

THE ALCIVAX

Alcimed demonstrates the efficacy of human solidarity in a time of crisis and why we will beat the pandemic in the end.

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Humans Helping Humans

Though the pandemic continues to spread this week, we are beginning to see some light at the end of the tunnel from true actions of human solidarity.

Traditional herbal medicine to the rescue

As China grappled with a novel viral outbreak at the earliest stage of what was to become the current COVID-19 pandemic, the absence of treatment guidelines led the country to explore all possible ways to prevent and treat the infection. With a history of 3,000 years, Traditional Chinese Medicine (TCM) has played an integral part in China's fight against the virus. TCM has been employed as preventive remedy to hopefully boost immunity in the healthy population. In addition, TCM is also prescribed alongside anti-viral drugs mainly in patients with mild and moderate symptoms.

Indonesia is also looking at its traditional herbal medicine, traditionally known as "jamu", to strengthen the overall health of the population. There is also hope that jamu might alleviate the symptoms of the coronavirus infection. In the United States, healthcare practitioners have recommended non-drug therapy like meditation to enable the community to better cope with the psychological aspect of the global pandemic. By reducing the stress and anxiety that result from recent uncertain times, it is hoped to improve overall well being, resulting in a population that is more resistant to viral infection.

A time to invest in one another

Many industries and industrial leaders are pitching in to help their fellow man. LVMH, owner of Louis Vuitton and Christian Dior, will use perfume production lines to make hand sanitizer donated to the French Public Health Ministry and the CEO of Delta Airlines has donated his own salary to help struggling Delta employees.

Quarantined neighbors sang to one another on balconies from China to Italy, while new charities have started to supply those most affected by COVID-19 with food and supplies. There is even a charity to keep other charities funded during the outbreak. China even donated much needed respirators to Italy.

But China isn't always playing nice. In retaliation for an American rumor that COVID-19 was leaked from a Chinese bioweapons lab, Chinese officials are now claiming American Army officials brought COVID-19 to Wuhan. There will definitely be long term political and economic fall out from these smear campaigns particularly for upcoming trade negotiations which stand to contribute to both countries slower financial recovery from the current crisis.



Money Matters

Goldman Sachs announced this week that the US was looked at a 5% GDP shrinkage due to the COVID-19 pandemic in Q2, with an expected rebound in Q3 and Q4. Barclays is forecasting a similar -0.5% GDP for the Eurozone this year.

Four International Monetary Fund economists this week claim that the pandemic induced global recession is already here. The pandemic fueled financial downturn in China was steeper than a normal recession because of the sharp decline in services, suggesting the most effective recovery methods should be targeted at suffering businesses and not shoring up investors.

In order to keep the worst at bay, governments across the globe have put forward stimulus plans to create protections for vulnerable workers and businesses, tax subsidies, and healthcare support. Country packages are large signaling the deep worry of how deep a recession could result: New Zealand (\$7.3 B), Australia (\$17B), Canada (~\$20B).

The World Travel and Tourism Council (WTTTC) has implored governments around the world to take drastic and immediate action to preserve the travel & tourism sector.



Cartoon by Gothard, Wall Street Journal, Dec 30, 2019

The WTTTC said that its figures show travel and tourism contributes 10.4% of global GDP, and 320 million jobs.



Flattening the Curve

By now it is almost impossible that your life has not been affected but attempts in the US and Europe to flatten the curve are happening. European countries have closed their borders, closed non-essential businesses, and forced everyone home. The US has begun to do the same in the hardest hit areas like New York and California and are diverting international air traffic to fewer airports to force screening of citizens returning from abroad.

Not everyone has adopted this strategy, the Netherlands approach has been to let the virus spread naturally, to develop herd immunity, calculated at 60% of the population. Blood banks are now conducting widespread testing to monitor the progress of herd immunity development. But it will be some time before we know the experimental outcome.

The UK had originally proposed a similar strategy, but abandoned it after new modeling report suggested the outcome would be catastrophic to the National Health Service. This has left the UK somewhere in the middle, strongly encouraging citizens to stay home, without government force.



Outbreak control success stories

Singapore, Taiwan, and South Korea have all been successful in controlling COVID-19. This has required rapid aggressive action, by beginning to screen incoming passengers quickly, instituting travel bans, enforcing strict quarantine coupled with widespread testing and large scale social distancing measures. In addition to the travel ban in place, Israel will join Iran and China in tracking citizen's smartphones to enforce quarantine.

Searching for Answers

Last week we began discussing some of the more unusual aspects of COVID-19. The more the virus spreads, the more we learn, giving us a fighting chance of actually getting it under control. Here's what we learned this week:

- More than 100 people in Wuhan have been reinfected with COVID-19 and in Guangdong up to 14% of recovered patients have retested positive. Is this really reinfection, faulty testing, or a failure to develop immunity? Only time will tell.
- We have learned a great deal about transmission. Asymptomatic people are the most contagious and COVID-19 can travel as an aerosol for up to 3 hours and is stable on many surfaces, between 24 and 72 hours, explaining the high rate of transmission.
- Additionally, people under the age of 60 may be much more at risk than they have previously been told. Recent data suggests that most of the confirmed cases are in people between 20-29. In the US, 40% of those hospitalized are between 20-54. Even the very young are more susceptible than previously thought. 11% of infants and 6% of pediatric cases develop severe infections.
- Health wearables are collecting data to find biomarkers to predict COVID-19 outcomes and a pre-TSD is overwhelming the medical community coping with the stress of dealing with the pandemic.

Prevention & Treatment

Crucial to containing the pandemic is widespread rapid testing and this week we came one step closer with BD's 2 hour rapid test application.

As higher IL-6 levels correlates with higher mortality, Sanofi Genzyme's and Regeneron Kezvara anti-IL-6 trials seek to increase survival. Avigan (flu drug) and malaria drug chloroquine phosphate have also shown promise.

Studying the immune response including cellular receptors, vaccine/immune enhancement of COVID-19 should aid the search for a vaccine. Vaccine trials have gone global with centers in China and Great Britain, with Moderna, Novavax, and Regeneron accelerating testing timelines, raising some concerns about unproven technology. Yet other novel vaccine technologies such as Synbio's hunt for a universal antigen, a molecular clamp, and a LEAP peptide immunotherapy are being rapidly explored.

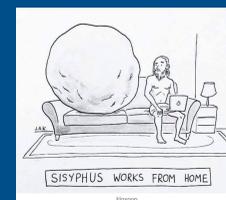


All Joking Aside

Necessity is the mother of invention. Now that most of Europe and North America are locked away in their homes trying to flatten the curve, people everywhere are inventing new ways to have an active social life during quarantine.

If the kids are home, Crayola is offering free coloring pages or you can learn some science.

Follow the hashtag #TogetherAtHome to keep up with lived-streamed concerts by global celebrities like Chris Martin and John Legend.



You don't need any special video chatting equipment to jump on the quarantini bandwagon and host a virtual happy hour!

Cartoon: Jason Adam Katzenstein, published in the New Yorker

Trying to keep the love alive? Try these great ideas for free virtual dates!

Nothing Stops Love



XAVIER DELUCQ, in the Huffington Post France

See a Broadway Show



Getty/Alexander Spatari

Go to the Met or Wein Staatsoper



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Tour a Museum



© Photos by Olivier Ouadah