

NTU Singapore Launches New Lab

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To bolster Singapore's efforts to fight COVID-19 and prepare for the next big biological threat, the Lee Kong Chian School of Medicine (LKCMedicine) at Nanyang Technological University, Singapore (NTU Singapore) recently [launched](#) a new laboratory designed for research into pandemic viruses and deadly bacterial infections.

The new Biosafety Level 3 laboratory (BSL-3) hosted at the Experimental Medicine Building on NTU Singapore's Yunnan Campus will allow the safe handling of bacteria and viruses that are serious or lethal, such as those that cause COVID-19, tuberculosis, and Avian flu. Biosafety Level 3 laboratories (BSL-3), like the one at NTU LKCMedicine, will be a protected place under the Ministry of Home Affairs and regulated by the Ministry of Health (MoH), in accordance with the Biological Agents and Toxins Act (BATA) 2005.

At BSL-3, scientists will have the opportunity to safely process samples from infected patients to study the impact of the disease on the immune system, test for the pathogen's transmissibility, and develop vaccines and diagnostic tools and technologies – activities that can only be done in a highly contained environment due to the pathogen's infectious nature.

<https://opengovasia.com/ntu-singapore-launches-new-lab/>

The BSL-3 was launched by the Director of Medical Services at MoH and comes amid warnings from the scientific community that, in the future, a more severe ‘Disease X’ could hit the world – a new, unknown disease that is highly infectious, deadly and mutates easily.

The facility will allow NTU LKCMedicine researchers to collaborate closely with clinician-scientists at the National Healthcare Group and the National Centre for Infectious Diseases to respond more quickly and effectively in the fight against deadly pathogens and in the event of an infectious disease outbreak. It will be an important partner with a role to play in Singapore’s Programme for Research in Epidemic Preparedness and Response (PREPARE), which pulls together pandemic research experts from various fields to respond to future infectious disease outbreaks.

The Executive Director at PREPARE stated that many lessons were learnt from the national response to COVID-19. One of them is the importance of biocontainment facilities for research purposes and the national coordination of their operations. PREPARE is keen to work with the new NTU LKCMedicine BSL-3 facility in the context of establishing a more efficient national BSL3 network both during peacetime and in response to future outbreaks.

The Dean of NTU LKCMedicine and NTU Senior Vice President (Health and Life Sciences) stated that NTU LKCMedicine is proud to continue contributing to Singapore’s efforts to fight COVID-19 and future biological threats by providing a safe facility to quickly identify high-risk pathogens as early as possible and develop reliable diagnostics, stemming disease transmission early. The facility will also allow the NTU research community to advance its infectious diseases research into other lethal bacteria and viruses.

The Vice-Dean (Research) at NTU LKCMedicine noted that the launch of the BSL-3 facility at NTU provides a ‘timely booster’ to advance greater research collaboration on infectious diseases at LKCMedicine, with the goal to develop innovative diagnostic tools, vaccines, and therapeutics not only for COVID but also other deadly diseases such as tuberculosis and melioidosis.

The BSL-3 facility at NTU will be helmed by NTU LKCMedicine’s Professor of Infectious Disease. As the Facility Operator, he will oversee the management of the facility and make sure that all health, safety, and environmental regulations are in place. He will be assisted by a BSL-3 Biosafety Committee (BSC) chaired by NTU LKCMedicine’s Associate Professor of Infectious Disease. The Committee will review all scientific projects using the BSL3 Lab to make sure they are in line with health, safety and environmental regulations.