swims. For mice, that qualifies as a permanent change in how they respond to alcohol.

Exactly how loss of the CRH receptor alters the animals' drinking habits is not clear. The mutants don't appear to be any more shaken up by the stressful situations than are the normal mice. And because they don't start drinking more right away, they're not relying on alcohol to restore their courage. Jane Stewart of Concordia University in Montreal, Canada, who studies the involvement of CRH receptors in addictive behavior, explains that "the stress may activate pathways that have nothing directly to do with fear and anxiety but which alter the approach to alcohol itself."

The researchers are now doing association studies in humans in hopes of finding out more about such pathways. Specifically, Sillaber and Spanagel will look for variations in stress-related genes in alcoholics. Some alcoholics, they say, may have defects in their CRH receptors or other anomalies that disrupt the stress response system in a way similar to that seen in the mutant mice. This research, they say, may help pinpoint some of the genes that make an individual more likely to respond to the slings and arrows of outrageous fortune by turning to the bottle.

–CONSTANCE HOLDEN

POPULATION STUDIES

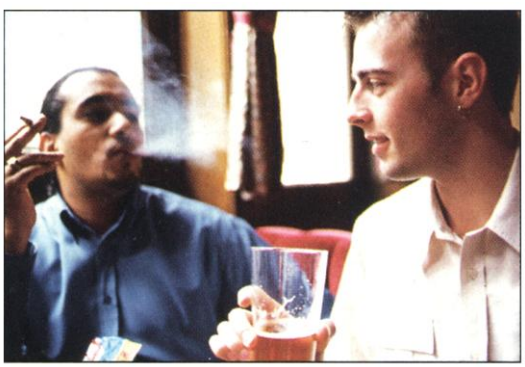
## U.K.'s Mass Appeal for Disease Insights

**LONDON**—Plans shifted into high gear this week for a huge repository of information on the genetics and lifestyle of the population of the United Kingdom. The $66 million BioBank UK hopes to collect data from half a million middle-aged Britons over the next decade. But a public battle is looming over how much access companies should have to the database.

The project, first proposed more than 2 years ago, aims to use the trove of data on the British population's genetic makeup and way of life to flush out factors that influence common diseases such as cancer, diabetes, and heart disease (*Science*, 18 February 2000, p. 1184). On 29 April, the Medical Research Council, the Department of Health, and the Wellcome Trust, a mammoth biomedical charity, announced their financial backing for BioBank, which will collect blood samples and information on diet, smoking, and other lifestyle choices from 500,000 volunteers aged 45 through 69, then track their health for at least 10 years. Researchers will mine the database for disease-related patterns, such as genes that heighten vulnerability to the cancer-causing effects of smoking.

The study is a logical follow-up to the Human Genome Project, says Wellcome Trust director Michael Dexter. "It is part of an overall strategy to really ensure that the [sequencing] research we've done does have health benefits," he says. The human genome sequence, he says, will allow researchers to more quickly identify DNA variations in the U.K. population that correlate with disease. BioBank will stand out from a growing pack of genetic databases—including deCODE, which probes for disease genes in Iceland (*Science*, 1 January 1999, p. 13)—because it will collect detailed data on lifestyle choices and risk factors across several ethnic groups. The search for an executive director and a headquarters site will begin in the next few months.

An oversight committee, to be established by BioBank's funders, will hammer out the rules for access to the data. These are expected to come under intense scrutiny. "A lot more work needs to be done on the relationship between BioBank and industry" to ensure that benefits flow back to the public, asserts David S. King, coordinator of Human Genetics Alert in London. The watchdog group is lobbying for a ban on patents based on genetic discoveries that come out of the database. The group is also pressing for BioBank to allow volunteers to opt out of research they may object to, such as studies on behavioral genetics. Dexter argues that industry researchers must be given access for the project to succeed. "At the end of the day," he says, "they're the ones who develop the drugs."



**Pay later?** BioBank UK will probe the links between genes, lifestyle, and disease.

BioBank has time to address such issues: Full-scale enrollment of volunteers is not likely to get under way until 2004, says a Wellcome Trust spokesperson. The real test will come then, when doctors start pitching the project in earnest to their patients. "It is an opportunity to get people on board for this kind of new biology," says Dexter.

–GRETCHEN VOGEL

GENOME RESEARCH

## Venter Is Back With Two New Institutes

After 3 months of rare silence, genome scientist J. Craig Venter is back on the air. Venter, who abruptly resigned in January as president of Celera Genomics of Rockville, Maryland (*Science*, 25 January, p. 601), announced 30 April that he plans to establish two new institutes that will focus on ethics, clean energy, and the environment. Venter also made headlines last week by confirming a persistent rumor about Celera's research: "Three-fifths" of the human genome the company sequenced and published in 2001 is his own.

Venter says he is establishing an outfit called the J. Craig Venter Science Foundation. It will be the financial and legal umbrella for three nonprofit organizations whose boards he will chair, all located in Rockville. One is already well established: The Institute for Genomic Research (TIGR), a sequencing and gene analysis operation presided over by Venter's wife, microbiologist Claire Fraser. TIGR's two new siblings will be a think tank called the TIGR Center for the Advancement of Genomics (TCAG) and a research institute called the Institute for Biological Energy Alternatives (IBEA). All three will share TIGR's current endowment, which is estimated to be worth about $140 million, according to Venter. The fund was established with stocks Venter received from Celera and from an earlier partnership with Human Genome Sciences of Rockville.

The broadest of the new operations, TCAG, will enter a field already well populated with serious thinkers. TCAG will concern itself with "public policy and ethical issues related to the sequencing of the human genome," says Venter. Initially it will take up four topics: risks of discrimination and a mistaken public emphasis on "genetic determinism"; fallacies about race; genetics and medicine; and stem cell biology. Venter says, for example, that congressional efforts to "criminalize" scientific research by banning some cloning and embryonic stem cell studies are "unprecedented" and deserve much wider comment. He plans to recruit a staff of 20 to 30 people to support up to 30 visiting faculty, who will come for periods of 3 to 12 months.

TCAG's turf overlaps to some degree with that of another new center announced in April, the Genetics and Public Policy Center of Washington, D.C., backed by the Pew Charitable Trusts and Johns Hopkins University in Baltimore. The Hopkins center, headed by former National Human

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