

## **AAAS: Viral chatter**

Earlier today, UCLA researcher Nathan Wolfe gave a fascinating talk on the intricate art of ‘viral forecasting’. Viral forecasting takes disease surveillance a step further than public health agencies normally go: instead of waiting for an outbreak and then rushing to contain it, Wolfe tries to find new viruses before they find us.

He likens the work to investigations by intelligence agencies that sift through internet and telephone ‘chatter’ in search of terrorist plots. Wolfe narrows his target area by focusing on areas where a virus is most likely to make the jump from an animal host to a human. He’s traveled around rural Cameroon and collected blood samples from hunters who hunt and eat primates. He’s also enlisted the hunters’ help in collecting samples from caught animals. (That help is voluntary of course: Wolfe does not pay hunters to kill primates.)

Wolfe has found that thousands of people in rural central Africa are infected with a primate virus called Simian Foamy Virus, and he says it’s possible that hundreds of thousands of people are infected worldwide. (SFV doesn’t cause illness in people – yet.) And he says HIV positive hunters in Africa could be catching SIV from their prey. If the simian virus then recombined with the human virus, new HIV strains would be produced.

Although it’s clearly important to catch emerging viruses as early as possible, Wolfe says there are few projects like his. In 2005, Wolfe received an NIH Pioneer award -- an award, he noted with a wry laugh, that is meant for risky, ‘out of the box’ projects. “This kind of thing should be very much in-the-box,” he said. To fix that, Wolfe wants to see a percentage of disease surveillance funding devoting to disease forecasting.

Posted by Heidi Ledford on February 18, 2008 12:52 AM