

Key Takeaways for “China, Biotechnology, and BGI”

The United States and its allies must be positioned to harness developments in biotechnology to address many major challenges of the 21st century. The nation that dominates the genomics space will control next-generation medical technologies, research standards and norms, and future genomics applications. However, the United States’ ability to leverage biotechnology to reflect our values and prevent misuse is threatened by China’s efforts to dominate this key sector. This paper uses BGI Group as a case study for China’s goals in biotechnology. It finds:

- **China’s economic system undermines global norms of science** by leveraging researchers and academic and commercial entities to further state goals.
- **BGI Group is Beijing’s vanguard** in advancing its industrial policy for biotechnology. Using a playbook it honed with Huawei and the race for 5G, the CCP supports BGI Group as a national champion to dominate the global genomics industry.
- **BGI Group exemplifies China’s hybrid economic model** that blurs private and public as well as civilian and military realms to meet the goals of the state. A majority of shareholders of BGI Genomics and MGI Tech have ties to the CCP, and multiple Chinese Government Guidance Funds directly fund both entities. The companies maintain complex networks of global subsidiaries and have overlapping leadership, obfuscating their connections to each other and to Beijing.

Recommendations:

- **Secure U.S. Genomics Data.** Protect U.S. citizens’ genomic data so that it cannot be exploited by foreign entities, without stifling innovation.
- **Foster U.S. and allied countries’ biotech companies** so they can compete with entities that are state-supported.
- **Reconfigure anti-monopoly laws** to reflect the nature of global competition.
- **Treat the Research Base as Critical Infrastructure.** The U.S. should not be dependent on China for current or future medicine or tools of discovery.
- **Support translating R&D into useful applications.** The U.S. government can harness the acquisition process to support precision medicine and other applications.

For more information:

- Download the report:
<https://cset.georgetown.edu/publication/china-biotechnology-and-bgi/>
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