UC SANTA BARBARA

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Sonia Fernandez

# A Quick Reaction

In support of efforts to battle the COVID-19 pandemic locally, UC Santa Barbara researchers have donated essential supplies to Cottage Health System, to aid with testing for the novel coronavirus.

Professors Max Wilson, Carolina Arias, Kenneth Kosik and Diego Acosta-Alvear, all from the university's Department of Molecular, Cellular and Developmental Biology, have donated 600 "reactions" to Cottage Hospital to help the medical facility cope with the fast-spreading virus in the community. Testing protocols for the novel coronavirus as developed by the World Health Organization and the U.S. Centers for Disease Control rely on a polymerase chain reaction (PCR) test, which homes in on the presence of the SARS-CoV-2 virus's genetic material in a tissue sample and amplifies the signal by duplicating the target RNA to a level that can be detected.

The reactions provided by the researchers can enable anywhere from 200-400 tests.

As of today, there are 68 confirmed cases of COVID-19 cases in Santa Barbara County, with eight hospitalizations — a so far relatively favorable situation County Public Health officials attribute to social distancing. However, the virus is known to spread rapidly from person to person as well as through contact with surfaces, and can be transmitted via asymptomatic carriers, raising concern and frustration over the low supply of tests available to community members who suspect they might be suffering from COVID-19 infection. There are more than half a million cases worldwide.

As the pandemic made its way through Europe and Asia mere weeks ago, the researchers knew it was only a matter of time before it reached the United States, so they took action and stocked up on the reagents.

“Ken and I had the foresight a few weeks ago to buy reagents so that we could do testing as we had to,” Wilson said.

Nevertheless, they were struck by how acute the shortage of the necessary reagents had become in so little time. “There’s a worldwide scramble for reagents right now,” he said.

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## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.