Europeans Approve 6-GeV Synchrotron . . .

An international agreement formally approving the creation and operation of the European Synchrotron Radiation Facility (ESRF) was signed in Paris last Friday by science ministers representing 11 different European nations.

The facility will be built in the French city of Grenoble, on a site adjacent to the existing high-flux reactor of the Institut Laue-Langevin. The synchrotron will take an estimated 6½ years to build, at a cost of $600 million, with the first experiments scheduled for 1994.

Designed to study the organization of atoms and molecules in solid matter, the new facility will have a beam energy of 6 GeV (billion electron volts) and is said to be more advanced than similar projects currently being studied in both the United States and Japan (see below). ■ DAVID DICKSON

. . . Japanese Pick Site for 8-GeV Facility

Tokyo

The Japanese government has selected the site of the world's most powerful synchrotron light source, Several regions of the country had been vying for the facility, which will cost 100 billion yen or about $820 million at current exchange rates for construction.

The 8-GeV (billion-electron-volt) synchrotron machine will be built near the town of Aioi near Osaka in Hyogo prefecture. The site was chosen for its geological stability, says Tohru Amano, director of the science promotion bureau of the Science and Technology Agency. The machine will be used to conduct fundamental research in materials, including semiconductors, he says.

In the United States, construction of a 2-GeV facility is under way at the University of California at Berkeley and a 7-GeV machine is planned at Argonne National Laboratory.

"We expect that researchers from academia, industry, and the government will use the facility," Amano says, "and it will be open to foreigners."

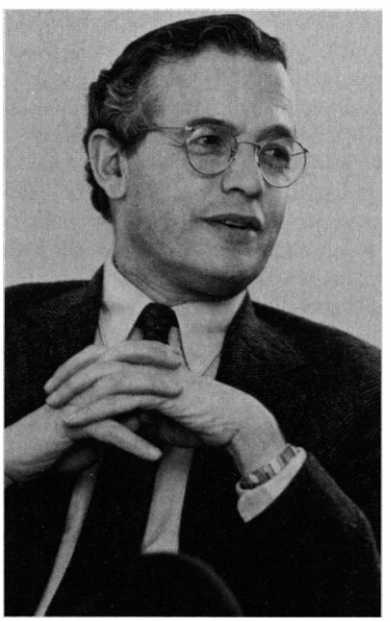
The budget for the proposed Japanese facility was 0.6 billion yen this year. In the next fiscal year, the Science and Technology Agency is asking for 2 billion yen for the project. Construction of the facility is expected to be completed by 1995.

■ MARJORIE SUN

Stopping the Brain Drain at NIH

Unless the National Institutes of Health takes better care of its own scientists, the intramural program at the world's largest biomedical enterprise may be doomed to a future of mediocrity. To avoid such a fate, and the brain drain that goes along with it, a recent Institute of Medicine (IOM) report calls for salaries at NIH that are more competitive with the real world. In addition, the IOM committee asks for privately endowed chairs for a few research heavyweights, as well as a scholars' program to attract young hot shots to the Bethesda campus and so overcome NIH's "tendency toward excessive inbreeding." Long gone, it seems, are the days when all biomedical researchers viewed NIH as some kind of mecca.

The IOM study was requested by the President's Office of Management and Budget, whose accountants surprised the biomedical community last March when they suggested that the $700-million intramural program at NIH might be better off as a free-standing research institute in the private sector (*Science*, 18 March, p. 1364). To no one's surprise, the IOM committee found "privatization" to be "undesirable and impractical." But it did see less radical ways to help beef up NIH's intramural program.



Harold Shapiro, *committee chairman.*

At a recent meeting to discuss the report, NIH director James Wyngaarden was grinning broadly. And why not? The IOM study, just in time for Christmas, is everything that the director could have hoped for. Not only does the report call for increased authority for NIH managers, but it tells Wyngaarden's overlords in the Department of Health and Human Services to back off and stop trying to "micromanage" NIH. The IOM committee also recommends that Wyngaarden be given an annual slush fund of $25 million to handle emergencies and to pounce on research opportunities that fall between the cracks at the various institutes.

The most pressing need is to make NIH salaries more competitive, say the study's authors. NIH has been hurt in recent years by the departure of several leading researchers, who left complaining about the relatively low salaries as well as the constant struggle for more space and the petty irritants of life within the federal bureaucracy, which can include layers of red tape for such seemingly straightforward chores as getting permission to travel abroad.

Yet more alarming than the departure of a few senior investigators is the difficulty NIH is having in recruiting both young talent and seasoned professionals from the outside, says Harold Shapiro, chairman of the IOM committee and president of Princeton University. Over the past 5 years, 15 senior scientists have left NIH, but only 6 have been replaced, all of them from the inside. To attract top talent from the outside, Shapiro and his colleagues recommend that NIH salaries be based on the dictates of the market; that in some cases, NIH administrators be allowed to offer salaries that exceed the federal ceilings; and finally, that NIH be allowed to hire staff based on the needs and budgets of the institutes, not on employment ceilings.

While the IOM committee notes that many NIH investigators are among the most respected in their fields, "not all work in the intramural program meets the same high standards." Some fields of study at NIH have suffered from a drop in quality, as measured by the influence of the journal in which work was published or the number of citations. The IOM committee suggests that a panel be established to monitor the intramural program, and that NIH's scientific directors and their programs be reviewed as a whole every 4 years. ■ WILLIAM BOOTH

Institute of Medicine, *A Healthy NIH Intramural Program: Structural Change or Administrative Remedies?* (National Academy Press, 2101 Constitution Avenue, NW, Washington DC 20418, 1988).