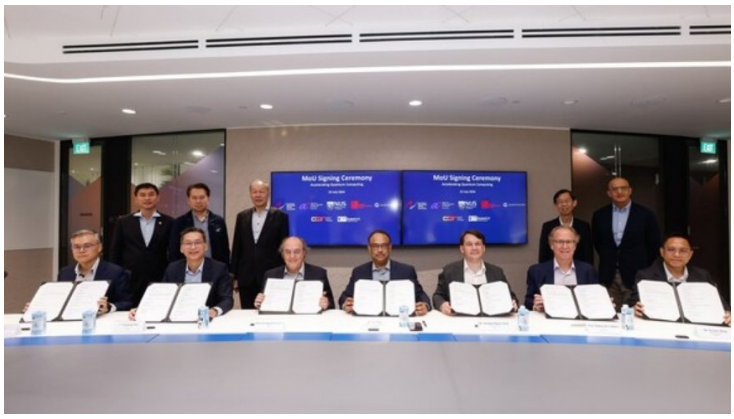
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Singapore inks MoU with Quantinuum focusing on computational biology

July 24, 2024 | News

Quantinuum plans to establish a dedicated R&D presence in Singapore



Singapore's National Quantum Office (NQO), Agency for Science, Technology and Research (A*STAR), National University of Singapore (NUS), National Supercomputing Centre (NSCC) and Quantinuum (with presence in US and UK) have signed a Memorandum of Understanding (MoU), enabling access to Quantinuum's advanced quantum computer, and to explore and collaborate on quantum computing use cases, focusing on computational biology.

Under the MoU, the parties agree to leverage Quantinuum's H-Series and Helios quantum computers, to promote joint research and development (R&D) activities in various quantum computing applications. Helios is Quantinuum's next generation quantum processor that could exponentially increase the computing power of quantum computers.

The parties will also collaborate on developing hybrid computing solutions that include both classical and quantum computing infrastructures, leading to the creation of long-term strategic roadmaps. The MoU also enables collaborations in training and outreach through seminars, workshops and bespoke programmes to nurture quantum talent and contribute towards Singapore's growing quantum community.

Singapore has a strong background in computational biology and the collection of quality health datasets. Through this MoU, scientists from A*STAR's Bioinformatics Institute (A*STAR's BII), the Centre for Quantum Technologies (CQT) at NUS and Duke-NUS Medical School's Centre for Computational Biology will be able to leverage Quantinuum's machines to enhance capabilities in modelling complex biological systems, advancing drug discovery and personalised medicine. In addition, Quantinuum also plans to establish a dedicated R&D presence in Singapore, where researchers from both Quantinuum and Singapore could better exchange knowledge and expertise for further developments in quantum applications and algorithms.