Dr. Zhao-hu Lin runs a high-throughput screening lab in Shanghai, China, for biotech giant Roche.

His lab requires speed, precision, and continual uptime.

"Robustness is always a challenge when you start a project that deals with as many as 1.4 million compounds," Zhao-hu says. "Our systems must be able to sustain stable running over a period of several months."

For years, he has been a fan of the Agilent automation system, which provides maximum walk-away time and throughput in a compact design.

Reliability

As the heart of the automation system, the Agilent Bravo liquid-handling platform delivers proven robustness.

"You don’t even have to do much maintenance," Zhao-hu says. "The Bravo system ensures that the whole screening process runs smoothly from beginning to the end."

Speed

"With Bravo, we are able to complete cell-based screening of 1.4 million compounds in four months every year," Zhao-hu says. "I can’t imagine how we could do that without the Bravo. It’s an amazing experience. Bravo moves fast and provides high accuracy and precision at the same time."

Accuracy

"The 384ST pipetting head has excellent performance, the CV is less than 5 % when pipetting as little as 0.5µL for three times with a single box of 30 µL tips," he says. "That is highly valued in many of our screening tasks. You can hardly find another liquid handler that can achieve such great performance."
AGILENT CASE STUDY

“Maintain system ensures that the whole screening process runs smoothly from beginning to the end.”

Ease of use

Zhao-hu also notes that the Bravo system is easy to use.

“Everyone in the lab likes to use it,” he says. “It’s very simple to write or edit a protocol, then just put your sample and reagent on the pad. You can have it run very fast. The nine plate pads are easy to access, and give me the flexibility to design the layout or change the configuration.

Zhao-hu has high praise for the VWorks automation control software as well.

“For a new user, it’s very friendly and easy to learn,” he says. “At the same time, automation experts find it powerful.”

Flexibility

Zhao-hu points out that the Bravo system can be accessed from any side, making it easy to place where other robots in the lab can reach it.

“Bravo is an amazingly flexible platform that fits most automation needs,” he says.