Drug researcher quits controversial cat study

Virginia Gewin, Washington

A researcher is to turn his back on controversial research into the impact of amphetamines on cats, in the face of opposition from individuals and animal-rights groups.

Michael Podell, a veterinarian at Ohio State University (OSU) in Columbus, will no longer lead its study of the interaction between consumption of methamphetamine — better known as 'speed' — and the impact of feline immunodeficiency virus on cats' brains and immune systems.

Podell's study had been the target of lawsuits (see *Nature* **415**, 106; 2002) and, according to university officials, he has been subjected to threatening phone calls and e-mails from opponents of the work. He says that he has now accepted a "better opportunity elsewhere", and is leaving the OSU.

Podell cites the protests as a factor in his



Animal model: researchers study cats to find a link between human drug use and HIV susceptibility.

decision, but adds that he didn't win the backing he wanted from the OSU. "We could not come to agreement on all aspects of my career and how I should be supported," he says.

Draft cow genome heads the field

David Adam, London

A biotechnology company is hoping to help farmers pick cash cows from bum steers, after rounding up the first draft genome sequence of cattle.

Researchers at MetaMorphix in Savage, Maryland, say they have not only completed a working draft of the genome, but have also identified some 600,000 single-nucleotide polymorphisms (SNPs) in the sequence.

Geneticists can use SNPs to track down links between specific genes and the traits that they control. In the cows' case, this is likely to mean genes that make them capable of producing tender, high-quality beef.

At the moment, farmers only know after slaughter which cows produced the choicest cuts. "If we know in advance which animals are of superior quality then we could separate them out and put them on different feed regimes," says Ed Quattlebaum, president and chief executive of MetaMorphix.



At 1X coverage, at which each base pair has been sequenced once on average, the draft is far from the finished article. A proposal to produce a publicly funded sequence of 5X to 6X coverage was recently deferred by the National Institutes of Health (NIH), but will be considered again next month (see *Nature* 417, 473; 2002).

Alan Archibald, head of genomics and bioinformatics at the Roslin Institute near Edinburgh, UK, and part of the group behind the NIH proposal, says that the MetaMorphix announcement makes the need for a publicly accessible sequence all the more urgent.

MetaMorphix, which intends to keep its sequence and SNP data confidential, will be hunting for genes to patent, says Archibald. "At 1X coverage the sequence isn't very impressive, but if they've identified 600,000 possible SNPs then that's a very big deal indeed, and they have a significant head start," he adds.

The SNPs still have to be verified, says Archibald, but they could allow MetaMorphix to use more powerful genetic techniques to hunt for desirable genes in normal herds of cattle. There are fewer that 2,000 SNPs in the public domain, and other researchers have to work with pedigree research herds, making it more difficult to apply the results to farm animals.

The large number of possible SNPs has taken other researchers by surprise, although many have known about the sequence for about a year. They say it was prepared by Celera AgGen, which was bought by MetaMorphix from Celera Genomics in Rockville, Maryland, earlier this year. University officials say that the OSU beefed up its security to protect Podell's work, which is supported by a \$1.7-million grant from the National Institute on Drug Abuse (NIDA), part of the National Institutes of Health (NIH). "People are very concerned," says Earle Holland, a spokesman for the OSU. "Nobody wanted him to leave."

Animal-rights groups that opposed the research, including a local organization, Protect our Earth's Treasures (POET), say they will carry on opposing the work if it continues under new leadership.

The first results from the project, published last month (*J. Neurovirol.* **8**, 240–249; 2002), show that methamphetamine drastically increases replication of the virus in cat nerve cells. Podell says this finding vindicates the approach taken by the experiment, which was designed to explore links between human drug use and susceptibility to HIV.

Supporters of biomedical research on animals fear that Podell's departure will compromise other projects. "He isn't the first and will not be the last" to abandon research in the face of opposition, says Frankie Trull, president of the Foundation for Biomedical Research, which lobbies against tougher regulation of animal research.

But Podell does not concede that the circumstances of his departure will encourage the harassment of researchers. "Whether I stay or go, they would continue the same tactics," he says.

OSU officials will decide shortly whether the project, which is due to run until 2005, will continue under new leadership. Timothy Condon, associate director of the NIDA, says that the funding agency would like it to do so. "We will encourage OSU to find an alternative principal investigator for this grant," he says.

The Physician's Committee for Responsible Medicine, a group that supports tighter controls on animal experiments, is suing the NIH for allegedly failing to provide information about the experiment, as required by the Freedom of Information Act.