

Beset by practical hurdles, UK Biobank moves at sluggish pace

Handsomely funded and backed by the government, the UK Biobank project was publicly launched in April 2003 with great fanfare as a resource to combat illnesses such as cancer and heart disease. But two years later, the ambitious project has been slowed by myriad practical hurdles while international competitors are speeding along.

A registered charity with €91 million in funding from the UK's Department of Health, Medical Research Council and the Wellcome Trust, the Biobank is intended to build a database with blood and urine samples, lifestyle details and National Health Service medical records from half a million volunteers aged 45–69.

The firm's chief information officer, Steve Walker, had hoped to recruit participants starting in September 2005, but the deadline has been pushed back to January 2006. To begin with, staff members are still grappling with predicting what information researchers might need in the future.

"We have to make a judgment now of what data might be useful 20 to 30 years down the line," says Walker. "If we only have this one opportunity to get these people into our assessment center, then we want to make sure we get as much out of it as we can."

The project is also trying to assemble systems needed to store the mass of data being generated. Special Oracle software will for the first time be used for a biobank platform, Walker says.

The center also appears not to have fully anticipated the scarcity of people with the right mix of biological and technological skills. "I've found it very, very difficult to find people that can really grasp the magnitude of what we are trying to do," says Walker. The company's chief executive, Professor John Newton, stepped down from the role in March after just two years in the job and is yet to be replaced.

In the meantime, the initial trials of some assessment centers were completed earlier this year, and the firm is scrambling to prepare for a more wide-ranging test in October, involving up to 3,000 participants over two to three months.

Meanwhile, leaders of Japan's Biobank, also launched in April 2003, announced in May that they have thus far collected 100,000 DNA and serum samples. With \$180 million for five years, that project aims to collect 300,000 samples for 47 diseases. It is sending its first 500 samples related to autoimmune disease to a research institute for analysis. Another ten applications are being processed, says the University of Tokyo's Yusuke Nakamura, who heads the project.

The quick clip of Japan's Biobank, which is only available to companies in Japan, could bolster a comeback for a Japanese biotech



Biobanks in the UK and Japan aim to collect biological samples from their populations.

Zuma Press/Rob DeLorenzo

industry that hasn't been very competitive, Nakamura says. "We can accelerate drug development if public universities and industry realize the value of the resource."

Besides the torpid pace, the UK project has faced much criticism from scientists, who have been dubious about it from the beginning.

"They want to predict morbidity and

mortality from a DNA scan," says Steve Jones, professor of genetics at University College London. But based on factors such as age, weight, gender and smoking habits, any doctor can predict with about 80% accuracy how long you have to live, Jones notes. "So how much more do you need? It may help find some rare cancer genes, but is this the best way to go about it?"

In Japan, Nakamura's considerable power with the country's policymakers allowed him to overcome such questions about the project. Critics such as the Japan Medical Association also voiced concerns about privacy issues and police access to these databases (*Nature* **424**, 359; 2003). But Nakamura says with careful attention to these issues, his team was able to obtain informed consent from 87% of recruited patients.

Jones concedes that critics like him may well be proven wrong. "Years ago, many people like me moaned about the Human Genome Project," he says. "But at the end it was a triumph."

James Watson, London; David Cyranoski, Tokyo

Foreign reviewers rile INSERM researchers

French researchers are rebelling against a decision to include foreign experts in policy decisions at the country's National Institute of Health and Medical Research (INSERM).

Beginning 21 June, eight scientists from the UK Medical Research Council and the German Research Foundation will join INSERM's Scientific Council and help evaluate research projects to be funded for the next four years. The council will hear from the center's director, research team leaders, postdoctoral fellows and students in a bid to improve transparency and research quality.

With 360 laboratories and 6,000 scientists, INSERM, France's primary biomedical research agency, already has a number of foreign advisors, but these external experts can only provide written advice, in accordance with INSERM legal statutes, says researcher Jean Kister, joint secretary general of the National Union of Scientific Research Workers. "It's unacceptable that the directors of INSERM decided, without debate, to impose these changes by a *coup de force*," he says.

The researchers are particularly incensed over the decision to hold internal discussions and hearings only in English, a topic already much in discussion in France. Ahead of a long-awaited science reform bill, an editorial in the 2 June *Le Figaro* criticized the exclusive use of English in scientific communication and said it is harmful for French science. "Competence in English has become a means of social

discrimination," it said. Kister says the union has filed a query to the Paris Administrative Court asking whether the hearings would be illegal if held only in English.

Some researchers are concerned that their English will not be good enough to discuss the more political aspects of science. "While my clumsy English is generally corrected during the editorial process before publication of papers, this kind of discussion with or within the scientific board of INSERM will be without any correction and surely misleading," says Christian Carpenne, a researcher at the Centre Hospitalier Universitaire de Toulouse.

INSERM's director general Christian Bréchet says most researchers at INSERM have a good grasp of English, but he is open to allowing a translator to be present at the discussions. He says members of the Scientific Council agree with the new decision. "It's much more valuable [for foreign experts] to directly meet with scientists rather than just reading projects and writing advice," he says.

Supporters say the changes are a positive development and the unhappy scientific unions represent a small number of scientists. "Some French scientists should stop considering that France has the best-ever research system that everybody in the world envies," says Jacques Samarut, head of molecular and cellular biology at the University of Lyon.

Xavier Bosch, Barcelona