grumbles Fisher, who is still writing up the text.

Fisher and Charrow are disputing NCI's right to force the pace. Charrow says that in 1991, federal courts ruled definitively (in *Board of Trustees of Leland Stanford University v. Sullivan*) that the Constitution protects a faculty member's right to publish as he or she pleases. And in a letter to the National Institutes of Health (NIH) on 23 January, Charrow warned that officials who violate "a well articulated Constitutional norm ... can and will be held personally liable for any damages resulting therefrom."

Ungerleider seems shaken by Fisher's tactics, noting, "He's threatening me and the NCI." Ungerleider and other NCI officials remain eager to publish the data and close this chapter in NCI's history. As *Science* went to press, however, NCI announced that it was inclined to let the deadline slip 2 weeks.

While Fisher and NIH are at legal swords' points, others seem eager to back away from controversy. NSABP's Herberman, for example, says, "We're optimistic that it all can get done pretty soon." Jerome Kassirer, editor of the *New England Journal of Medicine*, says NSABP has told him he will be receiving the article "by the end of February." But Fisher only says: "We are planning to get this completed just as fast as we can."

—Eliot Marshall