

News in brief

THOUSANDS VOLUNTEER FOR CONTROVERSIAL VACCINE STUDY

Momentum is building to speed the development of coronavirus vaccines by intentionally infecting healthy volunteers with the virus. A grass-roots effort has attracted about 3,900 potential volunteers for the controversial approach, known as a human-challenge trial.

The effort, called 1Day Sooner, is not affiliated with groups or companies developing or funding coronavirus vaccines. But co-founder Josh Morrison hopes to show that there is broad support for human-challenge trials.

Typical vaccine trials take a long time because thousands of people receive either a vaccine or a placebo, and researchers track who becomes infected in the course of their daily lives. A challenge study could, in theory, be much faster: a smaller group of volunteers would receive a candidate vaccine and then be intentionally infected with the virus, to judge the efficacy of the immunization.

“We want to recruit as many people as possible who want to do this, and pre-qualify them as likely to be able to participate in challenge trials should they occur,” says Morrison.

Wellcome, a biomedical-research funder in London, has begun discussing the ethics and logistics of a human-challenge trial for a coronavirus vaccine, says Charlie Weller, head of its vaccines programme. But she says it is unclear whether such a trial could actually speed up vaccine development.



EPIC ARCTIC RESEARCH MISSION FORCED TO BREAK OUT OF ICE

When scientists were planning MOSAiC – a pioneering expedition that would trap a research vessel in Arctic sea ice for one year – they considered the North Pole’s hazards. But no one anticipated a pandemic.

The travel restrictions and flight cancellations caused by the coronavirus outbreak have now forced mission planners to take a tough decision. *Polarstern*, the German ship central to the expedition, will temporarily leave its position in the ice to exchange its crew, and will abandon the research camp where it has been frozen since last October.

The disruption is a blow to the mission’s researchers, who have created a unique platform from which to study climate change in the Arctic. Although they hope to refreeze the ship at the same camp, the interruption will leave a hefty gap in the data set.

Scientists plan to leave the research camp mostly intact, although certain measurements must stop. But there are some autonomous instruments that will continue to function, taking measurements of, for example, wind speed, temperature, pressure and humidity.

“We’re going to do the best we can with these constraints,” says Matthew Shupe, an atmospheric and oceanic scientist at the University of Colorado Boulder and co-leader of MOSAiC. “But in the end, it’s a bummer.”

MORE US LABS COULD BE PROVIDING TESTS FOR CORONAVIRUS

A survey of more than 4,000 researchers in the United States suggests that better coordination at an institutional and national level could make hundreds of thousands more tests for coronavirus available.

To find out what is preventing molecular-biology laboratories with the capabilities to run tests from doing so, Giovanni Paternostro, a biomedical researcher at Sanford Burnham Prebys Medical Discovery Institute in La Jolla, California, and Joshua Graff Zivin, an economist at the University of California, San Diego, sent a survey to 35,000 principal investigators who had received grants from the US National Institutes of Health (NIH) in 2018.

Of the more than 4,000 researchers who responded within the first week, about 130 were already running tests to detect the new coronavirus (see ‘Keen to help’). Nearly

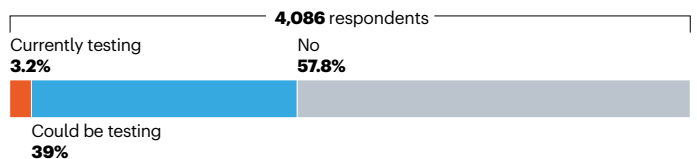
1,600 said that they had the main tool needed to run tests, a real-time PCR machine, and operated under the biosafety conditions required for working with pathogenic organisms such as coronavirus. But they were not testing.

Both groups – those who are testing and those who could – were asked what they would need to process more tests or to begin testing. Resources such as reagents and funding were a popular response for both groups, as was coordination by the NIH or their own institution. About 95% of labs not currently testing said they needed more information on protocols and regulations, such as the key Clinical Laboratory Improvement Amendments (CLIA) certification for providing clinical-test results. But 43% of labs currently doing testing said that they could do with more information in these areas as well.

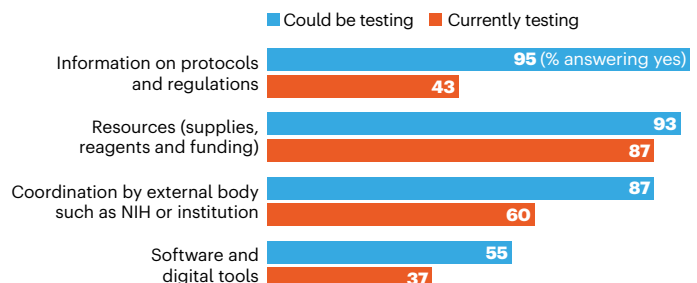
KEEN TO HELP

In a survey of almost 1,600 US laboratories, more than 40% met the basic necessary requirements to perform testing for the coronavirus that causes COVID-19. Many said that they could do better with more resources and with better coordination.

Is your laboratory providing COVID-19 testing – or does it have the basic necessary elements to do so?



Would addressing one or more of the following needs allow your lab to provide the test, or to provide it more efficiently if you are already doing it?



L. TO: MICHAEL GUTSCHE; SOURCE: DATA FROM G. PATERNOSTRO & J. G. ZIVIN