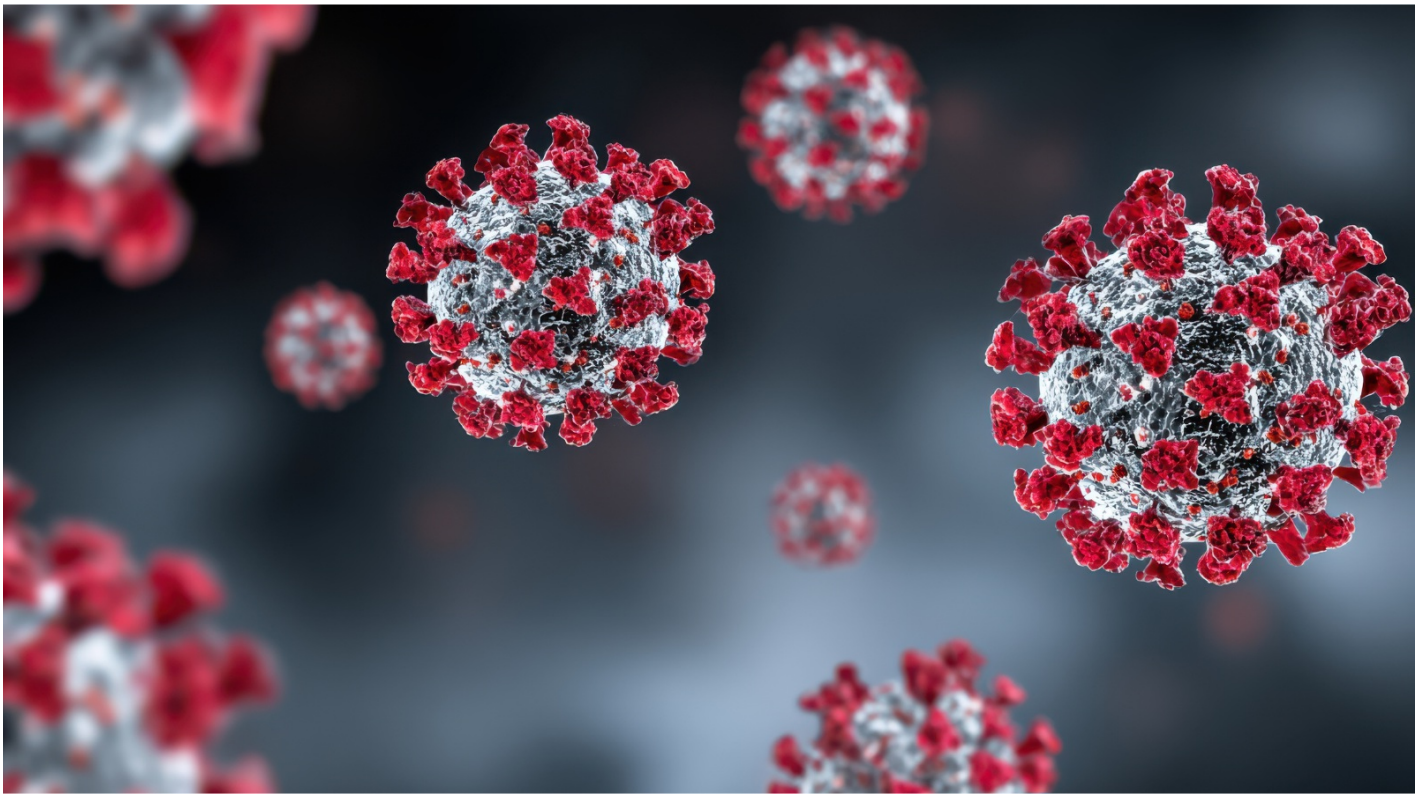
During The Height Of The Pandemic, COVID-19 Vaccine Delivered Peace Of Mind

Baylor College of Medicine
Texas Children's Hospital



Scientists at the Baylor College of Medicine (BCM) and Texas Children's Hospital have developed a novel protein sub-unit vaccine for COVID-19 that has been implemented as a primary vaccine option in India and will be soon introduced in Indonesia and the African Continent. Despite the successful efforts to rapidly develop novel vaccine technologies for COVID-19, many developing countries have struggled to gain access to effective vaccines, and vaccination rates remain low. Cost, scalability, ultra-cold storage requirements, and hesitancy have prevented many countries and individuals from vaccinating using the novel mRNA technologies.

This recombinant protein vaccine – partially funded with federal grant support – leverages tried and true practices for development, is as protective as the mRNA vaccines, can be produced at large scale locally in low and middle income countries (LMICs) for minimal costs, and is stable under standard refrigeration. Recombinant protein vaccines have also been

administered to children for decades and have a long history of safety data and patient acceptance, potentially reducing vaccine hesitancy.

In the interest of global access and rapid commercialization, BCM Ventures chose not to file patent protection on the vaccine technology and instead licensed the technology non-exclusively to experienced vaccine manufacturers in LMICs. These licensees also receive on-going scientific support from BCM investigators, Peter Hotez, MD, Ph., Dean for the National School of Tropical Medicine and Professor of Pediatrics – Tropical Medicine and Maria Elena Bottazzi, PhD, Associate Dean for the National School of Tropical Medicine and Professor of Pediatrics – Tropical Medicine, to expedite GMP production and formulation and enter clinical trials as quickly as possible. As a result of the licensing and commercialization strategy and the accelerated negotiation process to enable product development at record pace, our first licensee received Emergency Use Authorization in India within 18 months of licensing and in less than two years, has distributed approximately 100 million vaccine doses with hundreds of millions of additional doses reserved. A second licensee has completed clinical trials and is on track for Emergency Use Authorization by fall of 2022. Over 70 million doses have been administered to adolescents (12-14 years old) in India alone and the vaccine will soon be available in the African continent as well.

As a result of their scientific efforts, Drs. Peter Hotez and Maria Elena Bottazzi have been nominated for the 2022 Nobel Peace Prize.

This story was originally published in 2023.