Kansas Senate Committee on Federal and State Affairs

Hearing on SB 234, "Prohibiting the use of foreign adversary genetic sequencers and software"

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Proponent

Issue: The Chinese Communist Party (CCP) is collecting the genetic information of Americans in order to develop bio-weapons that hurt Americans but spare Chinese people.

Background

- Over two decades researching the CCP's military, I have learned about its interest in biowarfare, which dates back to the Korean War, when Chinese propagandists falsely accused the United States of using bio-weapons on the battlefield.¹
- More recently, in 2015 a Chinese colonel and professor at one of China's command colleges wrote a book accusing the United States of developing a genetically-modified bedbug as a bio-weapon.² And in 2016, a Chinese general and the head of the China's National Defense University published a book stating:

In the development of biotechnology today, the most lethal weapons are genetically engineered weapons, designed to attack people based on their specific ethnic or racial background, causing specific races to become ill, such as suffering immune deficiency, loss of intelligence, sterilization, or even death, while leaving other races unscathed.³

 Accordingly, senior Chinese military officers write of the need to establish "biological dominance" and "biological deterrence," meaning that they must demonstrate the ability to weaponize new genetic manipulation techniques such as CRISPR such that all other countries will fear China.⁴

Threat

• To achieve such biological dominance, the CCP has sponsored the rise of a company called Beijing Genomics Institute (BGI), which makes genetic sequencing machines and performs sequencing services.

¹ https://www.wilsoncenter.org/publication/chinas-false-allegations-the-use-biological-weapons-the-united-states-during-the-korean

² Du Chao, China's Future Warfare and Environmental Security (Shenyang: White Mountain Press, 2015).

³ Zhang Shibo, *The New High Ground of War* (Beijing: PLA National Defense University Press, 2016).

⁴ https://www.defenseone.com/ideas/2019/08/chinas-military-pursuing-biotech/159167/; and Zeng Huafeng and Shi Haiming, *Brain Power: The Law of War and National Security Strategy in the Age of Global Media* (Beijing: PLA Press, 2014).

- BGI is known to have been working with the PLA to study the genomes of fetuses and newborns since 2010,⁵ and, more recently, on projects designed to enhance soldiers.⁶
- The CCP subsidizes BGI,⁷ which enables it to underprice foreign competitors. CCP funds also allow BGI to buy up foreign competitors, so the company has many subsidiaries and affiliates e.g., MGI, Complete Genomics, Innomics, and STOmics in the United States.⁸
- American hospitals use sequencers from these companies and contract with them for sequencing services, meaning that Americans' genetic data goes to China and specifically, to servers owned by Huawei, ⁹ the Chinese military-linked telecom company that the Trump Administration banned from operating in the United States.

Solution

- The federal government has put BGI and several of its affiliates or subsidiaries on federal no-go lists, such as the Commerce Department's entity list and the Defense Department's 1260H list of Chinese military companies.¹⁰
 - o But these designations do not prevent American state and local governments from paying for BGI machines and services.
 - Meanwhile, different versions of legislation to fully ban BGI from the United States have passed each chamber of the US Congress but stalled prior to being enacted last year.¹¹
- States such as Kansas can therefore act to protect their residents by banning the use of hostile foreign adversary genetic sequencers and software.

⁵ https://www.reuters.com/article/world/exclusive-china-gene-firm-providing-worldwide-covid-tests-worked-with-chinese-m-idUSKBN29Z0H9/; https://www.reuters.com/investigates/special-report/health-china-bgi-dna/; https://www.reuters.com/world/china/bgi-prenatal-gene-test-under-scrutiny-chinese-military-links-2021-09-06/

⁶ https://www.reuters.com/world/exclusive-monkey-brain-study-with-link-chinas-military-roils-top-european-2021-11-18/

⁷ https://cset.georgetown.edu/publication/china-biotechnology-and-bgi/

⁸ Ibid; https://selectcommitteeontheccp.house.gov/media/press-releases/gallagher-krishnamoorthi-expose-hidden-bgi-subsidiary-innomics-operating-us

 $^{^{9}}$ https://www.reuters.com/article/world/exclusive-china-gene-firm-providing-worldwide-covid-tests-worked-with-chinese-m-idUSKBN29Z0H9/

¹⁰ https://www.nbcnews.com/politics/national-security/congress-wants-ban-china-genomics-firm-bgi-from-us-rcna135698

¹¹ https://www.hoganlovells.com/en/publications/biosecure-stalls-will-not-become-law-in-2024