

118TH CONGRESS
2D SESSION

H. R. 9627

To direct the Secretary of Defense to develop a biotechnology roadmap to guide the efforts of the Department of Defense relating to biotechnology, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 17, 2024

Mr. KHANNA introduced the following bill; which was referred to the Committee on Armed Services

A BILL

To direct the Secretary of Defense to develop a biotechnology roadmap to guide the efforts of the Department of Defense relating to biotechnology, 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. SHORT TITLE.

4 This Act may be cited as the “Biotech Futures Act”.

5 SEC. 2. BIOTECHNOLOGY ROADMAP.

6 (a) ROADMAP REQUIRED.—The Secretary of Defense
7 shall develop a biotechnology roadmap to guide the efforts
8 of the Department of Defense relating to biotechnology.

1 (b) ELEMENTS.—In the roadmap required by sub-
2 section (a), the Secretary of Defense shall—

3 (1) clearly articulate the strategic objectives of
4 the Department of Defense relating to bio-
5 technology;

6 (2) for each strategic objective, establish spe-
7 cific goals and milestones for the achievement of
8 such objective, including timelines for meeting such
9 goals and milestones;

10 (3) in the case of each updated version of the
11 roadmap following submittal of the initial roadmap
12 under subsection (d)(1), include—

13 (A) a review of the goals and milestones
14 established under paragraph (2) to ensure such
15 goals and milestones continue to align with
16 strategic objectives under paragraph (1); and

17 (B) a description of any goals and mile-
18 stones that changed as a result of such review;

19 (4) separately identify each biotechnology effort
20 covered by the strategy, including any programs,
21 projects, or other activities associated with such ef-
22 fort within the Office of the Secretary of Defense,
23 the Armed Forces, and other organizations of the
24 Department, and for each such effort provide—

25 (A) a description of the effort;

- 1 (B) an estimate of the funding dedicated
2 to the effort;
- 3 (C) a timeline for carrying out the effort;
- 4 and
- 5 (D) an explanation of how the effort aligns
6 with the strategic objectives under paragraph
7 (1);
- 8 (5) identify and describe the role of each organa-
9 ization of the Department with responsibilities re-
10 lating to biotechnology under the strategy;
- 11 (6) establish metrics to measure the progress of
12 the Department in meeting the objectives, goals, and
13 milestones under the strategy;
- 14 (7) based on such metrics, assess the progress
15 of the Department in meeting such objectives, goals,
16 and milestones;
- 17 (8) based on the results of such assessment,
18 make any necessary adjustments to the planning
19 and execution of the roadmap to ensure the Depart-
20 ment makes continuous progress toward achieving
21 the objectives under paragraph (1);
- 22 (9) assess the overall risk to the security of the
23 United States of the biotechnology efforts covered by
24 the strategy;

1 (10) analyze any requirements of the Federal
2 Government that hinder the ability of the Depart-
3 ment to advance and use biotechnology;

4 (11) provide for the development and support of
5 the biotechnology workforce of the Department, in-
6 cluding personnel with responsibilities relating di-
7 rectly to biotechnology and personnel who indirectly
8 support the biotechnology efforts of the Department
9 such as personnel involved program management,
10 acquisition, investment, and legal matters;

11 (12) with respect to the biotechnology workforce
12 described in paragraph (11)—

13 (A) identify the total number of bio-
14 technology positions required to support the ob-
15 jectives of the roadmap—

16 (i) as of the date of the road map;
17 and

18 (ii) over the periods of five and 10
19 years following such date;

20 (B) indicate the number of such positions
21 that have been filled as of the date of the road-
22 map;

23 (C) describe the positions included in the
24 biotechnology workforce, including a description
25 of—

- 1 (i) the role of each position in sup-
2 porting the objectives under paragraph (1);
3 and
4 (ii) the qualifications required for
5 each position, including any qualifications
6 relating to seniority level, education, train-
7 ing, and security clearances;
- 8 (D) identify any challenges affecting the
9 ability of the Department to develop the bio-
10 technology workforce and propose solutions to
11 those challenges;
- 12 (E) assess whether the codes used to de-
13 fine positions and roles within the workforce of
14 the Department adequately cover the range of
15 positions and personnel that comprise the bio-
16 technology workforce, such as personnel in re-
17 search, engineering, and testing;
- 18 (F) identify mechanisms to enable the De-
19 partment to access outside expertise relating to
20 biotechnology, including mechanisms to assem-
21 ble a pool of outside experts who have been
22 prequalified (including by obtaining any nec-
23 essary security clearances) to provide advice
24 and assistance to the Department on matters

1 relating to biotechnology on an as-needed basis;

2 and

3 (G) assess whether personnel occupying ex-
4 isting positions in the Department could be
5 used to meet biotechnology workforce needs
6 with additional training and, if so, the nature
7 and scope of the training required; and

8 (13) address collaboration between the Depart-
9 ment and international partners to advance research
10 on biotechnology, which shall include—

11 (A) a description of any international part-
12 nerships under which the United States is col-
13 laborating with partners to conduct bio-
14 technology research and development for de-
15 fense purposes;

16 (B) a description of any new international
17 partnerships that may be entered into, or exist-
18 ing partnerships that may be modified, to pro-
19 vide for such collaboration; and

20 (C) identification of any challenges affect-
21 ing the ability of the Department engage in
22 such collaboration with international partners,
23 including—

24 (i) any limitations on co-investments
25 within international partnerships;

1 (ii) any United States export controls
2 or other technology protections that hinder
3 information sharing within such partner-
4 ships; and

5 (iii) any other challenges that may
6 prevent the full utilization of such partner-
7 ships for such collaboration.

8 (c) CONSULTATION.—In preparing the roadmap re-
9 quired under subsection (a), the Secretary of Defense shall
10 consult with—

11 (1) the Under Secretary of Defense for Re-
12 search and Engineering;

13 (2) the Under Secretary of Defense for Acquisi-
14 tion and Sustainment;

15 (3) the Secretaries of the military departments;
16 and

17 (4) such other officials of the Department of
18 Defense as the Secretary determines appropriate.

19 (d) SUBMITTAL TO CONGRESS; UPDATES.—

20 (1) INITIAL SUBMISSION.—Not later than one
21 year after the date of the enactment of this Act, the
22 Secretary of Defense shall submit to the congres-
23 sional defense committees the roadmap developed
24 under subsection (a).

1 (2) ANNUAL UPDATES.—Not less frequently
2 than once every two years following the submittal of
3 the initial roadmap under paragraph (1), the Sec-
4 retary shall—

5 (A) review and update the roadmap; and
6 (B) submit an updated version of the road-
7 map to the congressional defense committees.

8 (3) FORM.—Each version of the roadmap re-
9 quired to be submitted under this subsection may be
10 submitted in classified form, but if so submitted,
11 shall include an unclassified executive summary.

12 (e) PUBLIC AVAILABILITY.—On annual basis, the
13 Secretary shall make an unclassified version of the most
14 recent roadmap submitted under subsection (d) available
15 on a publicly accessible website of the Department of De-
16 fense.

17 (f) BIOTECHNOLOGY DEFINED.—In this section, the
18 term “biotechnology” means the application of science and
19 technology to living organisms and to parts, products and
20 models of such organisms to alter living or non-living ma-
21 terials for the production of knowledge, goods, or services.

