

Press Release

Global AMR Challenge Receives a £5m Boost to Drive Diagnostics Innovation

Embargoed until 00:01 BST Thursday 26 September

<u>PACE</u> (Pathways to Antimicrobial Clinical Efficacy) has today launched its second funding round with up to £5 million available to support cutting-edge diagnostic projects. This funding is part of a broader £30 million investment to address the global challenge of antimicrobial resistance (AMR).

PACE is one of the UK's largest public-private initiatives targeting early-stage antimicrobial drug and diagnostic discovery. The pioneering partnership between LifeArc, Medicines Discovery Catapult (MDC) and Innovate UK is driving the development of new tests and treatments to tackle deadly AMR, which is predicted to kill 39.1 million people globally between 2025 and 2050.

Innovative diagnostics are urgently needed. Early diagnosis and appropriate management of infections will improve patient outcomes and experiences, and drive significant economic benefits. While some diagnostic tests are available, <u>most antibiotics are</u> <u>prescribed without a definitive diagnosis, especially in primary care settings</u>, where test results are often too slow to help healthcare professionals make timely treatment decisions.

Many <u>antibiotics in preclinical development</u> are seeking to overcome resistance by being more targeted. However, to ensure these antibiotics are used effectively, rapid diagnostics are essential to help clinicians identify the right treatment for the right patient at the right time. Research and innovation are needed to <u>improve the precision</u>, <u>speed</u>, <u>and usability of diagnostic tools</u>, <u>ensuring they</u> are fit for the specific healthcare setting in which they will be deployed</u>.

PACE's latest funding round will support a diverse portfolio of early-stage diagnostic projects, ranging from technical feasibility studies to early prototypes, across a range of technologies.

In this call for expressions of interest, PACE will support innovators to advance a diverse pipeline of early-stage *in vitro* diagnostics for use in primary care and hospital settings. These diagnostics will target bacterial infections with the highest disease burden and unmet patient need, with the potential to reduce inappropriate prescriptions, provide faster results to indicate which antibiotic should be used, and/or catalyse the move to personalised, narrow-spectrum treatments. Up to £5 million in funding is available for up to eight projects, with awards of up to £300,000 for technical feasibility studies and up to £1 million for product development projects. Eligible projects are expected to last up to two years and AMR innovators worldwide are encouraged to apply.

PACE is particularly interested in proposals covering diagnostic tests for urinary tract, respiratory tract and bloodstream infections, and sepsis, as they represent the highest antibiotic consumption and burden from AMR. Suggested solutions should aim to have <u>appropriate characteristics</u> for the setting for which they are intended. Proposals providing outcomes tailored to resource-limited settings, including in low- and middle- income countries are also highly encouraged.

Successful applicants will receive more than funding; PACE offers a collaborative approach to project development and delivery. Awardees will receive strategic support to align their innovations to the right developmental and translational pathways. This includes guidance on strengthening data packages, defining target product profiles, and facilitating engagement with regulators and other key stakeholders.



By bringing together and connecting UK national capability in AMR with innovators globally, PACE will empower awardees to develop their early-stage ideas and set them on the path toward further investment, clinical adoption, and patient impact.

Dr Beverley Isherwood, PACE Programme Director, said: "We are moving to an era when therapeutics will be more selective and potentially targeted to particular pathogens, which means diagnostic tools have an increasingly important role. Through this funding, PACE will provide a vital boost to innovators who are working to tackle the global challenge of AMR. By accelerating the development of much-needed tools to help with the early diagnosis and management of infections, we will help save lives."

How to Apply

Visit <u>https://paceamr.org.uk/funding/</u> to submit your application and register for the Diagnostic Innovations Funding Round informational webinar on Wednesday, 2 October 2024.

The deadline for applications is 23:59 GMT on Wednesday, 30 October 2024.

ENDS

Notes to Editors

AMR facts and figures

- AMR is one of the top 10 global public health threats which poses an urgent challenge.
- It has been estimated that 1.27 million deaths worldwide were attributable to infections caused by bacterial AMR in 2019.
- This number is estimated to rise to <u>10 million people every year by 2050 and cost the world >\$50 trillion if no action is</u> <u>taken</u>.
- AMR is a difficult challenge to address due to the continual evolution of microbial pathogens.
- Multidrug-resistant infections are increasing worldwide, and their management is hindered by both a lack of effective
 antimicrobials and challenges with diagnosis.

About PACE

PACE is a new approach to tackling one of the world's most complex health challenges – antimicrobial resistance (AMR). PACE's ambition is to work with the AMR community to help progress early-stage antimicrobial drug and diagnostic projects with greater speed, support and confidence – giving the best AMR innovations the greatest chance of success.

PACE will select, invest in and support projects that address the world's most threatening pathogens. It will deliver innovations for onward development and investment, moving them closer to clinical trials. Working together with the brightest and best, PACE will help tackle this rising threat to global health.

PACE was founded in 2023 by LifeArc, Innovate UK and Medicines Discovery Catapult, with a £30 million programme of funding and support to be deployed over five years.

About the PACE Partners

LifeArc is a self-funded charitable medical research organisation. It takes science ideas out of the lab and helps turn them into medical breakthroughs that can be life-changing for patients. LifeArc has been doing this for more than 25 years, and its work has contributed to five licensed medicines, including cancer drug pembrolizumab (Keytruda®), lecanemab for Alzheimer's (Leqembi), and a diagnostic for antibiotic resistance. LifeArc's teams are experts in drug and diagnostics discovery, technology transfer, and intellectual property.

Its work is in translational science – bridging the gap between academic research and clinical development, providing funding, research and expert knowledge, all with a clear and unwavering commitment to having a positive impact on patient lives. LifeArc is committed to spending £1.3 billion by 2030 in areas of high unmet medical need. LifeArc is a company limited by guarantee



(registered in England and Wales under no. <u>2698321</u>) and a charity (registered in England and Wales under no. <u>1015243</u> and in Scotland under no. SC037861). Find out more at <u>www.lifearc.org</u> or follow on <u>LinkedIn</u> or <u>Twitter</u>.

Innovate UK, part of UK Research and Innovation (UKRI), is the UK's innovation agency. It works to create a better future by inspiring, involving and investing in businesses developing life-changing innovations. Its mission is to help companies to grow through their development and commercialisation of new products, processes and services, supported by an outstanding innovation ecosystem that is agile, inclusive and easy to navigate.

Tackling infections is one of UKRI's strategic themes. It will bolster our national defence and response capabilities by tackling infectious diseases that pose threats to people, livestock, crops and natural resources in more integrated and innovative ways. It aims to better prepare for future disease epidemics and more effectively tackle the slow-moving pandemic of antimicrobial resistance.

More information: https://www.ukri.org/councils/innovate-uk/

Medicines Discovery Catapult (MDC) is an independent, not-for-profit innovation centre for drug discovery and part of the Catapult Network established by Innovate UK.

MDC's vision is to reshape drug discovery for patient benefit by transforming great UK science into better treatments through partnership. It supports drug discovery innovators by making world-class expertise, facilities, complex technologies and advanced analytics accessible to enable successful medicines discovery.

MDC develops pioneering, impactful R&D collaborations across biotech, academia, technology companies, charities, and global pharma. It brings these communities together in active, focused national programmes that target high-risk areas of patient need. In doing so, MDC helps to create a thriving UK drug discovery sector and translates the best of UK science into the best new treatments for the benefit of patients worldwide.

More information: https://md.catapult.org.uk/

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