

Australian Army to Be Equipped with Advanced Boxer CRV

Mar 18, 2018

This post is also available in: עברית (Hebrew)

The Australian Army will get 211 new Boxer CRV armored combat vehicles, after Rheinmetall was awarded a US$4.1 billion contract, defeating a rival bid from BAE Systems.

The vehicles will be built in Australia with a substantial input of local components and labor.

The wheeled armored combat machines will replace the Australian Army's aging Light Armoured Vehicle fleet. The Boxer CRV is designed to undertake both a range of missions in urban, jungle and amphibious areas, according to defenseworld.net. They can withstand direct bomb attacks and heavy machine gun fire and are part of a government investment in strengthening its defense force over the next decade.

The armored vehicles are equipped with a main gun, light machine guns and various sensors to enable them to take on various types of threats. They can respond with a higher speed than many main battle tanks with similar levels of survivability.

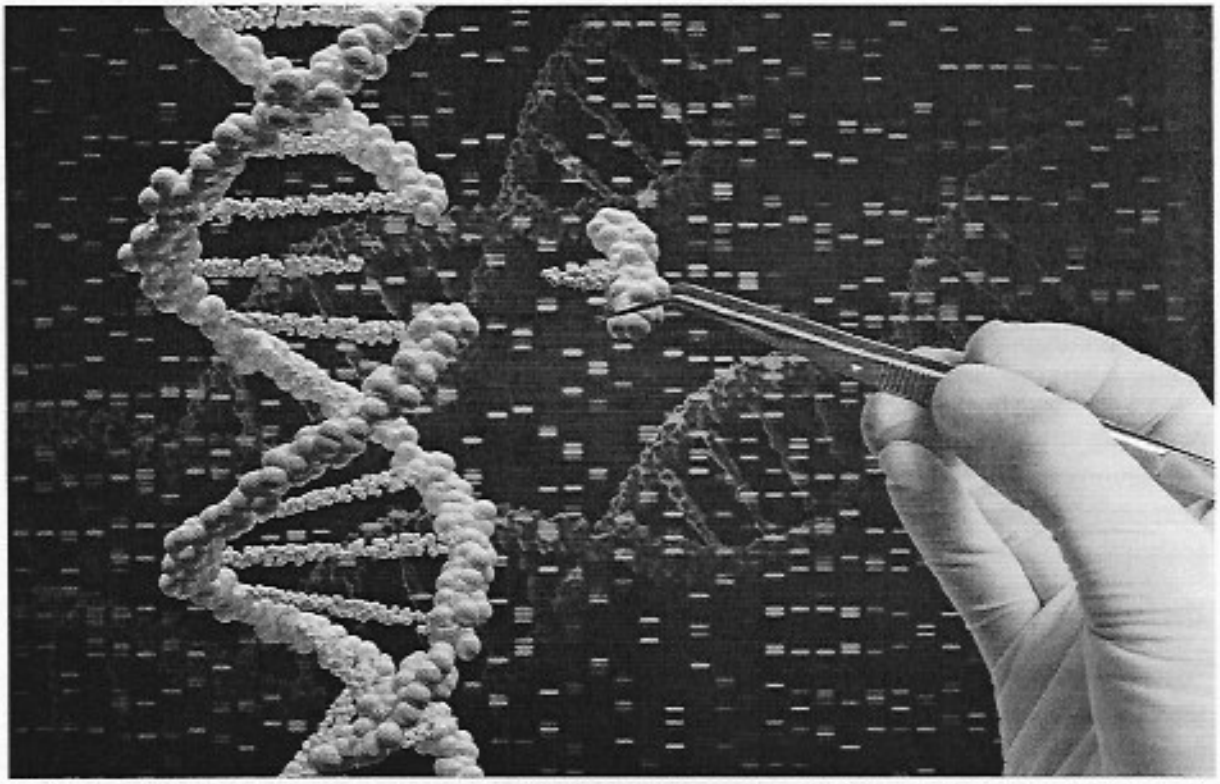
The protection to the crew is achieved by a multi-wall structure consisting of spaced and sloped armor in combination with additional protection elements. Reduced radar and infrared signatures, low noise level and high mobility after impact and NBC protection systems are the core elements of the vehicle's protection package.

The vehicle's LANCE turret system features a highly modular design, ensuring maximum lethality, flexibility and future growth potential. The electro-optical SEOSS Sector and SEOSS Panoramic sights provide both commander and gunner with a 360° view. The LANCE turret system also comes with a 66mm or 76mm smoke/obscurant grenade launcher while potential add-ons include a laser warning system, identification friend or foe technology, an integrated C4I system, an SAS close-range reconnaissance system or an anti-tank guided missile system.

The comprehensive range of C4ISR systems provided with the vehicle, according to the company website, enable warfighters to assess the environment, control assets and communicate effectively in pursuit of mission objectives.

Gene editing has gone from supervillain scheme to national security concern

By: Mark Pomerleau 10 hours ago



Tucked within the nearly 70-page National Security Strategy is a push to invest in research that can mitigate threats from and maintain an edge in novel biological capabilities. (vchal/Getty Images)

Gene editing is often thought of as a technique from a futuristic villain, best used to create killer mosquitoes or vaccine-resistant diseases.

But there, tucked within the nearly 70-page National Security Strategy unveiled Dec. 18 by the Trump administration, was a short paragraph devoted to research and innovation. The document included the areas where the United States should prioritize investment to "maintain our competitive advantage." And while the White House listed more conventional national security technologies, such as encryption and autonomy, the strategy also specifically mentioned gene editing.

Already, the main research arms of the U.S. national security sector have devoted resources and teams toward gene editing in the past few years.

According to the Defense Advanced Research Projects Agency, the national security implications of gene editing include the protection of troops against infectious disease, mitigation of threats posed by irresponsible or nefarious use of biological technologies and enhanced development of new resources derived from synthetic biology. This last point includes novel chemicals, materials and coatings with useful and unique properties.

DARPA's Safe Gene Program, which the organization plans to invest $65 million in the next four years, looks to "deliver novel biological capabilities to facilitate the safe and expedient pursuit of advanced genome editing applications, while also providing the tools and methodologies to mitigate the risk of unintentional consequences or intentional misuse of these technologies," according to the agencies Biological Technologies Office.

"The field of gene editing has been advancing at an astounding pace, opening the door to previously impossible genetic solutions but without much emphasis on how to mitigate potential downsides," said Renee Wegrzyn, the Safe Genes program manager. "DARPA launched Safe Genes to begin to refine those capabilities by emphasizing safety first for the full range of potential applications, enabling responsible science to proceed by providing tools to prevent and mitigate misuse."

DARPA's counterpart in the Intelligence Community, the Intelligence Advanced Research Projects Activity, has also expressed interest in this field. That agency released a request for information in January 2017 seeking tools or methods to detect organisms that have been modified using genome editing techniques.

IARPA warns that despite benefits from advancements in gene editing such as injecting more nutrients into crops, "unintended or deliberate misuse of genome editing tools may have adverse economic, health, and national security implications."

According to the 2017 Worldwide Threat Assessment, an annual report to Congress by the Intelligence Community, the fast pace of genome-editing technology development and broad range of applications are likely to challenge governments to develop ethical frameworks or norms to govern their application.

The 2016 assessment, the last under the Obama administration, offered similar alarm bells.

"Research in genome editing conducted by countries with different regulatory or ethical standards than those of Western countries probably increases the risk of the creation of potentially harmful biological agents or products," the report read.

"Given the broad distribution, low cost, and accelerated pace of development of this dual-use technology, its deliberate or unintentional misuse might lead to far-reaching economic and national security implications. Advances in genome editing in 2015 have compelled groups of high-profile US and European biologists to question unregulated editing of the human germline (cells that are relevant for reproduction), which might create inheritable genetic changes."