

Scientists develop brick-sized, portable DNA sequencer

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Singapore: Researchers at the University of Otago in New Zealand have developed the world's first brick-sized portable DNA sequencer. Though DNA sequencing plays a major role in diagnosis of deadly diseases, conventional table top sized DNA sequencing machines are not easily portable.

The novel device developed is called Freedom4 can be connected to a smartphone or a laptop. The device has six hours of battery life.

Researchers said that the device could detect a broad range of viruses and bacteria and could potentially be used in forensics and environmental laboratory monitoring.

Freedom4 can process DNA samples in one step and identify the presence of an infection in an hour. Researchers mentioned that this would increase speed of diagnosis and hence will help in providing timely medical aid to the patients.

Dr Jo-Ann Stanton, leader of the project, said, "We are immensely proud that we have created this brilliant device; there is currently no other system in the world that compares in terms of the analytical power we have achieved at this level of mobility and ease of use."

According to reports, the company has collaborated with genome company Ubiquitome to make this device commercially available worldwide.