

China to create gigantic DNA database

A super-sized DNA sequencing platform will be built in Nanjing, capital of east China's Jiangsu Province, in order to create a genetic information database for ethnic Chinese, according to the provincial health authority.

The DNA project is part of the National Health & Medicine Big Data (Nanjing) Center, a six-billion yuan project under construction in Nanjing's Jiangbei New Area, said Lan Qing, deputy director of the provincial health and family planning commission.

During the first phase, health and medical information on about 80 million people, the equivalent of the population in Jiangsu, will be stored at the center, Lan said.

"When the facilities are ready, the designed capacity for DNA sequencing will be up to 400,000 to 500,000 samples per year," he said.

The DNA sequencing project will be jointly undertaken by the state-owned Yangzi Group, Southeast University and Nanjing Medical University.

Researchers will then use big data created in the database to study genetic mutations related to major diseases, look for the impact of interaction between genes and environmental concerns on human health, and provide statistical support for diagnosis and treatment of major diseases, Lan said.

Cai Long, board director of Yangzi Group, said the program will focus on population genetics, newborns, childhood brain and cognitive development, cancer, and rare and chronic diseases.

The database is expected to be complete in around four years, he said.