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U.S. China Dialogue on the Challenges of Emerging Infections, Laboratory Safety and Global Health Security

[October or November 2019]

Kunming Institute of Medical Sciences, Chinese Academy of Medical Sciences

Kunming, China

To address the interconnected life science challenges associated with infectious diseases and further enhance cooperation between China and the United States in the areas of global health, biosafety, and biosecurity, the U.S. National Academy of Sciences (NAS), and the Chinese Academy of Medical Sciences (CAMS) in partnership with representatives from other Chinese institutions are organizing a U.S.-China dialogue meeting on the Challenges of Emerging Infections, Laboratory Safety and Global Health Security to be held at the Kunming Institute of Medical Sciences, in Kunming, China (in October or November) 2019.

The NAS and CAMS organizations recognize the benefits of dialogue to increase understanding, improving scientific and technical cooperation in areas of mutual interest to China and the United States and to build bridges between Chinese and American scientists. At the meeting, experts will share both scientific research to address public health threats of common interest and lessons learned to ensure the safe and secure operation of high containment biological laboratories. A special focus will be on rapid vaccine development and on non-human primate research in biocontainment.

The most recent dialogue meeting, held in Harbin, China had a special focus on the use of geneediting technology in pathogen research and participants discussed ways to create norms and reduce risks when using these new tools for research. Topics that may be covered at the Kunming meeting include: medical countermeasure development, especially advanced development of vaccines, therapeutics and diagnostics; development and use of animal models of high-consequence diseases in biocontainment; host-pathogen interactions; the special challenges on the conduct of regulated studies (i.e. GLP for FDA review) in biocontainment; response to disease outbreaks; risk assessment of gene editing and other advanced biotechnology in pathogen research; institutional oversight of biosafety and biosecurity training and facilities operations; and vector borne disease research.

This dialogue has led to new collaborations and relationships between Chinese and American scientists as well as American and Chinese institutions. Following a dialogue meeting held in the U.S. in January 2018, the directors of the Galveston National Laboratory and the Wuhan Institute of Virology (of the Chinese Academy of Sciences) signed a formal Memorandum of Understanding (MOU) to streamline future collaboration between their laboratories. In October 2018, the directors of the laboratories jointly published an editorial in [HYPERLINK

¹ The Kunming Institute of Medical Sciences, National High-level Biosafety Research Center, CAMS, operates the newest of China's biocontainment laboratories. Its National Medical Primate Research Centre was established in 2005 and is the first institute in both the Chinese Academy of Sciences and Yunnan province to gain AAALAC certification.

http://www.imbcams.ac.cn/Category_2143/Index.aspx



² During the most recent dialogue meeting in Harbin the director of China's Centers for Disease Control and the leadership of the Chinese institutes that operate China's three BSL-4 labs indicated that they support the idea and will work with NAS to develop and create a network. The groups have started planning an international meeting to take place soon.