

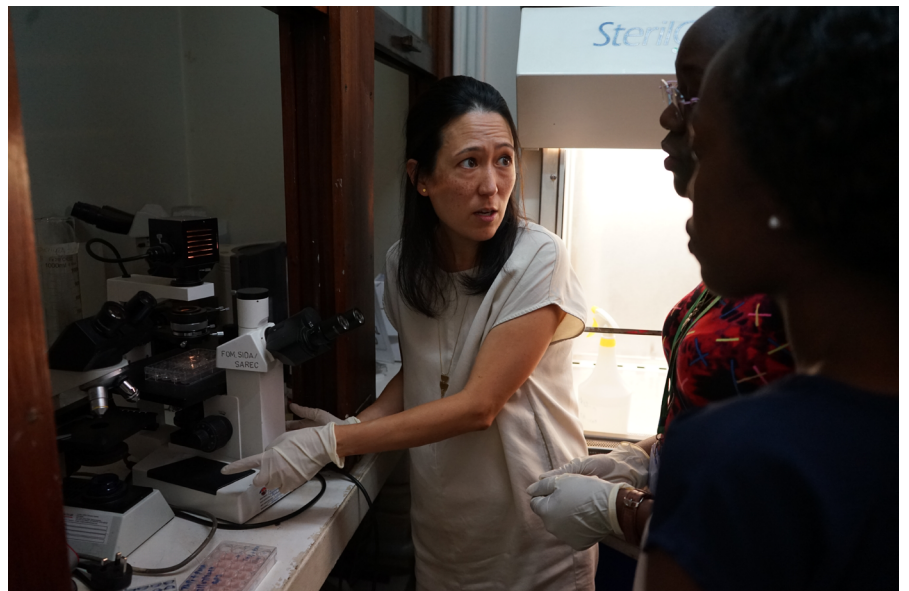


## Alliance for Global Health and Science Supports Covid-19 Response in Uganda

On March 21, 2020, the [first case of COVID-19 was confirmed](#) in Uganda, from a young adult who had been traveling back from Dubai. On March 22nd, UC Berkeley faculty [Dr. Sarah Stanley](#) reached out to UC Berkeley's Center for Emerging and Neglected Diseases (CEND), with an urgent question: what can we do to help our Ugandan colleagues deal with Covid-19? Countries in Sub-Saharan Africa, like Uganda, are extremely susceptible to becoming ravished by the pandemic due to communal living conditions, high population density, and limited hospital capacity and infrastructure - [Uganda only has 55 functioning ICU beds](#), for a population of more than 40 million people.

Dr. Sarah Stanley is a scientific advisor and one of the founders of the Alliance for Global Health and Science, a bioscience research capacity-building partnership between Makerere University in Uganda and UC Berkeley. After committing some of her own funds to help build Covid testing capacity in Uganda, she teamed up with Dr. Julia Schaletzky, the Executive Director of CEND, to secure additional funding through generous Alliance donors Steve Isaacs and Rich Robbins, as well as through the Bay Area Network ["Collaborate for Africa"](#).

Meanwhile, CEND program manager Isabelle Charles had in-depth conversations to establish which items would be most urgently needed in Uganda and how to best support the emerging national testing effort at Makerere University and the Uganda Virology Research Institute.



Dr. Sarah Stanley is a scientific advisor for the Alliance for Global Health and Science, and leads tissue culture workshops at the Summer Institutes each year.

Isaac Ssewanyana, lab director at the Uganda Virology Research Institute, Moses Joloba, Dean of Biological Sciences, Dr. Emmanuel Nasinghe, the Alliance's in-country coordinator, and CEND staff began discussions on how the institutions could best collaborate to tackle the pandemic. They agreed that the most urgent needs were PPE and testing. At the time, Covid tests for the entire country were being processed at UVRI, which severely limited the capacity for diagnosis and response. Dr. Nasinghe worked with Ssewanyana to determine the best way to scale-up testing, which would be to expand testing to the molecular biology labs at Makerere University. At full capacity, the molecular labs at Makerere University are able to run 1500 tests per day, significantly increasing current in-country.

Using CDC-developed laboratory guidance and the protocols developed at the IGI, Ms. Charles and Dr. Nasinghe identified the necessary laboratory supplies and reagents and were able to get all of the lab supplies ordered and shipped out to Uganda in just a few weeks. On April 30th, Dr. Nasinghe announced that Makerere University was approved by the Ministry of Health to run Covid-19 testing for patient care.



Paige Balcom, Berkeley engineering PhD candidate, and her a team of engineers from Northern Uganda, have designed reusable face shields from recyclable materials. Their production is based out of northern Uganda. Back from left to right: Jacob (engineer), Emma (nurse), Paige (engineer). Front: Patrick (engineer).

During this time, the Alliance team was also facing another dilemma: PPE. PPE shortages were happening around the U.S., and orders were backlogged for weeks. As the team was searching for solutions, an article appeared in the Berkeley news: [PhD Student Turns Recycled Plastic into Face Shields for Ugandan Medics](#). Mechanical engineering PhD candidate Paige Balcom was manufacturing these low-cost masks in Uganda. The Alliance team connected with Ms. Balcom immediately, and signed a contract for delivery of 370 reusable face shields, which are now being produced in Uganda and will be delivered to healthcare workers early next week.

UCB Professor Art Reingold, a long-time supporter of the Alliance program in Uganda, states “It is encouraging to see how intercontinental collaboration between UCB and African scientists within the Alliance is leading to fast, nonbureaucratic help in times of crisis.”

If you would like to contribute to CEND's current efforts, consider donating to the [Pandemics and Urgent Health Crises fund](#), which funds projects to lay the groundwork for understanding and responding to pandemics such as COVID-19.