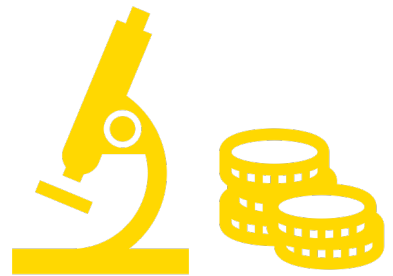


# Building a Lab on a Chip

## Digital Diagnostics for Africa Network

### The Problem

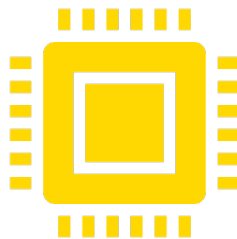
- ✘ In Africa, many poor communities don't have access to good diagnostic testing.
- ✘ This is because these tests usually take place in expensive, high-tech laboratories.



### The Solution

- ✔ With digital diagnostic technology, tests can be done quickly and cheaply, with no need for a lab.
- ✔ For example, The Digital Diagnostics for Africa Network have developed a lab-on-chip platform called Lacewing. Lacewing uses an array of sensors on a microchip to test for parasite DNA in a patient's blood.
- ✔ The test results can be sent to a smart phone app, so that healthcare staff can see in real-time whether the infection is spreading, and decide how to treat their patients.

This will be useful for diagnosing illness caused by parasites, like malaria.



**How do you think these experts helped to develop this technology?**

Biologists

Parasitologists

Electronic

Clinicians

Epidemiologists

Fieldworkers