# U.S. advances biotechnology in national security strategy



On December 18, 2024, the National Security Commission on Emerging Biotechnology announced significant advancements in the intersection of biotechnology and national security, following the inclusion of their recommendations in the fiscal year 2025 National Defense Authorization Act. This legislation aims to enhance the operational capabilities of the U.S. Department of Defense (DOD) and the intelligence community (IC) by leveraging the potential benefits of biotechnology.

The new provisions in the act are designed to address several critical areas. Firstly, it mandates the DOD to create and publish an annual biotechnology roadmap. This roadmap will assess barriers to the adoption of biotechnology within the defence apparatus, identify the workforce needs related to these technologies, and explore opportunities for international collaboration. This approach underscores a strategic initiative to align military readiness with the rapid advancements in biotechnology.

In a progressive move, the DOD is also required to establish a public-private “sandbox.” This initiative will enable both the DOD and industry stakeholders to securely develop and test use cases related to the convergence of artificial intelligence and biotechnology, referred to as AIxBio. The creation of this sandbox is anticipated to stimulate innovation by facilitating cooperative development and experimentation in a controlled environment.

Furthermore, the intelligence community is tasked with conducting a thorough and rapid assessment of biotechnology developments in the People’s Republic of China. This assessment is aimed at understanding the country’s actions to secure superiority in the biotechnology sector, indicating a keen interest from the U.S. government in monitoring global competition and potential threats in scientific and technological advancements.

Another pivotal requirement set forth for the IC is the development of an intelligence strategy specifically focused on identifying and assessing threats associated with biotechnology. This strategy will emphasise vulnerabilities within the supply chain, highlighting the national security implications of bioengineering and its associated technologies.

The National Security Commission has collaborated closely with Congress to formulate these proposals, which are seen as foundational steps towards further recommendations expected to emerge in early 2025. The initiatives represent a proactive approach to integrating advanced technologies into national defence strategies, reflecting the increasingly critical role that biotechnology plays in modern security considerations.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.lawbc.com/fy-2025-ndaa-includes-biotechnology-provisions/> - Corroborates the inclusion of biotechnology provisions in the FY 2025 NDAA and the specific requirements such as the annual biotechnology roadmap, public-private 'sandbox' for AIxBio, and IC assessments.
2. <https://www.klgates.com/Key-Provisions-on-Artificial-Intelligence-in-Fiscal-Year-2025-NDAA-1-2-2025> - Supports the use of AI in biotechnology applications, the establishment of pilot programs for AI and biotechnology, and the cooperation between DOD and industry.
3. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Confirms the National Security Commission's role in developing the biotechnology provisions, the annual biotechnology roadmap, the public-private 'sandbox,' and the IC's assessments on China and biotechnology threats.
4. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Provides details on the Commission's collaboration with Congress and the expected further recommendations in early 2025.
5. <https://www.lawbc.com/fy-2025-ndaa-includes-biotechnology-provisions/> - Details the IC's task to conduct a rapid assessment of biotechnology in China and to develop an intelligence strategy for biotechnology threats, especially supply chain vulnerabilities.
6. <https://www.klgates.com/Key-Provisions-on-Artificial-Intelligence-in-Fiscal-Year-2025-NDAA-1-2-2025> - Explains the pilot programs for evaluating AI in security-related biotechnology applications and optimizing workflow at DOD facilities.
7. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Quotes from NSCEB members highlighting the importance of biotechnology for national security and the economy.
8. <https://www.lawbc.com/fy-2025-ndaa-includes-biotechnology-provisions/> - Mentions the Commission's work with Congress to develop these proposals and the anticipation of further recommendations in early 2025.
9. <https://www.klgates.com/Key-Provisions-on-Artificial-Intelligence-in-Fiscal-Year-2025-NDAA-1-2-2025> - Discusses the use of AI to support cybersecurity, operations, and workflow within the DOD.
10. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Outlines the Commission's purpose and composition, including its role in advancing biotechnology for U.S. national security.
11. <https://info.winvale.com/blog/key-highlights-fy2025-national-defense-authorization-act-ndaa> - Provides an overview of the FY 2025 NDAA, including the focus on AI and biotechnology, and the establishment of pilot programs.
12. <https://natlawreview.com/article/fy-2025-ndaa-includes-biotechnology-provisions> - Please view link - unable to able to access data