Biotechnology Workforce Alignment Act of 2026

Overview

The **Biotechnology Workforce Alignment Act of 2016** (**H.R. 8938**) would direct the National Science Foundation (NSF) to align federal biotechnology research priorities with workforce development efforts and to strengthen partnerships across education, industry, and government, ensuring that training programs are built around real-world industry needs.

Background

The National Security Commission on Emerging Biotechnology (NSCEB) assessed in April 2025 that in the global race for biotechnology talent, the United States is losing ground to China.

China produces far more STEM PhDs and master's degree holders than the United States does. Moreover, China and other countries are quickly becoming compelling alternative destinations for the world's best biotechnology minds. In order to retain, or in some cases regain, biotechnology leadership, America must strengthen and sustain its talent pipeline in biotechnology, manufacturing, and related fields.

America's greatest strength has always been its people, but current U.S. education and training programs are not aligned with the skills that the biotechnology industry needs today, much less what it will need in the future. This lack of workforce alignment constrains America's ability to leverage its unique government, industry, and academic strengths to achieve its strategic priorities for biotechnology. In order address these workforce alignment gaps, the federal government must assess the needs of the biotechnology workforce and align workforce development activities with federal research priorities.

H.R. 8938

Sponsor:
Rep. Rich McCormick
(R-GA-07)

Original Co-Sponsor:
Rep. Ro Khanna
(D-CA-17)

Available for Senate introduction

Congress established the National Security Commission on Emerging Biotechnology (NSCEB) to assess biotechnology's national security impact and recommend strategies to ensure American leadership.

Read the NSCEB's April 2025 report at https://www.biotech.senate.gov/final-report

Legislative Details

01 Alignment of Priorities

This bill would direct the National Science Foundation (NSF), in coordination with relevant federal agencies, to align federal biotechnology research investments with workforce development activities and identify high-demand workforce areas, such as biomanufacturing, synthetic biology, bioinformatics, -omics, and regulatory science.

02 Pathways and Partnerships

The bill would direct the NSF to:

- Develop a workforce framework for biotechnology workforce categories, roles, and competency areas;
- Support education and career pathways with multiple entry and exit points for students and early-career researchers, leading to biotechnology credentials and degrees;
- Promote hands-on training through internships, apprenticeships, cooperative education programs, and other opportunities;
- Support cross-sector partnerships among higher education institutions, federal laboratories, nonprofits, and the private sector;
- Disseminate best practices for biotechnology workforce development activities; and
- Encourage training programs to align with evolving industry needs.

03 Reporting Requirements

This bill would require that the NSF submit a report to Congress within 2 years on biotechnology workforce gaps, workforce development outcomes, the U.S. biotech workforce position relative to global competitors, and recommendations to strengthen federal coordination of biotechnology and workforce development activities.

Interested in leading or co-sponsoring this bill?

Please contact ideas@biotech.senate.gov