



Your Philanthropy in Action: COVID-19 Response

Focus on the Future

UCSF remains deeply grateful for your timely and generous support during the COVID-19 pandemic. Your philanthropy has empowered us to provide vaccinations, connect disadvantaged patients with timely testing and assistance, pursue innovative research, and much more. Thank you. Please read on for updates on UCSF's most recent response to the challenges posed by COVID-19.

Using Evidence-Based Insights to Move Forward

With your support, our researchers are tackling challenging questions related to the COVID-19 crisis, including developing guidance for reopening schools and creating new ways to detect emerging pathogens.



Advising Schools on Reopening Safely

With the delta variant potentially causing more illness in children than previous strains of SARS-CoV-2, many parents are worried about the implications of reopening schools. In response, UCSF researchers created the Collaborative to Advise on Re-opening Education Safely (CARES), a project that draws on the expertise of our faculty members to develop detailed, timely guidance for school reopening in the Bay Area.

CARES members are working with colleagues in education and public health to ensure a safe and ideal learning environment for children, teachers, and staff during the pandemic. In addition to interpreting the latest scientific data, CARES participants are facilitating

community conversations to discuss their findings and recommendations, making sure that everyone concerned about school reopening gets answers to their most pressing questions.

Identifying Potential Pathogens to Prevent Future Pandemics

Looking back at the beginning of the pandemic, many people have wondered why more officials didn't see this coming – and how we might prevent the global spread of new pathogens in the future.

That's why scientists at UCSF and the Chan Zuckerberg Biohub have launched a unique project designed to spot emerging pathogens that cause disease well before they would normally be detected.

This new system, IDseq, allows researchers from anywhere in the world to process DNA or RNA recovered from patient samples and scan it for unidentified pathogens, including new viruses. It's a massive improvement on the traditional means of identifying and studying new pathogens, which involves isolating a virus, bacterium, or fungal spore and trying to reproduce it in a lab – a notoriously difficult process.

IDseq uses metagenomics to quickly analyze new pathogens and provide ample data about them. Because metagenomics requires computing power that only well-resourced labs have, IDseq is a highly collaborative system that greatly expands access to this technology. It enables researchers to process samples affordably in their own labs, then upload the results to a cloud-based system for analysis.

Ultimately, IDseq could help experts everywhere identify new infectious diseases faster, making them much easier to contain before they spread to other regions or countries.

For more on the work you have generously supported, please see:

- [UCSF Collaborative to Advise on Re-opening Education Safely \(CARES\) – Webinars, Reports, and Tip Sheets](#)
- [The Disease Detective](#)

The Path Forward

Cities are gradually reopening, and vaccination rates continue to climb. But are our pre-pandemic lives really just around the corner? What will we do about the inequality laid bare by COVID-19?

Hear more about what the future might look like – and what we need to do to prepare for it – in these discussions with UCSF experts: [ucsf.edu/path-forward](https://www.ucsf.edu/path-forward)





Helping People Struggling with COVID

While vaccination has protected many people from the worst effects of COVID-19, some patients suffer from lingering effects from the virus, and many countries have only recently started to scale up vaccination. UCSF is still assisting those hit hard by this virus.

Supporting and Studying Patients with ‘Long COVID’

Long after initial infection with COVID-19, an estimated 10%-30% of patients report troubling symptoms – including “brain fog,” shortness of breath, and extreme fatigue – that have made returning to their normal professional and personal lives difficult, and in some cases, impossible.

To help these so-called “long-haul” patients with their most immediate challenges, a palliative care physician and a neurologist at UCSF have drawn on the latest research to create an integrative medicine program that offers patients with continuing COVID symptoms new tools to cope with their illness. It includes a mix of mindfulness meditation training, support groups, and cognitive behavioral therapy.

In addition, UCSF infectious-disease experts have been studying these “long COVID” patients for months now, hoping to discover how often such complications occur and what causes them. More than 250 patients have enrolled in the UCSF study so far. Eventually, researchers hope to discern how to best prevent or treat long COVID. So far, long-term effects seem to be rare among vaccinated people who experience breakthrough infections of COVID-19, but further study is needed for confirmation.

Providing Assistance in Low-Income Countries

UCSF's Institute for Global Health Sciences has been strengthening pandemic response in low-income countries for many months now, working to mitigate the consequences of COVID-19 in Asia and Africa, where vaccination rates remain alarmingly low in many countries. These efforts have continued to evolve in recent months. As some countries face devastating surges that have overwhelmed hospitals, UCSF experts from a variety of centers and disciplines are working together to help colleagues abroad.

For example, the Center for Health Equity in Surgery and Anesthesia (CHESA) organized efforts to assist health organizations in Uganda when the country faced a massive rise in COVID cases. To increase local capacity to provide quality care for COVID patients, UCSF experts provided training and tools for improving mechanical ventilation and oxygen delivery. CHESA has provided support in India, as well.

In addition, global health specialists at UCSF have been advising on how to expand access to the latest COVID-19 treatments in developing countries and launching a study of social media in Guatemala that aims to combat vaccine misinformation. They are also contributing to global efforts to get ready for future pandemics, producing case studies on COVID-19 response in the US and Mexico for the World Health Organization's Independent Panel for Pandemic Preparedness and Response.

For more on UCSF's work helping people coping with COVID-19 in the US and abroad, see:

- [For COVID-19 Long-Haulers, Few Answers, But Meditation and Peer Support Offer Some Relief](#)
- [Terrifying 'Post-COVID Syndrome' Is Next Focus for Researchers in Bay Area and Beyond](#)
- [UCSF Institute for Global Health Sciences Pandemic Response Initiative](#)

Prioritizing High-Risk Populations

Your donation has helped us expand strategic testing and services for those facing the highest risk of infection. UCSF continues to offer assistance to communities who urgently need better health care.

Uniting the Black Community to Defeat COVID

While many people in the Bay Area know about high rates of COVID-19 infection among Latinx people, they may not be aware that Black residents have suffered the most deaths from the disease. The difference is not subtle: Black people who get COVID are up to four times more likely to die than Latinx people who get COVID.

That's why about 30 community organizations have been working to reduce COVID-19 in the Bay Area's Black communities. UCSF's Kim Rhoads, MD, MPH, launched an initiative to bring them all together and coordinate their efforts: Umoja Health Partners.



Umoja offers COVID-19 screenings, vaccinations, and health care referrals to Black residents in convenient locations identified by community leaders. Volunteers work with local churches to get the word out about Umoja's services. They also explain why it's so important to both detect infections and get the protection offered by vaccines.

Ultimately, all of Umoja's outreach aims to overcome Black distrust of the medical establishment. That distrust is based on a long history of racism in medicine – like the infamous Tuskegee experiment launched in the 1930s, in which Black men with syphilis were denied treatment so scientists could study the devastating effects of the disease over time.

Serving Low-Income Patients in the Mission

Low-income Latinx residents in the Bay Area have suffered disproportionately from COVID-19. UCSF has partnered with San Francisco's Latino Task Force for many months, offering free testing and vaccines in the Mission.

But COVID-19 is far from the only disease with an outsized impact on people of color. Now, UCSF is expanding its efforts in the Mission, giving residents the option to receive screening for other concerning health conditions that sometimes go overlooked for years, including HIV/AIDS and diabetes. Both conditions can be prevented and treated.

COVID-19 testing and vaccines will continue, and all of the screenings are optional. People who are newly diagnosed with HIV/AIDS or diabetes won't simply be sent home with their results; they'll be referred for timely follow-up care at Zuckerberg San Francisco General Hospital and community clinics. As always, the team will evaluate this new initiative and share lessons learned with other government and community partners in the hope of inspiring similar efforts in other locations.

For more on UCSF's wide range of efforts to advance health equity and tackle social determinants of health – including Umoja Health partners – see this collection of stories:

- **[UCSF Magazine: Achieving Health Equity](#)**



The Parallels of AIDS and COVID-19

In the early days of the AIDS epidemic, San Francisco became an epicenter of HIV. UCSF researchers and clinicians learned a great deal from the city's collaborative public health response, and many of those lessons informed San Francisco's initial response to the COVID-19 pandemic.

Today, it's clearer than ever before: We all have a stake in the success of infectious disease research. Learn more from people working on the front lines of both AIDS and COVID-19: [ucsf.edu/news/40-years-aids-sf](https://www.ucsf.edu/news/40-years-aids-sf)



Thank You

Our scientists, physicians, and researchers continue to advance our understanding of COVID-19 and the standard of care for patients – locally and globally – thanks to your support. We appreciate your important contribution to UCSF's efforts to rapidly reduce the harm caused by the pandemic.

See our [April 2020](#), [May 2020](#), [June 2020](#), [August 2020](#), and [February 2021](#) updates to learn more about UCSF's response to the coronavirus and how donations like yours have made a difference.

Get the latest news on UCSF's COVID-19 initiatives [here](#).