COVID-19 research funding in Africa

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## A call: COVID-19 research funding in Africa

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## Un appel: le financement de la recherche COVID-19 en Afrique

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The World Health Organization (WHO) has made the general public to understand the transmission pattern of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), which is responsible for COVID-19, across different countries of the world (1). There have been reports showing increase in confirmed COVID-19 cases in low-and-middle-income countries (LMICs) such as Bangladesh, Cameroon, the Democratic Republic of Congo, India, Indonesia,

Nigeria, Mali, Gambia, Senegal, Ghana, Sudan, Tunisia and other countries of Africa. However, the scientific communities have starred up various researches on COVID-19, in several areas including virus genomics and proteomics, epidemiology, pathogenesis, diagnostics, vaccines, drug discovery and therapy (including clinical trials) as well as preventive approaches to combat the pandemic. The scale and speed at which these COVID-19 researches are being

conducted in other countries is unprecedented whereas this is very low in African countries when compared to these other countries in terms of funding.

There is the urgent need for various international organizations, African health institutions, governments of African countries, private co-operations, and African philanthropists to come up with specific road maps for provision of funds for African scientists to conduct research on COVID-19 in such areas as basic research on SARS-CoV evolution and history, pathogenesis, transmission characteristics and disease modelling in the population, diagnostics, outbreak response and prevention, drug and vaccine development and clinical trials in different populations because of the heterogeneity of the African population.

According to the Frontiers Coronavirus Funding Monitor, there were little or no calls for COVID-19 research funding for African scientists either by the African governments or private institutions and organizations (2). There were calls for or from Finland, India, Belgium, Austria, Germany, USA, Denmark, Canada and Global. Still African scientists will have to compete with scientists from these developed countries, which will significantly reduce their chances of obtaining these funds.

As a result of the increasing spread of the virus and severity of the disease, COVID-19 pandemic is a serious public health emergency, and urgent steps should be taken in answering questions associated with the virus pandemic in Africa. Because of the weak economy, inadequate health infrastructures and ineffective policies of most African countries, it is imperative to strengthen the Africa research capacity by coordinated and collaborative efforts within and outside the continent, to effectively combat emerging and re-emerging virus infections. This is the basis for the clarion call for funding of African scientists to meet the peculiar need of

the continent with respect to the COVID-19 pandemic.

In many ways, COVID-19 research funding requires multilateral collaborations and approaches to scale up the win to develop the vaccines and drugs that will have more comprehensive coverage considering the science of human genetics. The GDP of African countries is projected to fall by 5-8% due to this pandemic with prediction of 90-200 billion dollars loss (3), which is going to make funding of research difficult for governments of African countries. Therefore, multinational bodies such as Bill and Melinda Gates Foundation, National Institute of Health (NIH), Medical Research Council (MRC) UK, Wellcome Trust, Canadian Institutes of Health Research (CIHR) and other public or philanthropic funders of health research as highlighted by Viergever and Hendriks (4) should come to the aid of African scientists in fighting this global pandemic through provision of grants that will help in funding of COVID-19 research enumerated above as well as in human capacity building. Africa must not be left behind in proffering solutions to the challenges of COVID-19 and to other potential pandemic infectious diseases peculiar to the continent.

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