

BGI opens emergency testing lab for coronavirus

10 February 2020 | News

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The Huo-Yan Laboratory, an emergency test laboratory run by BGI and designed to handle 10,000 samples daily to detect 2019-nCoV (novel coronavirus), has officially started trial operation in Wuhan.

The lab will greatly increase the speed of testing novel coronavirus cases so that suspected infections can be eliminated or confirmed as soon as possible.

The Huo-Yan or “Fire Eye” laboratory was jointly established by the Wuhan Municipal Government, Wuhan East Lake High-Tech Development Zone, CCCC Second Harbor Engineering Company, Shanghai Nori Laboratory Equipment Co., and BGI.

The East Lake High-Tech Development Zone provided the site, BGI led the design and operation, the Second Harbor Engineering Company led the construction, and Shanghai Nori provided a large amount of laboratory equipment.

Overcoming the 2019-nCoV epidemic requires rapid and accurate detection and diagnosis. Precise nucleic acid testing is an important basis for clinical diagnosis and discharge of recovered patients, as well as ending isolation of contacts. The laboratory will provide scientific support for the detection of suspected cases and the examination of high-risk populations, and help relieve the worry and panic among the community.

The 2,000-square-meter laboratory includes 1,000 square meters of testing laboratory area strictly designed as a P2 laboratory (Second Level of Biosafety) and equipped with high-throughput sequencing equipment manufactured by MGI. It also has 30 B2 biological safety cabinets, a series of 12 automated nucleic acid extraction platform, separate sample preparation rooms, reagent storage rooms and office areas.

On January 29, the East Lake District Government of Wuhan responded quickly and implemented the site support provided by the East Lake High-Tech Development Zone. BGI collaborated with the Second Harbor Engineering Company to complete the laboratory site survey. On January 30, BGI completed the design of the laboratory, and the Second Harbor Engineering

Company officially launched the laboratory construction on January 31. With the voluntary work of 279 employees from Second Harbor and Shanghai Nori in an all-out push, the main laboratory construction was completed in just five days.

The Huo-Yan Laboratory will provide sufficient testing capabilities for Wuhan and surrounding cities, and provide support for the diagnosis of patients, the screening of high-risk groups, the identification of suspected cases, the isolation of positive infections, and the protection of healthy people.

The laboratory also received instrument donations from Xi'an Tianlong Technology Co. and Tiangen Biochemical Technology (Beijing) Co., a donation of 2 million yuan from the Henan Youth Development Foundation (for clinical testing and related research and development) and a donation of 1 million yuan from IDG Capital for laboratory construction.