



## Humane Technologies – affordable bio-discovery technology for citizen scientists

Humane Technologies has developed innovative and affordable laboratory equipment for life sciences researchers and citizen scientists. Its products are based on accessible technologies such as 3D printing and programmable microprocessors. They are made available as blueprints for self-construction, as do-it-yourself kits, or as ready-to-use devices, expanding access to the tools and technologies which are currently found only within fully-equipped research labs.



### Technology Overview

High-resolution data on microbial growth dynamics are routinely collected using bench-top spectrophotometers, but as well as being high cost, their proprietary nature makes it difficult for standardisation methods to be developed across devices. Humane Technologies' first product is the MicrobeMeter, which is a do-it-yourself (DIY), simple, yet robust photometer with continuous data-logging capability built using 3D-printing and open-source Arduino platform. A full open-source description of MicrobeMeter and its implementation is also provided for faster adaptation and future development by the scientific community.



### The Company

Humane Technologies was spun out of Warwick University's School of Life Sciences in 2018 following development of the technology over three years.

The founder, Dr Kalesh Sasidharan, was frustrated by the time spent taking samples and waiting to use the benchtop photometer. To buy another one would cost over £2,500 so he decided to build his own, and realised the sample-taking could be eliminated and by adding a wireless interface, measurements could be automated and data collected remotely.

### FUNDING TO DATE

2018 – Coventry University Enterprise POC grant – £4k  
2018 – WMG HMV Catapult – £14k  
2018 – Business Ready/Ignite – £4k  
2019 – Innovation Networks grant – £5k

### Next Steps

Humane Technologies launched its first two products – the MicrobeMeter and Measure-It – in June 2019, and two further products are in development. They are now seeking initial seed investment of £250k to scale-up production of current products and introduce the next products. They are also seeking to obtain regulatory and export clearances to access global market.

For further information please visit:  
[www.humanetechnologies.co.uk/](http://www.humanetechnologies.co.uk/)

Patents: n/a