

119TH CONGRESS
1ST SESSION

H. R. 5186

To authorize the Secretary of Defense to carry out a program to support the defense biotechnology supply chain, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 8, 2025

Mr. KHANNA (for himself, Mr. GARAMENDI, and Mr. DAVIS of North Carolina) introduced the following bill; which was referred to the Committee on Armed Services

A BILL

To authorize the Secretary of Defense to carry out a program to support the defense biotechnology supply chain, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. BIOTECHNOLOGY SUPPLY CHAIN RESILIENCY**
4 **PROGRAM.**

5 (a) AUTHORIZATION.—

6 (1) IN GENERAL.—The Secretary of Defense, in
7 coordination with the Secretaries of the military de-
8 partments and the heads of relevant Defense Agen-
9 cies, may establish and implement a program (re-

ferred to in this section as the “Program”) to develop, scale, and transition biotechnology research from the military service laboratories, including biotechnology-based chemicals, materials, fuels, and other products relevant to the mission of the Department of Defense that support the resilience, sustainability, and responsiveness of the defense supply chain.

(2) ACTIVITIES.—Under the Program, the Secretary of Defense may carry out the following activities:

(A) Conduct an assessment of supply chain vulnerabilities in the Department of Defense.

(B) Direct the military service laboratories to establish mechanisms to collaboratively—

(i) conduct applied research, including experimentation, advanced technological development, advanced component development, and rapid prototyping in bioindustrials, biomanufacturing, and related disciplines to support defense missions;

(ii) develop, prototype, test, and transition biologically derived materials and

1 products to reduce reliance on foreign sup-
2 ply chains and vulnerable supply chains;

3 (iii) upgrade, expand, or construct
4 physical and digital infrastructure, includ-
5 ing laboratory facilities, of the Department
6 and its partners to support bioindustrial
7 research, development, testing, proto-
8 typing, and production;

9 (iv) as needed, enter into contracts,
10 cooperative agreements, grants, or other
11 transactions with relevant Federal entities
12 and non-Federal entities such as commer-
13 cial entities, research institutions, and aca-
14 demic organizations to execute the activi-
15 ties under this paragraph; and

16 (v) support education, training, and
17 workforce development initiatives to build
18 and sustain a skilled bioindustrial and bio-
19 manufacturing workforce.

20 (C) Collaborate across the military depart-
21 ments, Defense Agencies, and other Federal en-
22 tities to ensure alignment with national bio-
23 industrial and supply chain strategies.

1 (D) Promote the development and utiliza-
2 tion of next-generation feedstocks and processes
3 in ways that support local economic growth.

4 (E) Modernize infrastructure through in-
5 vestment in facilities that enable rapid proto-
6 typing and advanced materials testing.

7 (F) Establish performance metrics and
8 benchmarks to measure progress toward oper-
9 ational integration and transition to programs
10 of record.

11 (3) OTHER CONSIDERATIONS.—In the event the
12 Secretary carries out the Program, the Secretary of
13 Defense shall—

14 (A) prioritize technologies and capabilities
15 that address critical defense supply chain
16 vulnerabilities and enhance military readiness,
17 including technologies and capabilities necessary
18 to—

19 (i) reduce logistics through field-en-
20 abled manufacturing of materials such as
21 construction-grade bio-cement and
22 deployable infrastructure components;

23 (ii) enhance performance through de-
24 velopment of novel materials including pro-

1 tective coatings and biologically derived
2 composites; or

3 (iii) improve cost efficiency of manu-
4 facturing and reduce dependency on for-
5 eign supply chains;

6 (B) consult with representatives of indus-
7 try, academia, and other Federal agencies with
8 relevant expertise, to accelerate development
9 and transitions; and

10 (C) ensure the Program supports the de-
11 velopment and fielding of emerging technologies
12 such as biotechnologies that provide operational
13 and strategic advantages to the Armed Forces,
14 including through—

15 (i) cross-service and public-private
16 partnerships; and

17 (ii) applied research, pilot-scale pro-
18 duction, and technology transition efforts
19 focused on biomanufacturing and materials
20 innovation.

21 (b) PLAN AND REPORTS.—

22 (1) INITIAL PLAN.—Not later than 90 days
23 after electing to commence the Program, the Sec-
24 retary of Defense shall submit to the Committees on
25 Armed Services of the Senate and the House of Rep-

1 representatives a plan for the allocation of appropria-
2 tions to fund the Program.

3 (2) ANNUAL REPORTS.—Not later than one
4 year after commencing the Program, and annually
5 thereafter until the Program terminates under sub-
6 section (c), the Secretary of Defense shall submit to
7 the Committees on Armed Services of the Senate
8 and the House of Representatives a report detailing
9 all activities carried out under the program. Each
10 report shall include, to the extent applicable, the fol-
11 lowing:

12 (A) A summary of key research, develop-
13 ment, and prototyping efforts initiated or con-
14 tinued during the year covered by the report,
15 including technical objectives, anticipated de-
16 fense applications, and funding.

17 (B) A list of significant partnerships or
18 agreements executed with industry, academic
19 institutions, and other Federal agencies, includ-
20 ing the purpose, national security nexus, and
21 funding level of each such partnership or agree-
22 ment.

23 (C) An assessment of infrastructure en-
24 hancements undertaken to support bioindustrial

1 development and scale-up, including facility
2 modernization and equipment acquisition.

3 (D) An evaluation of program performance
4 against established milestones or metrics, in-
5 cluding progress toward the transition of tech-
6 nologies to operational use or acquisition pro-
7 grams.

8 (E) An identification of major technical,
9 logistical, or policy challenges encountered, and
10 actions taken to mitigate such challenges.

11 (F) Any recommendations for additional
12 authorities, funding mechanisms, or interagency
13 coordination necessary to enhance the effective-
14 ness of the Program.

15 (3) FORM.—Each report under this subsection
16 shall be submitted in unclassified form but may con-
17 tain a classified annex.

18 (c) SUNSET.—

19 (1) IN GENERAL.—Except as provided in para-
20 graph (2), the authority to carry out the Program
21 shall terminate on the date that is 10 years after the
22 date of the enactment of this Act.

23 (2) EXTENSION.—The Program may be contin-
24 ued after the termination date specified in para-
25 graph (1) if, before such date, the President—

1 (A) determines that continuation of the
2 Program is necessary to meet national economic
3 or national security needs; and

4 (B) submits notice of such determination
5 to the Committees on Armed Services of the
6 Senate and the House of Representatives.

○