U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Floor Statement

**Statement by Chairwoman Eddie Bernice Johnson (D-TX)**
on H.R. 4373, the *Engineering Biology Research and Development Act of 2019*
December 9, 2019

I rise today in support of H.R. 4373, the *Engineering Biology Research and Development Act of 2019*.

I want to thank Ranking Member Lucas for joining me in introducing this legislation.

The term "engineering biology" means the application of engineering design principles and practices to biological systems to advance fundamental understanding of complex natural systems and to enable novel functions and capabilities. Engineering biology research is used in microbes and plants to grow food more resilient to climate change, reduce our dependency on fossil fuels, and make more effective drugs to treat human disease. Some researchers are even engineering microbes for environmental cleanup. These are some of our nation's and world's greatest challenges, and engineering biology is one of our greatest tools.

The economy of the 21st century will be driven by the "bio-economy." Other countries are making significant investments in engineering biology research and development. We must recognize that U.S. leadership is not just about growing our economy and ensuring that our nation benefits from the products of engineering biology. It is also about leading responsibly.

As China accelerates its own investments, and the tools of engineering biology are increasingly cheap and accessible to individuals everywhere, we must also be mindful of the security implications. The potential for misuse of this technology to cause harm makes more urgent our need to invest strategically in engineering biology research today.

Along with authorizing a federal engineering biology research initiative, this bill would establish a framework for greater coordination of federal investments in engineering biology; require a national strategy for those investments; expand public-private partnerships; focus on the education and training for the next generation of engineering biology researchers; and address any potential ethical, security, and societal issues associated with engineering biology research.

It is past time for the United States to recognize the significance of this emerging research area to our economic and national security.

I was disappointed by the lack of such recognition in this Administration's last budget request, but hopeful to see the tide turning with the convening of a recent White House summit on the bio-economy. I look forward to working with my colleagues on both sides of the aisle and with the Administration to ensure the United States will not lose its leadership position in this area. H.R. 4373 is an important bill, and I urge my colleagues to support it.

I reserve the balance of my time.