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DayOne launches Singapore's first biological data centre prototype with Cortical Labs and NUS Medicine

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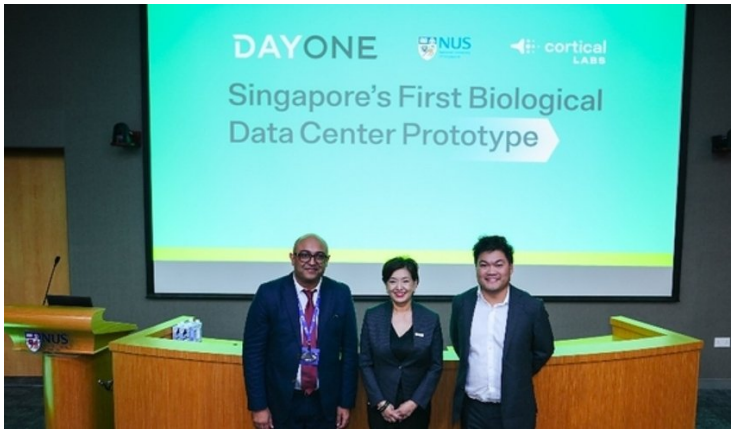
A real route to accelerate drug discovery and neurological disease research



DayOne Data Centers, a Singapore-headquartered global digital infrastructure platform, has launched Singapore's first Biological Data Center Prototype in collaboration with Cortical Labs and the Yong Loo Lin School of Medicine, National University of Singapore (NUS Medicine). The milestone advances the development of biological computing as a potentially more adaptive and energy-efficient complement to conventional silicon-based infrastructure.

The deployment of a 20-unit CL1 biological computing system – the first independently operated biologically integrated server rack in the world – brings Cortical Labs' technology into a live research environment at NUS Medicine, hosted within infrastructure designed and supported by DayOne. It demonstrates an alternative pathway to scale AI capacity with significantly lower power intensity.

Biological computing uses living neurons grown from stem cells and connected to silicon hardware to process information. The neurons receive electrical signals, respond, and adapt over time, enabling the system to perform certain computing tasks on a fraction of the wattage required by digital computers.

The initiative draws on NUS Medicine's neurobiology expertise, Cortical Labs' technology, and DayOne's experience in designing, building, and operating mission-critical digital infrastructure. Areas of exploration include neuro-inspired artificial intelligence, biomedical modelling, drug discovery, and neurological disease research.