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ASIA EDITION

Korean firm LG to develop AI model for protein multistate structure prediction

February 9, 2025 | News

To accelerate the discovery of Alzheimer's factors and the development of new drugs



LG AI Research recently signed a joint research agreement at the Global Lounge of LG Science Park in Magok, Gangseo-gu, Seoul, with Prof. Min-Kyung Baek from the school of Biological Sciences at Seoul National University to develop a "next-generation protein structure prediction AI."

In collaboration with Prof. Min-Kyung Baek's research team, LG AI Research aims to develop an artificial intelligence (AI) model for protein multistate structure prediction by the end of the year, addressing current technological limitations. This breakthrough is expected to provide deeper insights into biological processes and accelerate drug development.

Soonyoung Lee, Bio Intelligence Lab Leader at LG AI Research, said, "The complexity of protein structures is at the heart of incurable diseases like Alzheimer's, and unraveling them is a highly challenging task. By developing AI for protein multistate structure prediction, we expect to achieve breakthroughs in understanding disease mechanisms and developing new treatments—much like unlocking a lock."

LG expects that this joint research will further accelerate the discovery of Alzheimer's factors and the development of new drugs, which are currently being conducted in collaboration with The Jackson Laboratory (JAX), a U.S.-based nonprofit genomics research organization.

Since early last year, LG AI Research has been collaborating with The Jackson Laboratory to develop predictive AI technologies for diagnosing and treating Alzheimer's and cancer.