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TiktTok owner enters life sciences, invests in Shuimu BioSciences

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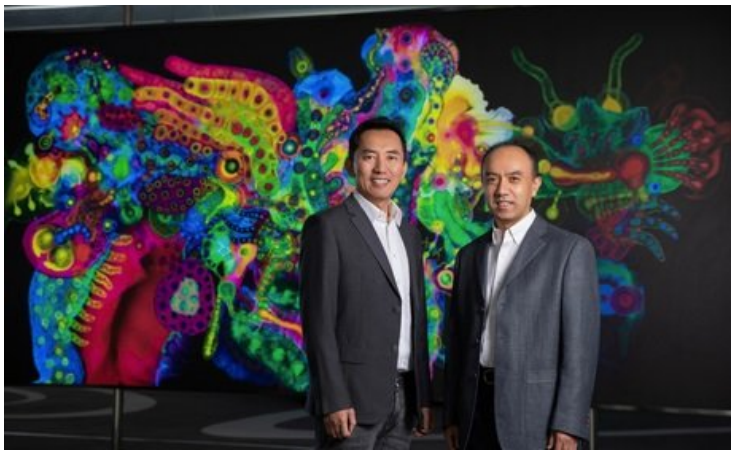
Shuimu's novel drug discovery platform takes advantage of its high-throughput cryo-EM facility and AI



ByteDance, developer of the video-sharing social networking services and apps TikTok, has pitched into life sciences.The internet tech giant has invested in Chinese biotech startup Shuimu BioSciences, a company leveraging the power of cryogenic electron microscopy (cryo-EM) and artificial intelligence (AI) to revolutionize drug discovery.

Shuimu partnered with Thermo Fisher in 2019 to build the first commercial cryo-EM facility in the Asia Pacific with two Titan Krios. It has quickly become the largest in the world as it is expanding its capacity to eight 300kV cryo-EMs this year.

Shuimu’s novel drug discovery platform takes advantage of its high-throughput cryo-EM facility and AI. It applies artificial intelligence and deep learning algorithms to automate data collection and model building workflow. An atomic model can be built in only one or two days, instead of two weeks. Shuimu is accelerating drug discovery with its enormous data set of biological structures, including structures of proteins, antibodies, nucleic acid, and other compounds.

"In the future, all drug development will take advantage of cryo-EM and AI," said Allen Guo, CoFounder, and CEO at Shuimu.