











NIHR Leeds Biomedical Research Centre



Mark Wilcox
AMR and Infection Theme

NIHR Leeds BRC

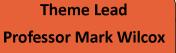
AMR and Infection Theme objective:

We will accurately identify patients at risk of infections, particularly for infections that are resistant to antibiotics

Our grand challenge is:

- To optimise diagnosis of life-threatening AMR infections, transforming patient care with targeted antimicrobial treatment, thereby driving down the collateral damage caused by healthcare associated infections and spread of multiresistant organisms
- We work collaboratively with clinical, academic and commercial partners to achieve this







Workstream One Lead Professor Mark Wilcox

Emerging Lead Dr Kerrie Davies

AMR and Infection Steering group

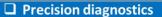
Clinicians, academics, policy, industry Workstream Two Lead Professor Alex O'Neill

Emerging Lead

Dr Jane Freeman



WS1. Targeted AMR Solutions



- AMR diagnostic testing and evaluation centre (AMR-TEC)
- Repurposing and optimising infection diagnostics
- Tackling disparities

Optimising Antimicrobial stewardship

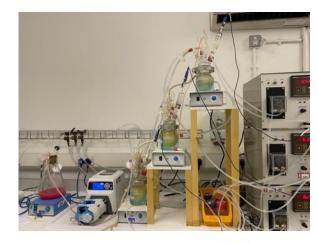


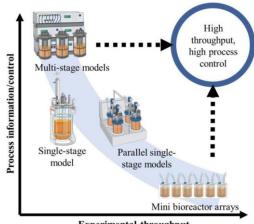


WS2. Translational pipeline for antimicrobial solutions

- Pre-clinical studies of antimicrobial agents
 - Gut model/Mini-model development
 - Industry engagement







Experimental throughput

Davis Birch WA, Moura IB, Ewin DJ et al. Microb Biotechnol. 2023 Jun;16(6):1312-1324.





AMR and Infection theme



WS1. Targeted AMR Solutions





- ☐ Precision diagn
 - AMR diagn and evalua (AMR-TEC)
 - Repurposir optimising diagnostics

Launch of seedcorn funding

> Clin Microbiol Infect. 2023 Oct;29(10):1222-1224. doi: 10.1016/j.cmi.2023.06.027. Epub 2023 Jun 28.

Hear my voice: involving patients in Clostridioides difficile infection research

Judith Strawbridge ¹, John Heritage ², Marcela Krůtová ³, Benoit Guery ⁴, Kerrie Davies ⁵, Fidelma Fitzpatrick ⁶, Jane Freeman ⁷

- Tackling disparities
- Optimising Antimicrobial stewardship

Launch of PhD on Disparity of CDI diagnosis

Submission of OVID-CDI grant application

☐ Translation into practice via clinical trials

Flagship Infection Diagnostics event with NHS England



/Mini-model ent ngagement





Questions

