

Unique US-Chinese lab to head off H7N9 outbreak and future threats

May 28 2013

The Center for Infection and Immunity at Columbia University's Mailman School of Public Health (CII) and the National Institute for Viral Disease Control and Prevention (NIVDC) within the Chinese Center for Disease Control and Prevention will open a Joint Research Laboratory for Pathogen Discovery to conduct surveillance, identify new infectious microbes, establish novel platforms for diagnostics, and develop drugs and vaccines to treat diseases in humans and animals.

It is the first time an international team will operate a laboratory within the Chinese Center for Disease Control. The agreement, years in the making and formalized on May 9, will "enable CII and Chinese CDC investigators to work side-by-side developing solutions for pandemic threats to global health" says Dr. W. Ian Lipkin, MD, Director of CII.

The unique arrangement had its origins 10 years ago when Dr. Lipkin was invited by the government of China to help address the challenge of SARS. Together with Chinese scientists and officials, he developed a research plan for SARS and <u>infectious disease control</u>, and even appeared on Chinese television to allay fears and correct misconceptions regarding treatments.

"In 2013 the threat is not the <u>SARS coronavirus</u>—this time the imminent threats are the H7N9 <u>influenza virus</u> and the new coronavirus emerging in the Middle East," says Dr. Lipkin, who serves a Scientific Director of the laboratory along with Xiao-ping Dong, MD, and Administrative Director Zhao-jun Duan, PhD, of the NIVDC.



"This historic agreement comes at a crucial time. <u>International</u> <u>collaboration</u> is needed in the face of infectious disease outbreaks with the potential to rapidly cross borders and spread around the world," says Dr. Dong.

Expected to be operational by in the summer of 2013, the new laboratory will employ state-of-the-art techniques to keep up with the rapidly increasing pace of pathogen discovery, which has been spurred by a global proliferation of microbial infections and improvements in methods for detection. New molecular diagnostic platforms; investments in pathogen surveillance in wildlife, domestic animals and humans; and the advent of social media tools that mine the Internet for clues to outbreaks of infectious disease are proving invaluable in early recognition of threats to public health.

The new lab will open its doors at a time when pathogen discovery is pushing the boundaries of what is thought of as infectious disease by lending insights into the mechanisms by which microbes can contribute to chronic illnesses like cancer, peptic ulcer disease, and mental illness.

Through a five-year agreement between Columbia and NIVDC, the lab will be funded by NIVDC.

Provided by Columbia University's Mailman School of Public Health

Citation: Unique US-Chinese lab to head off H7N9 outbreak and future threats (2013, May 28) retrieved 20 March 2024 from https://medicalxpress.com/news/2013-05-unique-us-chinese-lab-h7n9-outbreak.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.