CONDITIONS AND PROSPECTS FOR VIROLOGY RESEARCH AT CHINA'S ACADEMY OF MILITARY MEDICAL SCIENCES AND OTHER DOMESTIC INSTITUTES

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Executive Summary

- The Academy of Military Medical Sciences (AMMS) has emerged as one of China's most capable virology research institutes. AMMS has extensive "in-house" capabilities, domestic scientific partnerships and strategic international partnerships.
- 2. The AMMS, which is organised under the People's Liberation Army (PLA), conducts research on multiple virus types including SARS-CoV-2 and the recently detected Langya Henipavirus (LayV). The lead institute for the scientific analysis of LayV is the Beijing Institute of Microbiology and Epidemiology, which is officially part of AMMS.
- 3. The PLA Centre for Disease Prevention and Control (PLA CDC) was established within AMMS in 2003 and AMMS was formally incorporated into the Academy of Military Sciences in 2017. During the COVID-19 pandemic, AMMS also developed Convidecia, a vaccine used by the PLA.
- 4. AMMS researchers have collaborated in high-risk virology research with researchers from the University of Texas Medical Branch (UTMB) in Galveston. It is noteworthy that UTMB, a top US virology outfit, would cooperate with the PLA-related AMMS.
- AMMS researchers also collaborated with researchers at the Canadian National Microbiology Lab in Winnipeg in virology research, specifically in relation to Ebola and Henipavirus.
- 6. The AMMS has developed and maintained transnational links to be at the cutting edge of global virology research. Such transnational collaboration may become increasingly tenuous as the relations between the West (especially the United States) and China deteriorate amid a more competitive geopolitical relationship.

- 7. Another significant Chinese lab is the Guangzhou Institute of Respiratory Health (GIRH). Professor Zhong Nanshan, China's most famous virologist, leads the GIRH and spearheaded the country's campaigns to eradicate the 2003 SARS and COVID-19 pandemics.
- The Institute of Pathogen Biology (IPB), under the flagship of the Chinese Academy of Medical Sciences and Peking Union Medical College (CAMS/PUMC), is also making rapid scientific progress.
- 9. The Christophe Merieux Laboratory (CML) is IPB's key platform for transnational collaboration. CML was co-founded by the French Merieux Family Foundation and CAMS/PUMC in 2005. In October 2021, CML researchers developed their own synthetic SARS-CoV-2 virus in the lab to inform treatment options.
- 10. Indeed, China has made considerable progress in virological research. It is emerging as a "virology leader" with world-class scientific capabilities to prepare for the next global pandemic.