Congress of the United States

Washington, DC 20510

September 28, 2021

The Honorable Janet Yellen Secretary Department of the Treasury 1500 Pennsylvania Ave. NW Washington, D.C. 20220

The Honorable Gina M. Raimondo Secretary Department of Commerce 1401 Constitution Avenue, N.W. Washington, D.C. 20230

The Honorable Lloyd J. Austin Secretary Department of Defense 1000 Defense Pentagon Washington, D.C. 22202

Dear Secretaries Yellen, Raimondo, and Austin,

I write to you today regarding China's use of biotechnology companies including the Beijing Genomics Institute (BGI) as part of the Chinese Communist Party's (CCP) strategy of "Military-Civil Fusion" (MCF). I urge you to add BGI and other Chinese biotechnology companies to the Department of the Treasury's Non-SDN Chinese Military Industrial Complex Companies List (NS-CMIC List), the Department of Commerce's Entity List, and the Department of Defense's list of Chinese military companies required by Section 1260H of the Fiscal Year 2021 National Defense Authorization Act.

BGI and other Chinese biotech companies meet the grounds for inclusion on the NS-CMIC List, the Entity List, and the Section 1260H list. BGI operates in the defense and related materiel sector of the Chinese economy, it is involved in activities contrary to the national security and foreign policy interests of the United States, and it is a clear military-civil fusion contributor to China's defense industrial base.

The CCP's ambition to dominate biotechnology is well known. The Chinese government designated biotech as a "strategic emerging industry" and has prioritized state support for the industry through Made in China 2025 and other state-directed MCF plans. BGI plays a key role in these biotech aspirations. Thanks to at least \$1.5 billion in Chinese state subsidies, BGI has grown to become China's biotech "national champion" and now manages China's national gene

^{1 &}quot;China's Collection of Genomic and Other Healthcare Data from America: Risks to Privacy and U.S. Economic and National Security." Fact Sheet, The National Counterintelligence and Security Center, February 2021.
https://www.dni.gov/files/NCSC/documents/SafeguardingOurFuture/NCSC China Genomics Fact Sheet 2021.pdf.

database.² BGI has also purchased American firms and used state subsidies to undercut the global DNA sequencing market.^{3,4}

BGI has used its dominant position to further the CCP's strategic goals by acquiring sensitive health data from the rest of the world. BGI and at least 14 other Chinese companies perform genomic sequencing for U.S. healthcare patients.⁵ As mandated by Chinese law, these companies have almost certainly shared this data with the Chinese government.

BGI also attempted to take advantage of the pandemic to acquire U.S. data, reaching out to the governors of six states with offers to build advanced COVID-19 testing labs before top U.S. intelligence officials convinced states to reject BGI's offers.⁶ Most recently, reports revealed that BGI was selling prenatal tests to pregnant women around the world and using the tests to collect vast swathes of genetic data on different populations.⁷

The Party's focus on biotech also extends to biotech's potential military applications. The former head of the People's Liberation Army (PLA) National Defense University identified biology as one of seven "new domains of warfare," including the possibility of "specific ethnic genetic attacks," in a 2017 publication.⁸

BGI has a history of collaboration with the PLA and serving the PLA's interests. A review of 40 publicly-available research papers demonstrates BGI's work on PLA priorities, such as improved high-altitude soldier performance, neuroscience, and pathogens. BGI's worldwide prenatal test was itself developed in collaboration with the PLA. BGI has also partnered with the PLA's National University of Defense Technology (NUDT) to advance bioinformatics research and leverage supercomputers for biological research. Joint BGI-PLA research could have an application in future bioweapons—which is especially concerning because BGI's national gene bank is presumably made available for military research.

² Kania, Elsa B. and Vorndick, Wilson, "Weaponizing Biotech: How China's Military Is Preparing for a 'New Domain of Warfare'." *Defense One*, August 14, 2021, https://www.defenseone.com/ideas/2019/08/chinas-military-pursuing-biotech/159167/.

Needham, Kirsty, "Chinese state fund invests in gene firm BGI." Reuters, February 21, 2021, https://www.reuters.com/article/us-china-genomics-state/chinese-state-fund-invests-in-gene-firm-bgi-idUSKBN2AM0AT.

⁴ Pollack, Andrew, "U.S. Clears DNA Firm's Acquisition by Chinese." The New York Times, December 30, 2012, https://www.nytimes.com/2012/12/31/health/chinese-firm-is-cleared-to-buy-american-dna-sequencing-company.html.

Gryphon Scientific, LLC and Rhodium Group, LLC, China's Biotechnology Development: The Role of US and Other Foreign Engagement. Report, U.S.-China Economic and Security Review Commission, pg. 124, February 14, 2019, https://www.uscc.gov/research/chinas-biotechnology-development-role-us-and-other-foreign-engagement.

Wertheim, Jon, "China's push to control Americans' health care future." CBS News, January 31, 2021, https://www.cbsnews.com/news/biodata-dna-china-collection-60-minutes-2021-01-31/.

Needham, Kirsty and Baldwin, Clare, "China's gene giant harvests data from millions of women." Reuters, July 7, 2021, https://www.reuters.com/investigates/special-report/health-china-bgi-dna/.

⁸ Kania, Elsa B. and Vorndick, Wilson, "Weaponizing Biotech: How China's Military Is Preparing for a New Domain of Warfare'." *Defense One*, August 14, 2021, https://www.defenseone.com/ideas/2019/08/chinas-military-pursuing-biotech/159167/.

⁹ Needham, Kirsty. (2021, January 30). Exclusive: China gene firm providing worldwide COVID tests worked with Chinese military. Reuters. https://www.reuters.com/article/us-china-genomics-military-exclusive/exclusive-china-gene-firm-providing-worldwide-covid-tests-worked-with-chinese-military-idUSKBN297.0HA.

Needham, Kirsty and Baldwin, Clare, "China's gene giant harvests data from millions of women." Reuters, July 7, 2021, https://www.reuters.com/investigates/special-report/health-china-bgi-dna/.

Kania, Elsa B., "BGI is a company that might be characterized as a national champion..." Thread, Twitter, February 9, 2021, https://twitter.com/EBKania/status/1359172905335160842?s=20.

Given BGI's and other Chinese biotechnology companies' support for and collaboration with the PLA, I urge you to include BGI and other Chinese biotech companies on the NS-CMIC List, the Entity List, and the Section 1260H Chinese military companies list. The United States must not turn a blind eye to the threat posed by Chinese biotechnology companies operating at the CCP's behest. Blacklisting BGI and its fellow biotech companies will help the United States government counter the Chinese Communist Party's efforts to capture Americans' most private information—their DNA.

Thank you for considering this important national security.

Sincerely,

Tom Cotton

United States Senator

Mike Gallagher

Member of Congress