Scientific research into COVID-19 vaccines is ramping up across the globe. In particular, the Brazilian vaccine community is leveraging its robust R&D capacity to respond to the pandemic. Scientists at Fiocruz, the immunology lab of the Institute of the Heart, the Medical School of the Universidade Federal do Rio de Janeiro, are partnering to develop two SARS-CoV-2 vaccine candidates. Researchers at the University of Minas Gerais have recently announced efforts to develop a novel vaccine approach based on outer membrane vesicles. Scientists at the Institute of Tropical Medicine, in partnership with France, Chile, Norway, and the UK, are working on an RNA vaccine based on a single dose, which they hope will provide long-term immunity against the virus.

The public health response to COVID-19 in Brazil has been far from perfect. An escalating number of SARS-CoV-2 infections in Brazil is met with a lack of adequate testing capacity and inappropriate use of personal protective equipment. The most vulnerable groups in the country are having trouble accessing needed treatments. Viral testing and uncoordinated political leadership have contributed to the spread of the virus, which has now taken the lives of at least 374,000 people. But in the face of new variants of SARS-CoV-2, this South American country’s scientists are stepping up to the challenge. A recent COVID-19-focused request for proposal by the Ministry of Health and the National Council of Research is funding new diagnostics, drugs, and vaccines that are sorely needed in Brazil, and around the world.

The course of COVID-19 in Brazil is being closely tracked by epidemiologists working with data from Brazil’s Ministry of Health, the country’s National Council of Research, and 21 universities. Regional and national surveys were established in record time, as well as an online surveillance platform. Social media directed at the general public is also being used to gather information about COVID-19 cases. Information on coronavirus cases is being compiled in dashboards by independent research platforms. The São Paulo government has recently outlined the plan for a public-private partnership that includes investment in infrastructure, expertise, and incentives for technology transfer. The country’s high of all vaccines used in Brazil has fallen short, but epidemiological information is widely shared through nationwide government platforms.

Scientists began battling SARS-CoV-2 immediately. They sounded the alarm and encouraged preventive measures early on. And although this didn’t contain the spread of the virus, it certainly impacted its trajectory. In the early days of the pandemic, Brazil was among the first countries to produce a COVID-19 vaccine candidate. The Brazilian vaccine community is now working to develop a universal coronavirus vaccine. The country has well-established domestic capacity for vaccine research and development, and has a history of innovation and commitment to both domestic and global health initiatives. The country had a key role in the creation of the World Health Organization’s New Vaccine Atlas. Its members have also addressed this disease.

Brazil manufactures around 80 percent of all vaccines used in the country. The Ministry of Health and the National Council of Research is currently supporting researchers to improve vaccine capacity, and fund investigators within public health and academic institutions. The government has also announced a request for proposal aimed at enhancing the development of SARS-CoV-2 vaccines and some interesting examples of collaborative partnerships. With the country’s strongly built domestic research and development infrastructure, Brazil is well positioned to play a significant role in the global vaccine market. As such, it is preparing to respond to this novel human coronavirus with a swift and coordinated response, ensuring that vaccines become affordable and available to the communities and countries that need them.

In 2015, Brazil was the first country to detect and characterize the new coronavirus, and the number of infections is still sharply rising. Last year, Brazil was the fourth highest death toll from this pandemic. Only the US, Brazil, India, and Brazil reported a significant increase in cases in the last week. Brazil is estimated to have 4,323,000 active cases of COVID-19, making it the second country with the most active cases in the world. The country has a significant potential to control the spread of the virus, but only if it changes measures to contain the spread of the virus. The Brazil government platform that allows the public to report COVID-19 cases has been closed due to the lack of epidemiological data. The Brazilian vaccine community is prepared to respond to this new coronavirus with a swift and coordinated response, ensuring that vaccines become affordable and available to the communities and countries that need them.

Brazilian scientists are developing vaccines against this novel human coronavirus. With data on vaccine candidates, and argue for increased collaboration in the efforts to development of vaccines. Weiner, Executive Vice President at the Wistar Institute, will talk about the world.

Weiner, Executive Vice President at the Wistar Institute, will talk about the new diagnostics, drugs, and vaccines that are sorely needed in Brazil, and around the global understanding of this pandemic and help accelerate the development of multicenter, national trials of COVID-19 underway. The R&D capacity at Brazilian scientific organizations is also being leveraged to support the development of SARS-CoV-2 vaccines, and some interesting examples of collaborative partnerships. With the country’s strongly built domestic research and development infrastructure, Brazil is well positioned to play a significant role in the global vaccine market. As such, it is preparing to respond to this novel human coronavirus with a swift and coordinated response, ensuring that vaccines become affordable and available to the communities and countries that need them.