

NUS, Agilent and NUH launch translational R&D hub to boost clinical diagnostics

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S\$38 million research facility aims to be a premier, global, one-stop hub for research and translation to clinical testing through biochemical innovation and techniques



The National University of Singapore (NUS), Agilent Technologies, a global leader in life sciences, diagnostics, and applied chemical markets, and National University Hospital (NUH), have established Singapore's first integrated translational R&D hub that leverages on biochemical innovation and research data analytics to develop new methods of translating clinical research into clinical diagnostics.

The NUS-Agilent Hub for Translation & Capture (NUS-Agilent Hub) was officially launched by Associate Professor Benjamin Ong, Director of Medical Services of the Ministry of Health, at the opening ceremony held in NUS today. The research hub, which comprises laboratories located in NUS and NUH, provides 1,000 square metres of research space to facilitate multidisciplinary collaborations among scientists, clinicians and industry partners to translate biochemical research into clinical applications. Through research in areas such as lipidomics and synthetic biology, and supported by data analytics, NUS and Agilent hope to develop innovative ways that enhance the accuracy of clinical diagnostics based on data obtained from patients' blood samples. The initial research focus areas are cardiovascular disease and diabetes, which account for 30 per cent of all deaths in Singapore in 2017, and affected 440,000 Singaporean adults in 2014 respectively.

The NUS-Agilent Hub aims to be a global premier one-stop research centre for informing clinical testing through the use of emerging technologies and translational studies to provide greater insight and accuracy to clinical biochemistry testing. This collaboration between NUS, Agilent and NUH represents a unique and innovative approach to conducting joint research into important health issues and medical science. The "hub and satellite model" allows research to be conducted centrally, Singapore-based, but shared broadly, both locally, regionally as well as globally through key partnerships and alliances supported by NUS and Agilent.

NUS President Professor Tan Eng Chye said, "This partnership with Agilent and NUH builds on NUS' strengths and focus in biomedical sciences and translational medicine, the state-of-art mass spectrometry technology at Agilent and clinical

expertise at NUH. We are excited about this unique opportunity to further extend our longstanding collaborative relationship with Agilent and NUH into the area of clinical diagnostics, which could bring about the positive societal and economic impact to Singapore.”

“We’re extremely honoured to be working with one of the world’s top research universities and world-renowned principal investigators in developing the next generation of scientific discovery for societal benefit in life sciences,” said Mike McMullen, CEO and President, Agilent Technologies. “This type of innovative collaboration will not only deliver significant benefit to Agilent and our global customers but importantly also to the University, the people of Singapore and eventually people around the world who will benefit as a result of the work that will be conducted at NUS.”

“The population we care for in NUH is changing rapidly. We need new diagnostics to be tested and scaled up when successful. This tripartite partnership enables NUH to apply emerging technologies from the university and industry to improve clinical laboratory testing. Validating biomedical breakthroughs from NUS and translating these to clinical care will benefit patients,” said Associate Professor Eugene Liu, CEO, NUH.

“We are delighted that Agilent is working closely with NUS and NUH to launch the NUS-Agilent Hub for Translation & Capture. This new R&D hub embodies the spirit of open innovation, whereby companies tap on the unique capabilities of Singapore hospitals and universities to co-develop new solutions for global markets. We hope to continue to nurture collaborations between the private and public institutions within the Medical Technology sector in Singapore.” said Ms Goh Wan Yee, Executive Director, Healthcare, EDB.

The NUS-Agilent Hub is a continuation of an established and significant partnership that has existed for many years between NUS and Agilent. By extending its substantial investments in R&D with Agilent’s work alongside top universities like NUS, Agilent is able to accelerate its mission of improving the human condition.