# US Department of Defense to enhance biotechnology capabilities



On 18 December 2024, the National Security Commission on Emerging Biotechnology announced significant developments concerning the integration of biotechnology within the U.S. Department of Defense (DOD) as part of the fiscal year 2025 National Defense Authorization Act. The Act reflects recommendations put forth by the Commission in May 2024, aimed at enhancing the capacity of the DOD and the intelligence community (IC) to effectively leverage biotechnology for national defence strategies.

The provisions included in the bill mandate the DOD to create and publish an annual biotechnology roadmap. This roadmap is expected to provide critical insights into the barriers that hinder the adoption of biotechnology, identify workforce needs within the DOD, and explore opportunities for collaboration on a global scale. The emphasis on a structured approach seeks to ensure that the DOD remains at the forefront of emerging biotechnological advancements.

In a further push to harness innovations, the bill establishes a public-private "sandbox." This initiative will serve as a collaborative platform where DOD and industry stakeholders can securely develop use cases that merge the functionalities of artificial intelligence (AI) and biotechnology, a convergence often referred to as AIxBio. The intent behind this sandbox concept is to foster innovation in a controlled environment that balances security with creative exploration.

Another notable provision tasks the IC with conducting a rapid assessment of biotechnological advancements and initiatives underway in the People’s Republic of China. This assessment aims to evaluate China's efforts to gain a competitive edge in biotechnology. Alongside this, the IC will also formulate an intelligence strategy aimed at identifying and assessing threats posed by biotechnology, especially in relation to the vulnerabilities within supply chains.

The Commission has indicated that collaboration with Congress was essential in shaping these proposals, which position the DOD and IC to strategically navigate the future landscape of biotechnology and its implications for national security. Further recommendations from the Commission are anticipated in early 2025, signalling a continued effort to fortify the U.S. government's approach to biotechnology as an integral facet of national defence.

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

## Bibliography

1. <https://www.lawbc.com/fy-2025-ndaa-includes-biotechnology-provisions/> - Corroborates the announcement by the National Security Commission on Emerging Biotechnology and the inclusion of biotechnology provisions in the FY 2025 NDAA, including the creation of an annual biotechnology roadmap and the public-private 'sandbox' for AIxBio.
2. <https://www.klgates.com/Key-Provisions-on-Artificial-Intelligence-in-Fiscal-Year-2025-NDAA-1-2-2025> - Supports the establishment of pilot programs for evaluating AI in security-related biotechnology applications and optimizing workflow at DOD facilities, as well as the use of AI in various DOD functions.
3. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Confirms the Commission's announcement on December 18, 2024, and details the provisions including the annual biotechnology roadmap, the public-private 'sandbox,' and the IC's assessment of biotechnology in China.
4. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Provides additional context on the Commission's role and the bipartisan efforts to prioritize biotechnology for national security.
5. <https://www.lawbc.com/fy-2025-ndaa-includes-biotechnology-provisions/> - Details the IC's tasks, including the rapid assessment of biotechnology in China and the development of an intelligence strategy to identify biotechnology threats, especially supply chain vulnerabilities.
6. <https://www.klgates.com/Key-Provisions-on-Artificial-Intelligence-in-Fiscal-Year-2025-NDAA-1-2-2025> - Supports the integration of AI in cybersecurity, operations, and workflow within the DOD, aligning with the broader goals of the biotechnology provisions.
7. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Highlights the importance of international collaboration and workforce needs as part of the annual biotechnology roadmap.
8. <https://info.winvale.com/blog/key-highlights-fy2025-national-defense-authorization-act-ndaa> - Corroborates the establishment of pilot programs for AI in biotechnology and the overall focus on AI and cybersecurity within the FY 2025 NDAA.
9. <https://www.lawbc.com/fy-2025-ndaa-includes-biotechnology-provisions/> - Mentions the Commission's collaboration with Congress and the anticipation of further recommendations in early 2025.
10. <https://www.biotech.senate.gov/press-releases/national-security-commission-on-emerging-biotechnology-announces-fy25-ndaa-biotechnology-provisions/> - Provides quotes from key figures like NSCEB Chair Senator Todd Young and NSCEB Vice Chair Michelle Rozo, emphasizing the importance of biotechnology for national security.
11. <https://info.winvale.com/blog/key-highlights-fy2025-national-defense-authorization-act-ndaa> - Details the broader context of the FY 2025 NDAA, including funding and other key provisions that support the integration of biotechnology and AI.
12. <https://www.jdsupra.com/legalnews/fy-2025-ndaa-includes-biotechnology-8091175/> - Please view link - unable to able to access data