

# Scientists lauded for contributions in Singapore's Covid-19 fight

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Scientists and researchers played critical roles not just in treating patients amid the Covid-19 outbreak but also in determining policies.

Speaking at the launch of the Programme for Research in Epidemic Preparedness and Response (Prepare), which will pull together pandemic experts from various fields to respond to future infectious disease outbreaks, Minister of Health Ong Ye Kung reflected on the role of research and science.

“Our years of investment in biomedical research, and our cumulation of experts across diverse fields, have paid off during the Covid-19 pandemic crisis. Without that reservoir of capabilities and talent that was built up over the years, we would not have been able to respond to the pandemic as effectively as we have,” he said.

He added that the Covid-19 experience has enhanced Singapore's preparedness against disease outbreaks, with Prepare being a spearhead of future initiatives.

At the event on Thursday, Mr Ong praised the achievements of scientists including Professor Wang Linfa from Duke-NUS Medical School. The world-renowned coronavirus expert and his team isolated the Sars-CoV-2 virus within days of the first Covid-19 case.

Mr Ong said Prof Wang, who leads Prepare, laid the foundation for subsequent Covid-19 research, and provided insights to help the Ministry of Health formulate policies. He also led a team of scientists from the National Centre for Infectious Diseases (NCID), Agency for Science, Technology and Research (A\*Star) and global biotech company GenScript to develop the first Sars-CoV-2 serology test, cPass. The portable test can test for antibodies, indicating the pres-



(From left) Professor Wang Linfa, who will lead the Programme for Research in Epidemic Preparedness and Response (Prepare), Health Minister Ong Ye Kung and Professor Tan Chorh Chuan, co-chair of the steering committee of Prepare, at the launch of the programme on Thursday. ST PHOTO: ALPHONSUS CHERN

ence of the virus, without needing special containment facilities.

Several other scientists were commended.

Dr Sidney Yee, from the Diagnostics Development Hub; Dr Masafu-

mi Inoue, from the Experimental Drug Development Centre at A\*Star; Dr Sebastian Maurer-Stroh from A\*Star's Bioinformatics Institute; Dr Timothy Barkham, from Tan Tock Seng Hospital; and Ms

Wong Woei Jiuang and Dr Rama Sethuraman, from the Health Sciences Authority, invented one of the world's first Covid-19 diagnostics tests, Fortitude Kit, in February 2020. To date, more than seven million kits have been produced and shipped to over 45 countries.

Professor Lim Keng Hui, Professor Loh Xian Jun, Dr Kang Chang Wei and Dr Ivan Tan from A\*Star used modelling techniques to understand flight trajectories of droplets spread, aiding public sector agencies and event providers in adopting effective safe management measures.

Professor Alex Cook from the Saw Swee Hock School of Public Health, an expert in infectious disease modelling, worked with MOH to provide projections of Covid-19 disease trajectory. His work was critical in determining the adequacy of healthcare capacity here.

Also lauded were researchers from the National Covid-19 Re-

search Workgroup, and Professor David Lye from NCID. Prof Lye actively engaged the United States' National Institutes of Health to include Singapore as a global Covid-19 clinical trials site, allowing the Republic to have early access to therapeutic drugs.

Mr Ong also credited Professor Barnaby Young from NCID and Professor Lisa Ng from A\*Star. Their study analysing Covid-19 viral load levels showed that a few days after a person showed symptoms, the viral load fell to relatively low levels, and the virus was no longer able to replicate.

This finding was critical, said Mr Ong. “It enabled us to move away from the practice of discharging Covid-19 patients upon a negative test result, which can take many days or weeks, to a policy of discharging a patient after a maximum of seven days.”

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