

A BILL

To establish biotechnology workforce training programs for certain Federal employees, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “National Security Biotechnology Workforce Act”.

SEC. 2. DEFINITIONS.

In this Act:

(1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term “appropriate congressional committees” means—

(A) the Committee on Homeland Security and Governmental Affairs of the Senate; and

(B) the Committee on Oversight and Reform of the House of Representatives.

(2) APPROPRIATE FEDERAL AGENCY.—The term “appropriate Federal agency” means—

(A) the Department of Agriculture;

(B) the Department of Commerce;

(C) the Department of Defense;

(D) the Department of Energy;

(E) the Department of Health and Human Services;

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(F) the Department of Homeland Security;

(G) the Department of the Interior;

(H) the Department of State;

(I) the Department of the Treasury;

(J) the Environmental Protection Agency;

(K) the National Aeronautics and Space Administration;

(L) the National Science Foundation;

(M) the Office of the Director of National Intelligence;

(N) the Office of the United States Trade
Representative; or

(O) such other Federal departments and agencies as the
Director of the Office of Personnel Management considers
appropriate.

(3) ARTIFICIAL INTELLIGENCE.—The term “artificial
intelligence” has the meaning given the term in section 5002 of
the National Artificial Intelligence Initiative Act of 2020 (15
U.S.C. 9401).

(4) BIOTECHNOLOGY POSITION.—The term
“biotechnology position” means a position in an appropriate
Federal agency for which the primary duties are—

(A) directly related to biotechnology or carrying out the
activities of such appropriate Federal agency with respect to
biotechnology; or

(B) supporting the positions at such appropriate Federal
agency for which the primary duties are described in
subparagraph (A).

(5) BIOTECHNOLOGY WORKFORCE.—The term “biotechnology workforce” means the individuals holding biotechnology positions.

(6) COVERED ARMED FORCE.—The term “covered Armed Force” means the Army, Navy, Marine Corps, Air Force, or Space Force.

(1) COVERED EMPLOYEE.—The term “covered employee” means an employee of an appropriate Federal agency who is—

(A) a management official or supervisor who is responsible for—

(i) program management;

(ii) planning;

(iii) research and development;

(iv) engineering;

(v) testing and evaluation of systems (including quality control and assurance);

(vi) procurement and contracting;

(vii) logistics; or

(viii) estimating costs; or

(B) designated by the head of the appropriate Federal agency to receive training under a program established under this section because the job responsibilities of the employee are similar to those of an employee described in subparagraph (A).

(2) DIRECTOR.—The term “Director” means the Director of the Office of Personnel Management.

SEC. 3. FEDERAL BIOTECHNOLOGY WORKFORCE TRAINING PROGRAMS.

(a) ESTABLISHMENT AND UPDATES.—

(1) IN GENERAL.—Not later than 360 days after the date of enactment of this Act, the Director shall establish at each appropriate Federal agency an annual training program for covered employees with respect to biotechnology and other relevant critical and emerging technologies.

(2) INTERACTIVE NATURE.—The Director shall ensure that each training program established under paragraph (1) includes interactive learning opportunities with scholars and experts from private, public, and nonprofit organizations.

(3) ANNUAL UPDATES.—The Director shall annually update each training program established under this subsection to account for advances in—

(A) biotechnology science and the convergence of biotechnology with other relevant critical and emerging technologies;

(B) laboratory work;

(C) equipment; and

(D) software.

(b) CONSULTATION.—In carrying out subsection (a), the Director shall consult with leadership and workforce training managers at each appropriate Federal agency, and shall consult, as appropriate, with the Executive Office of the President, to—

(1) determine which covered employees shall be required to participate in the training programs established under that subsection, which shall be based on the needs and priorities of the appropriate Federal agency and the relevance of the training program to the position of the particular covered employee; and

(2) develop and implement each training program established under that subsection.

(c) CONTENT.—

(1) IN GENERAL.—Subject to the other provisions of this subsection, for the purposes of a training program established under subsection (a) at an appropriate Federal agency, the head of the appropriate Federal agency shall establish the essential knowledge and skills that shall be taught under the training program.

(2) REQUIRED MATERIAL.—The specific material covered in each training program established under subsection (a) shall—

(A) be customized by the head of the appropriate Federal agency to align with the specific needs, and mission requirements, of that Federal agency;

(B) be informed by the information on biotechnology workforce needs gathered in the assessment required in section 3; and

(C) at a minimum, include information regarding—

(i) the fundamental science underlying biotechnology, artificial intelligence, and other relevant critical and emerging technologies;

(ii) concepts relating to the technological features of biotechnology systems;

(iii) the application of biotechnology to health, agriculture, energy, the environment, and other relevant areas;

(iv) the ways in which artificial intelligence, quantum computing, and other technologies are and could be leveraged to advance biotechnology;

(v) the mechanisms through which the Federal Government supports, funds, purchases, and deploys biotechnology and the applications of biotechnology;

(vi) the ways in which the Federal Government can benefit from biotechnology;

(vii) ethical, social, and legal aspects of biotechnology, including ways to incorporate a wide range of stakeholder perspectives throughout research and innovation cycles;

(viii) ways to mitigate risks posed by the uses and applications described in this subparagraph, including efforts to create and identify biotechnologies that are reliable, safe, and trustworthy; and

(ix) future trends in biotechnology, including intersections with artificial intelligence, quantum computing, autonomous systems, robotics, advanced manufacturing, and other relevant technologies, as well as trends for national security, economic security, and innovation with respect to biotechnology.

(3) SPECIFIC AGENCY REQUIREMENTS.—In addition to the requirements under paragraphs (1) and (2), the following requirements shall apply with respect to the training program established under subsection (a) at the appropriate Federal agency:

(A) The Secretary of Defense shall—

(i) develop biotechnology workforce training for members of the covered Armed Forces, civilian employees of the Department of Defense, and contractors of the Department of Defense who duties involve—

(I) creating and deploying novel biotechnologies; or

(II) analyzing, preparing for, or responding to biological threats; and

(ii) provide access to the training program at institutions such as the National Defense University.

(B) The Secretary of Homeland Security shall ensure that the training program of the Department of Homeland Security provides instruction for covered employees of the Department who might encounter inbound and outbound biological samples or issues relating to illicit technology transfer, which shall include training on—

(i) security challenges posed by emerging biotechnologies and responses to biological threats;

(ii) the safe handling of biological samples in compliance with biosafety regulations;

(iii) preventing the illicit transfer of biotechnologies; and

(iv) securing national borders with respect to biotechnology.

(C) The Director of National Intelligence shall ensure that the training program is provided at the National Intelligence University and other similar venues to ensure that covered employees who are employed by elements of the intelligence community have a functional understanding of biotechnology research and innovation, including—

(i) the uses of biotechnology in statecraft, espionage, and geopolitical maneuvering; and

(ii) how to assess and interpret biotechnology-related intelligence in open-source and classified contexts.

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(D) The Secretary of State shall ensure that the training program of the Department of State, as provided to foreign service officers—

(i) is provided at the Foreign Service Institute; and

(ii) focuses on—

(I) the significance of biotechnology in addressing cross-border and global challenges;

(II) the implications of biotechnology on international policy; and

(III) biotechnology diplomacy, including the role of biotechnology diplomacy in promoting international collaboration, addressing global challenges, and shaping international policy.

(d) MEASURING PARTICIPATION; FEEDBACK.—The Director shall establish mechanisms to—

(1) measure the rate of participation by covered employees in the training programs established under this section; and

(2) receive feedback from covered employees who have participated in training programs established under this section so as to improve those training programs.

(e) ANNUAL REPORT ON IMPLEMENTATION.—Not later than 180 days after the completion of the first course, and annually thereafter, the Director shall submit to the appropriate congressional committees a report on implementation of the training programs required under this section.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Director a total of \$50,000,000 for fiscal years 2026 through 2030 to carry out this section.

(g) SUNSET.—This section, and the training programs established under this section, shall terminate on the date that is 5

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years after the date on which the Director establishes the programs
under subsection (a).
