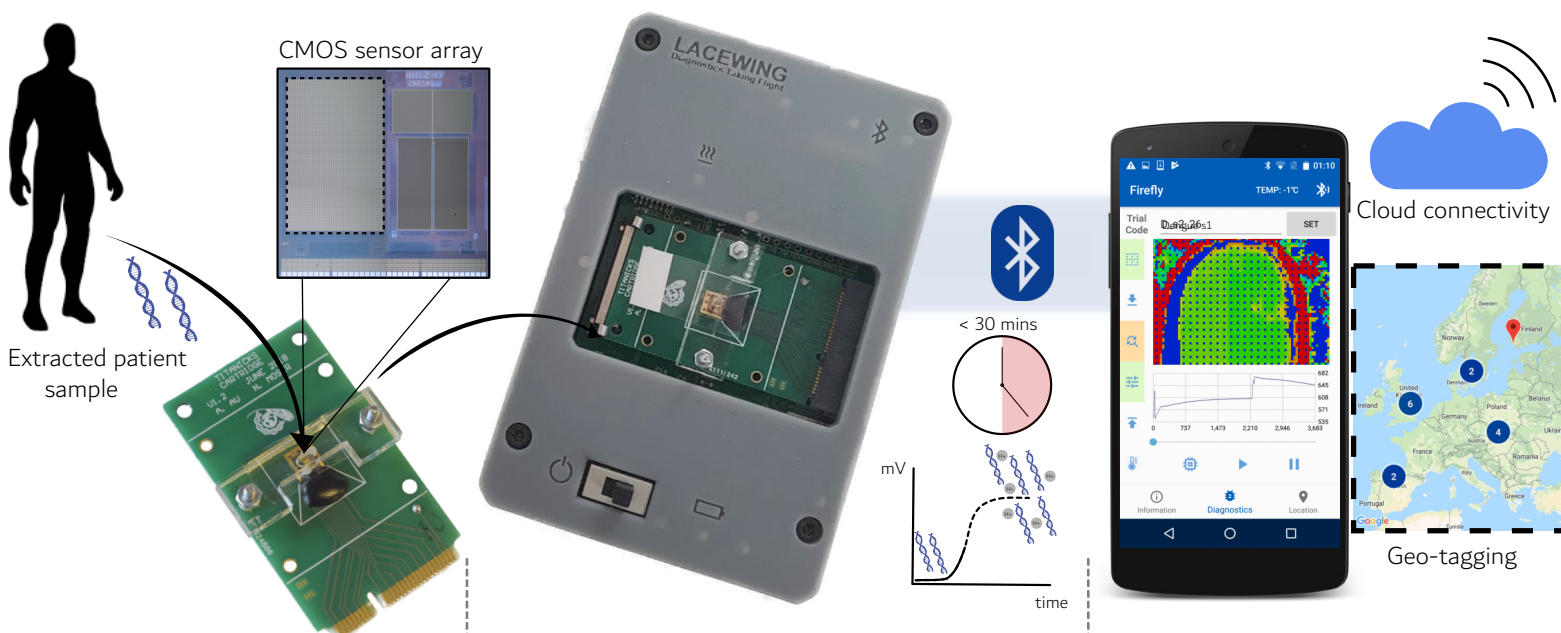


Handheld lab-on-a-chip diagnostic platform for rapid detection of COVID-19 and surveillance

Overview

- Our novel diagnostic test based on microchip technology addresses the need for new accessible diagnostics to be rapidly deployed in hospitals for testing front-line staff, enabling clinical management of infected patients and real-time tracking of the pandemic.
- The platform performs real-time amplification and detection of COVID-19 RNA using isothermal chemistries.
- Quantitative test results are provided on a smartphone application in under 20 minutes and synchronised to a cloud server for real-time tracking of disease progression and surveillance.



Disposable cartridge with mounted microchip integrating a 78x56 sensor array to perform chemical imaging. The reaction chamber contains the reaction mix for DNA and RNA amplification.

Handheld diagnostic device with emdedded microcontroller, rechargeable battery and temperature regulation to enable real-time DNA and RNA detection and amplification on-chip in under 20 minutes. Processed sensor data is sent via Bluetooth.

Android app for acquisition, storage and processing of patient data. Positive diagnosis are geo-tagged and synchronised on a cloud server for real-time surveillance.

Over the past years, Lacewing has been trialled with clinical samples around the globe.

London - Our labs



Ghana - Malaria infections



Taiwan - Dengue infections

