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Shimadzu and DxD Hub establish joint lab to advance diagnostics innovation in Singapore

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To improve the speed, accuracy, and affordability of diagnostics to better meet healthcare needs



Shimadzu Corporation, a global leader in the precision instrumentation industry, and Diagnostics Development Hub (DxD Hub), a national platform hosted by Singapore's Agency for Science, Technology and Research (A*STAR), have entered a strategic collaboration to establish the Shimadzu – DxD Hub Diagnomics Centre (SDDC) at Biopolis, Singapore. The SDDC will drive innovation and accelerate the development of diagnostic products by integrating Shimadzu's technological expertise with DxD Hub's productisation platforms.

Developing diagnostic products is a complex process that requires extensive validation, clinical studies, and regulatory approvals—leading to long development times and high costs. Through this collaboration, SDDC aims to accelerate the development of high-quality, cost-effective diagnostic solutions. This includes the productisation of advanced multiplexed polymerase chain reaction (PCR) kits for faster and more accurate disease detection, as well as the use of Shimadzu's cutting-edge MALDI1 and FTIR2 platforms. These technologies support high-precision diagnostics, enabling rapid identification of bacteria and fungi in clinical samples, as well as biomarker detection, tissue analysis, and quality control of diagnostic products. Together, these efforts aim to improve diagnostic speed, accuracy, and affordability to better meet healthcare needs.

SDDC will focus on three key areas—infectious diseases, cancer, and metabolic disorders. In infectious diseases, efforts will focus on developing solutions for early detection of pathogens with the potential to cause pandemics. Cancer diagnostics labs will harness advanced technologies to drive early screening and precision medicine approaches. In metabolic diseases, the research will focus on enhancing diagnostic accuracy to support disease management.

Dr Weng Ruifen, Chief Executive Officer of DxD Hub added, "Our collaboration with Shimadzu Corporation supports Singapore's efforts to grow as a global hub for diagnostic innovation. By contributing our productisation expertise and working closely with industry partners, we help commercialise high-value intellectual property and translate scientific discoveries into practical healthcare solutions. Together, we look forward to developing impactful diagnostic tools that enhance healthcare delivery and promote greater health equity."

*From left to right: Dr Teruhisa Ueda, CEO, Shimadzu Corporation; Prem Anand, Managing Director, Shimadzu (AsiaPacific); Dr Weng Ruifen, CEO, DxD Hub; and Beh Kian Teik, CEO, A*STAR*