

SPIN-OUT CASE STUDY 1:

PHENUTEST



Tackling global antimicrobial resistance with rapid, point-of-care diagnostics

- Sector: Medical diagnostics/Antimicrobial resistance
- £1M Innovate UK Grant Funding
- £750K from investors matched by £260K from UoL EIF*
- 7 full time employees

Urinary tract infections (UTIs) impact over 200 million people worldwide every year and account for more than 20% of prescribed antibiotics. Current diagnostics are slow, taking at least 48 hours, frequently leading to the wrong antibiotic being described and significantly contributing to the increasingly serious issue of antimicrobial resistance.

PhenUtest Diagnostics was spun out from the University of Liverpool in 2021, and with the support of the University's IP Commercialisation team is moving from strength to strength. Their 30-minute diagnostic can be used at point-ofcare, a low-cost test that can accurately identify which bacteria is causing the infection, ensuring the correct antibiotic is prescribed. As the UK population continues to age there are increasing rates of UTIs, and yet the market for point-of-care UTI testing is young, with little competition for a technology-based diagnostic providing a large return on investment for PhenUtest.

Originally developed by Dr Srijan Jindal (now Chief Scientific Officer for PhenUtest) through his PhD and Post-Doc research with Professor Doug Kell at the Institute of Systems, Molecular and Integrative Biology, the company now has seven full-time employees based in the Institute of Systems, Molecular and Integrative Biology, adding new positions in microbiology, engineering and leadership since spin-out.

PhenUtest has so far gained funding through grant applications and rounds of investment, with over £997k secured for the academic 2021/2022 year alone. This has included over £250k through the Innovate UK, Innovation to Commercialisation of University Research (ICURe) 'follow on funding' competition and £750k from private investors with an additional £260k from the University of Liverpool's Enterprise Investment Fund.* The company maintains two active partnerships with large industry players who are supporting the development of PhenUtest's technology. PhenUtest has recently won the "Innovation Challenge" organised by TBAT.

"Our technology will revolutionise the diagnosis and treatment of Urinary **Tract Infections. We will** provide cheaper, faster and more accurate antibiotic sensitivity results in under an hour at a point-of-care setting. This will massively decrease the number of samples reaching the overburdened and understaffed centralised testing facilities and help in combating the rising crisis of AMR."

Dr Srijan Jindal Chief Scientific Officer for PhenUtest