

Nigeria

- **Nigerian researchers claim COVID-19 vaccine**

A team of Nigerian scientists has announced the discovery of a preventive vaccine against the novel coronavirus, local media have reported.

Leader of the COVID-19 Research Group, Dr. Oladipo Kolawole claims that the vaccine has been validated several times.

The study that the vaccine was based on was initially funded by the Trinity Immunodeficient Laboratory and Helix Biogen Consult, Ogbomosho, with roughly 7.8 million Nigerian nairas (\$20,000), according to the report. The Nigerian team had worked extensively on the virus's genome from samples across Africa to select the best potential vaccine candidates. The team leader says that it would take a minimum of 18 months to release the vaccine for widespread use.



Ref: <https://www.aa.com.tr/en/africa/nigerian-researchers-announce-covid-19-vaccine/1883955>

- **Tech startups are joining Nigeria's fight against coronavirus**

In Nigeria, tech startups are beginning to step up in the fight against Covid-19.

Lifebank, a health startup that finds and delivers blood to patients has turned its attention to seeking critical medical equipment for Covid-19 treatment and has created a national register to track hospitals with working ventilators and respirators. Hotel booking platform Hotels.ng has partnered with hotels to create isolation centers across Nigeria, an added buffer for the country's limited quarantine facilities.



Some of the support has come in form of targeted funding too. One year-old genomics research startup 54gene has launched a \$500,000 fund to boost local testing capacity for coronavirus. Ventures Platform, a local VC firm, has also partnered with the Lagos science and research agency to find and fund innovative tech-based solutions that tackle coronavirus-related issues.

Ref: <https://qz.com/africa/1828438/coronavirus-nigerian-tech-startups-step-up-to-assist-government/>

- **Nigerian tech steps up to boost coronavirus testing**

The testing deficit is a problem that 54gene, an African genomics startup with offices in Lagos and Washington DC, has set its sights on addressing.



In late March, 54gene launched a testing fund to raise cash to expand testing by up to 1,000 additional tests per day. It donated \$150,000 to the fund and secured \$350,000

from other partners, including Union Bank of Nigeria. With the funds, the genomics company has provided testing instruments to public laboratories and biosafety cabinets and personal protective equipment to health workers fighting the pandemic.

Another startup, LifeBank, has been working with several partners to build drive-through testing facilities. Lifebank collaborated with the Nigerian Institute of Medical Research (NIMR) to start a 2000-capacity drive-through centre in the Yaba district of Lagos.

National register

LifeBank has created a national asset register, Quip, in which staff and volunteers call hospitals throughout Nigeria to document the availability of respirators, ventilators and ICU beds. Hospitals can also list their equipment on the website. The firm has engaged volunteer engineers to fix broken equipment. The idea behind Quip is to establish a national repository where hospitals on the frontline can easily find critical equipment as and when needed.

Finding solutions

Ventures Platform, an Africa-wide network that supports entrepreneurs and innovators, has created the Covid-19 Innovative Challenge (CIC) in partnership with the Lagos State Science Research and Innovation Council (LASRIC) to provide a grant of \$3000 apiece to seven developers to create tech-driven solutions to fight the spread of Covid-19. Some of the solutions undergoing modifications include a GPS and Bluetooth-based solution to improve contact tracing as well as a risk assessment tool which connects high-risk individuals to medical resources.

Ref: <https://africanbusinessmagazine.com/sectors/technology/nigerian-tech-steps-up-to-boost-covid-19-testing/>

- **Nigerian Doctor Invents Portable Low-Cost Ventilator**

Nigerian doctor, Dayo Olakulehin, has invented a cheap, portable, easily deployable, easy to use and rechargeable battery-powered ventilator.

The D-Box, just launched in Lagos, costs around 100 times less than a conventional ventilator at an introductory price of US\$300. Conventional ventilators cost around

\$30,000; low-cost alternatives still in development are to be sold for \$3,000. The D-Box requires little or no expertise to use and is powered by a rechargeable battery. D-Box is a joint venture product of the Canadian product development firm Inertia Engineering + Design, headed up by Ray Minato and LigandCorp, owned by Dr. Dayo Olakulehin.



Ref: <https://healthmanagement.org/c/icu/news/nigerian-doctor-invents-portable-low-cost-ventilator>

- **COVID-19: Nigerian military begins mass production of ventilators, PPE kits**

The Nigerian military says it has successfully produced a ventilator using local content and has begun mass production of Personnel Protective Equipment (PPE) kits and more units of ventilators to cushion its shortage in the country and boost the fight against the deadly Covid-19 (Coronavirus). Each unit of the kits consists of standardized gowns, face shield and nose masks to be sold at affordable rates.



DICON engineers, consultants and medical teams have successfully produced a digital mechanical ventilator known as DICOVENT. The newly designed low-cost machine is a simple mechanical ventilator that can deliver positive pressured ventilation using a volume-controlled ventilation (VCV) system. while DICOVENT may not be able to meet the high demands of critical patients, it can be used for Continuous Mandatory Ventilation (CMV) and Intermittent Positive Pressure Ventilation (IPPV).

Ref: <https://businessday.ng/news/article/covid-19-nigerian-military-begins-mass-production-of-ventilators-ppe-kits/>