

Antimicrobial resistance (AMR) is a serious emerging threat for patients and the healthcare systems. It has been anticipated by the Institute and Faculty of Actuaries in Britain that AMR has the potential to reduce Gross Domestic Product (GDP) by 3.5% globally and to kill an additional 10 million people by 2050, and as such the topic is of high importance to the public. Our working group will highlight the efforts made in the field by academics and industry alike and raise awareness on the urgency of action and proposes the use of an old nitrofurantoin drug for future development of potent antimicrobials by intense study of its use, potency, and the fundamental science behind its mode of action and resistance mechanisms. The inclusion of distinguished and prominent scientists in the field coming from different backgrounds will emphasize a multidisciplinary effort is needed to tackle the serious problem of AMR in a timely fashion.

- Full names and affiliations of all project partners

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Expertise: Structural biology of antibiotic resistance mechanisms*

*Laura Piddock, University of Birmingham, United Kingdom
Expertise: Microbiology of multidrug resistant pathogens*

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Expertise: Mechanisms and dynamics of the evolution of antibiotic resistance*

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Expertise: Medical microbiology, pharmacokinetics and pharmacodynamics*

*Peter Hawkey, University of Birmingham and West Midlands Public Health Laboratory, United Kingdom
Expertise: Public health and clinical microbiology*

*Sara Jabbari, University of Birmingham, United Kingdom
Expertise: Mathematical modeling in microbiology*

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Expertise: Nanotechnology, drug delivery and chemistry for healthcare*

*Thomas Wichelhaus, Goethe University Frankfurt, Germany
Expertise: Medical microbiology and infection control*

*Eugen Proschak, Goethe University Frankfurt, Germany
Expertise: Rational design of multi-target drugs*

*Annie Ducher, Chief Medical Officer DaVolterra (SME), Paris, France
Expertise: discovery programs and clinical development of antibacterial products against multi-resistant infectious diseases*