Prisoners' DNA database ruled unlawful

[SAN FRANCISCO] A Massachusetts Superior Court judge has barred the state police from demanding DNA samples from prisoners, parolees and probationers. This is one of the first US court decisions asserting privacy rights to stop DNA data banking.

In striking down the statute, Judge Isaac Borenstein said that compulsory blood sampling violated the privacy guaranteed to US citizens under the Fourth Amendment. He impounded 1,200 samples, saying the law's enactment in January amounted to "unreasonable search and seizure".

All 50 US states have laws establishing a forensic DNA database for convicts. Few have been contested in court, and all those have withstood the challenge. Paul Billings, a medical geneticist who supported the Massachusetts plaintiffs, said the ruling showed a balancing trend. "There are beginning to be decisions that show there have to be rules — that all this ethics stuff isn't blowing smoke."

Borenstein ruled that "regardless of the state's compelling interest, an unjustified random bodily intrusion without any indication of individualized suspicion is unreasonable and intolerable".

The state plans to appeal. Assistant attorney general Elisabeth J. Medvedow says the law enforcement value of the database outweighs the intrusion. The DNA bank would help police find missing people, solve crimes and deter illegal conduct, she says.

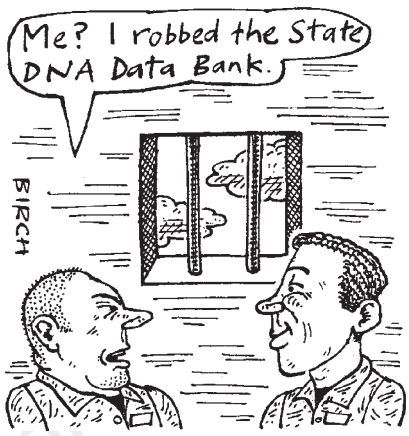
The statute allows the permanent storage of DNA samples collected from people convicted of any one of 33 crimes ranging from murder to dissemination of obscenity. The material would be used for law enforcement and — after all identifiers had been removed — for broadly defined research purposes including those that might advance methods of DNA banking and statistical analysis. The plaintiffs argued that this creates a second invasion of privacy, because of the open-ended possibilities for using the data, despite the promise of anonymity.

Frederick Bieber, a forensic geneticist in the department of pathology at Harvard University, testified in favour of the law. He pointed to the high rate of repeat offences in Massachusetts: 26 per cent of convicts who have committed crimes listed in the statute offend again within a year of release.

"From my point of view it's an issue of public safety, victims' rights and preventing future crimes," he says. He adds that permanent storage of samples would be important in the development of improved forensic DNA technology – for example, for use in validating systems using new markers.

State senator James Jajuga, who joined the governor in proposing the statute, says he hopes the database will one day help prevent crimes. Studies of the DNA bank might yield a 'criminal' DNA profile that could help predict which parolees or probationers were likely to commit further crimes, and identify how to use education, drug therapy or counselling as preventive measures, he says.

Jajuga acknowledges the controversy over



such research, but says he feels it could be done fairly. "Obviously we want to be careful with this; there's no question we don't want it to be abused," he says. But Paul Billings questions the science behind hunting for a 'recidivism gene' — and lawyers for the plaintiffs decry the civil-rights implications.

"The law is a blueprint for genetic engineering," says Benjamin Keehn of the Committee for Public Counsel Services in Boston. If prisoners could be tested on the basis of a 26 per cent recidivism rate, he suggests, so could all African American males, who on average have a 28 per cent chance of spending time behind bars.

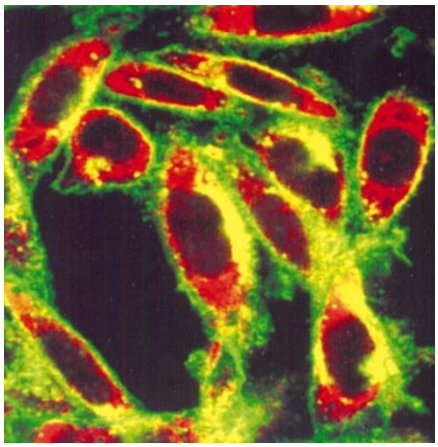
Keehn says that scientists thinking of potentially beneficial results of genetic research need to be aware of how samples are being collected.

Sally Lehrman

NIH institute to work with trial of AIDS vaccine, despite concerns

[WASHINGTON] The US National Institute of Allergy and Infectious Diseases (NIAID) is to collaborate with large-scale, privately funded clinical trials of an anti-HIV vaccine developed by Genentech.

In 1994, NIAID declined to undertake such a 'phase three' trial itself, citing since-resolved concerns about the vaccine's safety — and continuing concerns about its efficacy. The vaccine is based on a part of HIV's protein coat known as gp120 (see *Nature* 369, 593; 1994).



P. BERMAN, VAXGEN INC

Red alert: trials have begun of a new AIDS vaccine, produced using cells expressing gp120.

This year, a trial of a modified version called AIDSVAX has gone ahead anyway, led by the Genentech spin-off company VaxGen (see *Nature* 391, 220; 1998). NIAID now says it will collaborate with the trial's sponsors to conduct scientific studies of its own.

NIAID, which is the leading supporter of AIDS research at the National Institutes of Health (NIH), plans, among other things, to bank cells from volunteers. This will allow later analysis of cases of breakthrough infection, and the charting of immune function in successfully vaccinated subjects.

NIAID's new willingness to be associated with the trial has won applause from activists — and barbs from scientists who say there is no evidence that the vaccine will work.

It's "a very positive development", says Jeff Jacobs of the AIDS Action Council in Washington DC. "This alleviates some concern we had of VaxGen moving forward without the government's involvement."

But some scientists are less sanguine. "What has changed is not scientific, it's political," says Dennis Burton, a molecular biologist at the Scripps Research Institute in La Jolla, California, and an expert on antibody responses to HIV. Another prominent AIDS researcher, who declined to be identified, says: "If anything did come out of the trial, the NIH would be crucified for not having been involved."

Anthony Fauci, the director of NIAID, insists that politics played no part in the decision. The institute will capture scientific information that could answer important questions — such as why the vaccine is ineffective, if that turns out to be the case — and that would otherwise be lost, he says.

"Our interest is based in trying to understand and learn anything we possibly can," says Fauci. "It would be a shame if the only phase three trial [thus far] is executed and we don't get the optimum amount of information."

Meredith Wadman