## **EPIDEMIOLOGY**

## **Author of Iraqi Deaths Study Sanctioned**

The lead author of a controversial study that concluded that the U.S.-led invasion of Iraq in 2003 caused a high number of violent deaths-more than 600,000 Iraqis—has been sanctioned for a lapse in ethics. The Bloomberg School of Public Health at Johns Hopkins University in Baltimore, Maryland, found last week that epidemiologist Gilbert Burnham had committed "violations of the Bloomberg School's policies regarding human subjects research" by failing to fully protect the confidentiality of interviewees. It ordered a 5-year suspension of "Burnham's privileges to serve as a principal investigator on projects involving human subjects research," the school announced in a press release.

"The [Bloomberg] School has asked me to make no comments at the present," Burnham said to *Science*.

A university investigation discovered that the full names of Iraqi people interviewed appeared on some of the 1800 data-collection forms filled out during the house-

to-house survey designed by Burnham. The university gave Burnham approval for the study with the understanding that no unique identifiers would be recorded. The survey was carried out by a team of Iraqi researchers who met with Burnham in Jordan to receive instructions and hand over data (*Science*, 20 October 2006, p. 396). According to a Hopkins press release, the investigation found "no evidence that the violations caused harm to any individuals involved in the study" because the data sheets were "never out of the possession of the research team." As principal investigator, Burnham was held responsible.

"The punishment is very severe, and making it public is unusual," says Gary King, a statistician at Harvard University.

Les Roberts, a co-author of the 2006 Lancet study who is now at Columbia University, acknowledged in an e-mail exchange with Science that a "serious" breach of confidentiality occurred in the survey forms but said that Burnham was not initially aware of it. "When the forms

arrived in Jordan all filled out, [Burnham] asked and was assured that these words at the top of the forms were not complete names or unique identifiers," Roberts wrote, and "most are written in Arabic, which [Burnham] does not read."

The debate is likely to continue. The sanction "has nothing to do with the scientific merits or defects of the study or its results," notes Debarati Guha-Sapir, an epidemiologist at the World Health Organization's Collaborating Centre for Research on the Epidemiology of Disasters in Brussels. Statistician Seppo Laaksonen of the University of Helsinki notes that Hopkins didn't evaluate the study's sampling methodology or statistical approach, which he cares about more than the punishment. But Roberts dismissed criticism of the study. In an e-mail, he wrote: "There is a way to verify [our] findings: replicate. The posh academics who spend their lives in offices are offended by that, but in this arena, rigor is more about ground activities than software manipulations."

According to the Hopkins press release, "an erratum will be submitted to *The Lancet*" concerning the unauthorized recording of names. —JOHN BOHANNON

## SCIENCE AND BUSINESS

## **India Allows Government Scientists to Own Companies**

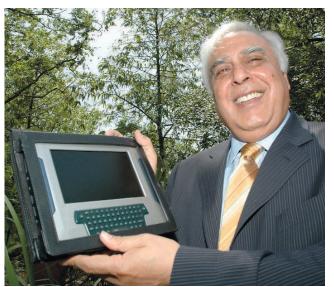
**NEW DELHI**—In 2001, Swami Manohar and three colleagues at the Indian Institute of Science (IISc) in Bangalore invented the Simputer, a simple and cheap hand-held computer. But as civil servants, the com-

puter scientists by law could not commercialize their invention. "I had no choice but to resign," says Manohar, who is now chief of intellectual property and strategy at Geodesic Limited, a telecom firm that bought the company Manohar and his colleagues founded after leaving IISc in 2001.

Indian scientists will no longer be forced to make such a stark choice. On 24 February, the Department of Scientific and Industrial Research issued regulations that permit researchers at government-funded institutions to hold equity stakes

in scientific enterprises and spinoff companies. The "historic decision," says Science Minister Kapil Sibal, will "unleash the latent entrepreneurial potential of Indian scientists."

The policy shift is expected to have a



**More freedom.** Inventors like Swami Manohar, co-inventor of the Simputer, will gain from a regulatory change.

profound impact in India: Some 400,000 scientists, about three-quarters of the scientific work force, are employed at public institutions. By bringing India in line with the United States and other Western nations, the new rules should create an attractive environment for talented expatriate scholars to return to India, says Samir Brahmachari, director general of the Council of Scientific and Industrial Research in New Delhi who helped shepherd the regulation through 18 ministries over 18 months.

The new rules also permit research institutes to hold equity stakes in commercial enterprises. To facilitate this process, the government will encourage the lateral mobility of researchers between institutes and industry. "Cross-fertilization between the academics and industry is very much necessary," says Sibal. Although the regulations came too late for Manohar to keep his post at IISc, he applauds what he sees as a long-overdue change. "Scientists need the freedom to flourish, and now they have gotten it," he says.

-PALLAVA BAGLA