National Biotechnology Safety Act

Overview

The **National Biotechnology Safety Act** (**S.2697**) would authorize the National Science Foundation (NSF) to fund research on potential impacts of releasing organisms produced with biotechnology into the environment. This would advance regulatory streamlining by providing regulators with the necessary data to justify simplified regulatory pathways.

Background

The National Security Commission on Emerging Biotechnology (NSCEB) assessed in April 2025 that the United States' current approach to biotechnology regulation hampers the commercialization of safe and effective products.

Right now, U.S. biotechnology companies often face slow, unpredictable, and complex regulations across multiple agencies. Innovators encounter unnecessary regulatory burdens for products that have already been deemed safe, while regulatory agencies lack the necessary capacity or up-to-date information to streamline regulations.

To help resolve these issues, U.S. regulators need access to scientific data to justify simplified regulatory pathways. For example, regulators need more information about emerging technologies such as gene editing. They also need multi-season, multi-location studies to evaluate the potential impacts of biotechnology products on existing ecosystems.

Equipped with this kind of information, the United States could advance more straightforward and risk-proportionate regulation that would encourage innovators to bring biotechnology products to market efficiently and transparently, while protecting human health and the environment. Without action to streamline biotechnology regulation, the United States risks doubling down on its inefficient approach and allowing adversaries such as China to develop and commercialize key technologies first.

Available for House introduction

S. 2697

Sponsor:
Sen. Todd Young
(R-IN)

Original Co-Sponsor:
Sen. Alex Padilla
(D-CA)

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 Research Priorities

The NSF would prioritize research to identify unintended effects of biotechnology methods, develop practices to minimize risks, and identify potential risks of convergence of biotechnology with artificial intelligence, among other topics.

02 Consensus Study

The NSF would enter into an agreement with the National Academies of Science, Engineering, and Medicine to identify risks of biotechnology and recommend appropriate regulatory frameworks, including to reduce or remove regulation of safe products.

03 Regulatory Consultation

The NSF would consult with regulatory agencies to ensure that funded research and the consensus study advance regulatory streamlining.

04 Cost

The NSF Directorate for Technology, Innovation, and Partnerships would operate this research with a recommended $50 million annually for fiscal years 2026 through 2030. In fiscal year 2026, an additional $1.5 million is recommended for the consensus study on biotechnology safety.

Interested in leading or co-sponsoring this bill?

Please contact ideas@biotech.senate.gov

