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Scientists at University of Queensland tests vaccine response in Ã¢â?¬Ë?moonshot' challenge

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Producing the first vaccine for the little-known but potentially fatal Bolivian Chapare virus



Australia's Queensland researchers are attempting to create a vaccine in just 150 days to prove how far their response capabilities to a viral pandemic have come since COVID-19.

The clock started on 10 February for The University of Queensland (UQ)'s Vaccine Rapid Response Team, which has been tasked with producing the first vaccine for the little-known but potentially fatal Bolivian Chapare virus.

Team leader Professor Keith Chappell said the 'pressure test' at UQ's Australian Institute for Bioengineering and Nanotechnology (AIBN) is backed by the Coalition for Epidemic Preparedness Innovations (CEPI).

"Our goal is to get as close as possible to achieving CEPI's aspirational '100 Days Mission' to create a vaccine from scratch in just over three months when faced with a new pandemic threat," Professor Chappell said.

The UQ Rapid Response Vaccine Team will now produce 26 vaccine candidates using its re-engineered molecular clamp technology, which successfully completed a proof-of-concept phase I clinical trial last year.

A clinical grade batch of the most promising candidate will be produced, and the process fully documented and reviewed for CEPI to keep on hand for potential future use.

The Chapare virus is currently only known to occur in Bolivia and causes a severe haemorrhagic fever.

There have been five documented outbreaks since the disease emerged in 2003, with a laboratory-confirmed case reported in January this year.

CEPI project leader Dr Nicole Bézay said the team's work could make it much quicker to produce a vaccine should there be a significant outbreak of the Chapare virus, but the main focus is on testing and improving the vaccine development process for the re-engineered clamp technology.