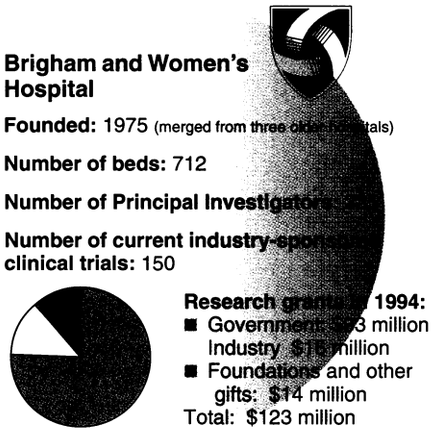
funding is up (*Science*, 10 February, p. 780) and the percentage of grant money that hospitals can keep to cover overhead—indirect costs of research—is not keeping pace with expenditures.

Officials realized that without some kind of response, the two hospitals might soon be "bathed in red ink," says William Terry, BWH's senior vice president for research and ventures. But the December 1993 announcement of the impending marriage still evoked disbelief from the affected staffs. "To have two proud and mighty institutions that have often perceived each other as competitors




suddenly be cast in the roles of best buddies is a strange and rather shaking occurrence," says Koski.

By huddling under a single corporate umbrella, the hospitals hope to achieve at least three goals. First, explains Ronald Newbower, MGH vice president for research and technology affairs, the hospitals can keep patients out of the hands of HMOs—and save the energy they wasted in competition with each other—by joining to purchase a large network of private physician practices. Partners will use the network to capture a consistent share of the money spent by Massachusetts residents on outpatient care and to guarantee the flow of patients with complex illnesses to MGH or BWH—thus providing a cushion for what Newbower calls "inherently money-losing" scientific and educational activities.

Second, the hospitals plan to consolidate some existing resources and participate jointly in new capital projects, reducing the costs borne by each. In the future, new research and clinical facilities needed by both institutions will be centralized and shared. And third, the large population of patients whom officials hope will become part of the Partners primary-care network will help restore the hospitals' attractiveness as sites for industry-sponsored drug trials.

So far, 400 out of a targeted 850 primary-care physicians in eastern Massachusetts have joined the network as employees or affiliates, bringing with them some 200,000 new "covered lives," according to Partners network president Ellen Zane. And Partners officials still expect to save $240 million in the hospitals' operating budgets by consolidating activities such as legal and financial affairs. They concede, however, that the savings are taking longer to materialize than originally projected.

Some outside observers say the savings aren't materializing because Partners officials aren't making tough decisions about overlapping services, some of which involve researchers. One university hospital executive in another city comments sharply: "It's the Noah's Ark problem. Partners now has two of everything. Where's the efficiency? Where's the savings? That's what everybody is waiting to see." There are, for example, 37 principal investigators in pathology at BWH and another 29 at MGH.

But BWH's Terry says that as long as researchers can continue to win some outside funding, the hospitals can support parallel research programs. "You can have two immunologists or 200. ... They are each looking at their questions differently," he says. Frederick Wang, a virologist at BWH, agrees: "My impression from the bench is that there's no pressure to consolidate. The partnership is one of augmentation."

The resolution of the "Noah's Ark" problem and other issues is being watched closely by leaders at academic medical centers around the country, for reorganizing to cut costs and create new "integrated delivery systems" is increasingly seen as the only option for nonprofit institutions forced to compete with the managed-care industry. University Hospitals of Cleveland, for instance, acquired three community hospitals and created its own HMO to increase inpatient admissions by 28% this year over the first quarter of 1994, according to chief executive officer Farah Walters. This structural overhaul allowed the institution to spare research and teaching programs, she says. The hospital has also committed $32 million to recruit new faculty and has jumped from 20th in the rankings of NIH-funded hospitals 4 years ago to 12th today.

McCurdy, whose own university hospital in South Carolina is negotiating an alliance with a for-profit community hospital owned by health-care giant Columbia HCA, believes that success or failure in such partnerships rides on finding institutions whose strengths and weaknesses complement one another, to keep internal competition and overlaps to a minimum; hence his eagerness to see "how the cultural fit will occur" between MGH and BWH. If the Boston venture flourishes, observers like McCurdy say, mergers may prove to be good medicine for teaching hospitals across the country.

**–Wade Roush**

HIGH-ENERGY PHYSICS

# Japan Agrees to Help Build the LHC

Japan has become the first nonmember country of CERN, Europe's high-energy physics center, to agree to finance construction of the Large Hadron Collider (LHC), the world's most powerful particle accelerator.

Last week the Japanese Ministry of Education, Science, and Culture announced that it would contribute 5 billion yen ($60 million) this year toward the $3 billion facility in Geneva. The contribution was approved this spring by legislators as part of a midyear supplemental budget to stimulate the sagging Japanese economy. The money will speed up construction of the 14-teraelectron-volt accelerator, say CERN officials, who were forced to push back the original completion date of 2003 by 5 years because of budget squabbling among CERN's 19 member nations. "We hope this will really set the ball rolling," says LHC project leader Lyn Evans.

The United States, Canada, Russia, India, Israel, and China have all had discussions with CERN, but Japan is the first to commit. The Japanese donation, believed to be the country's largest to an overseas science project, will solidify Japan's already strong ties with CERN. About 70 Japanese scientists are working on the LEP, the center's most powerful accelerator, and a few dozen are helping to design Atlas, one of the LHC's two giant detectors. There is also collaboration with the KEK National Laboratory for High-Energy Physics on high-field superconducting magnets for the LHC. "It is exciting to have this opportunity to go ahead," says KEK physicist Takahiko Kondo.

In contrast, U.S. scientists are still waiting for a financial commitment from their government. Although Administration officials see the LHC as a model for international cooperation in the wake of the cancellation of the Superconducting Super Collider (SSC)—"This is an initiative we have to support," Energy Secretary Hazel O'Leary told *Science* last week. "It is the replacement for the [super]collider"—that sentiment has yet to find a home in a shrinking budget.

Kondo says the LHC is a more popular project among Japanese researchers than was the SSC, which was seen as siphoning money from Japanese high-energy physics. He says a number of key organizations have strongly endorsed a contribution to the LHC.

**–Daniel Clery**

*With reporting by Dennis Normile in Tokyo.*