

US-based scientist makes potent version of H1N1 flu

July 2 2014



H1N1 virus. Credit: C. S. Goldsmith and A. Balish, CDC

A US-based Japanese scientist said Wednesday he has succeeded in engineering a version of the so-called swine flu virus that would be able to evade the human immune system.

The research on the 2009 H1N1 virus at a high-security lab at the University of Wisconsin, Madison has not yet been published, but was first made public July 1 by the Independent newspaper in London.



The article described virologist Yoshihiro Kawaoka, as "controversial" and said "some scientists who are aware of (the experiment) are horrified."

Kawaoka confirmed to AFP that he has been able to make changes in a particular protein that would enable the 2009 H1N1 virus to escape immune protection.

"Through selection of immune escape viruses in the laboratory under appropriate containment conditions, we were able to identify the key regions would enable 2009 H1N1 viruses to escape immunity," he said in an email.

However, he described the Independent's story—which called his research "provocative" because it sought to create a deadly flu from which humans could not escape—as "sensational."

"It is unfortunate that online news outlets choose to manipulate the message in this way to attract readers, with sensational headlines, especially in regard to science and public health matters," he said.

Kawaoka said the reason for the research was to find out how the flu virus might mutate in nature and help scientists devise better vaccines against it.

He also said he has presented his initial findings to a World Health Organization committee and it "was well received."

Controversy erupted in 2011 and 2012 over research on the H5N1 bird flu, after a Dutch and a US team of scientists each found ways to engineer a virus that could pass easily among mammals.

Concerns were raised over the potential to create a deadly pandemic like



the Spanish flu of 1918-1919 that killed 50 million people.

A key worry was that bioterrorists could find a way to recreate and release such a virus, or that it could accidently escape from a research lab.

Scientists stopped their work for a time but the details of the experiments were eventually published in major scientific journals.

© 2014 AFP

Citation: US-based scientist makes potent version of H1N1 flu (2014, July 2) retrieved 11 May 2024 from https://medicalxpress.com/news/2014-07-us-based-scientist-potent-version-h1n1.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.