



## AVIAN INFLUENZA

## As H5N1 Keeps Spreading, A Call to Release More Data

**PARIS**—An impassioned call by a prominent Italian influenza scientist has renewed the debate about how to balance global health against scientists' needs to publish and countries' demands for secrecy. On 16 February, Ilaria Capua of the Istituto Zooprofilattico Sperimentale delle Venezie in Italy asked more than 50 colleagues around the world to release all sequence data for the H5N1 avian influenza strain into the public domain. Comparing sequence data from every H5N1 isolate as soon as they become available is crucial for understanding how the virus moves and evolves, Capua argues.

Putting her money where her mouth is, Capua entered H5N1 sequence data from two recently infected countries, Nigeria and Italy, into the GenBank database the same day. She also rejected an offer by the World Health Organization (WHO) to join a select circle of 15 labs that share bird flu sequences on a password-protected Web site.

Capua's lab is a reference center for the U.N. Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (OIE), and officials at those agencies say they support her call. But some scientists say sharing data instantly is complicated by the need for credit, and WHO argues that without some form of confidentiality, some countries would not submit samples at all.

Sharing information about H5N1 has been

tricky from the start. WHO, FAO, and OIE encourage countries to send virus samples to specialized reference labs that can confirm the outbreak and study the virus further. Some have been reluctant to do so because they worry about intellectual-property rights or not receiving a fair share of the scientific credit; China, for instance, has not shared any avian samples for a year, a WHO spokesperson says. But even when reference labs do get their hands on a virus, they don't always release the data immediately.

For instance, in the past few months, H5N1 samples from about 15 European countries have been sent to the Veterinary Laboratories Agency (VLA) in Weybridge, U.K., a reference lab for OIE and the European Union. Lab director Ian Brown says he's sharing sequence and other data with governments and the international agencies; to show support for Capua's campaign, he also submitted the sequence of a virus from an outbreak in Turkey that he says is a "progenitor to the European epidemic" into GenBank last week. However, until a paper about the European outbreaks—which he says could be submitted in a matter of weeks—has been accepted, Brown says he needs to hold on to the European sequences. "The staff in this institute is working 24/7 to provide this service," he says. "I don't think it's unreasonable to expect ... some reward for their endeavors." It also takes time to negotiate the conditions of release with

**Showing her cards.** Ilaria Capua says she will submit H5N1 sequences from her lab to public databases immediately.

dozens of individual governments, Brown says.

Capua counters that just isolating and sequencing a virus that comes in the mail does not give researchers the right to sit on the data—especially not at a government lab. "Most of us are paid to protect human and animal health," she says. "If publishing one more paper becomes more important, we have our priorities messed up." Governments can often be persuaded to release the sequences, adds Capua, who repeated her call at an OIE meeting in Paris on Monday and also plans to submit it to ProMED, an e-mail list about emerging infectious diseases.

WHO agrees that in an ideal world, scientists would share their data widely and voluntarily, says Wenqing Zhang of the agency's Global Influenza Programme. But because that's not happening, the agency created a special secured section at the Influenza Sequence Database at Los Alamos National Laboratory in New Mexico in 2004. Currently, some 15 labs have passwords to access these data, says Zhang, including WHO's eight reference labs. The system is invaluable for WHO, she adds, as it helps the agency track the virus and adjust risk assessments if necessary.

Virologist Yi Guan of the University of Hong Kong, which has a huge H5N1 collection, says he would be prepared to release more data publicly before publication but is looking for WHO to establish a new policy. Until then, WHO's secure server at least ensures that policymakers and most of the scientists who advise them have access to vital information. But Capua says everyone with an interest should be able to browse all the data. When she was offered access in exchange for submitting her Nigerian sequence last month, she declined. And the system gets mixed marks within WHO as well. "Personally, I'm not in favor of it," says WHO scientist Michael Perdue.

Whether scientists' fears of being scooped are justified is difficult to say. In theory, once sequences are posted in the public domain, anybody could write a paper about them. In practice, journal editors will ask manuscript authors to get permission if they write a paper about unpublished data they did not submit to GenBank themselves, says Caroline Ash, who edits infectious diseases papers at *Science*. But Brown says he'd rather not take that risk.

—MARTIN ENSERINK

With reporting by Dennis Normile in Tokyo.