

## Medical Research Foundation National PhD Training Programme in AMR

**Annual Conference, Monday 12<sup>th</sup> – Tuesday 13<sup>th</sup> August 2019**

**Wills Memorial Building, Queen's Road, University of Bristol, BS8 1RJ**

### PROGRAMME

#### Day 1

Time	Event	Venue
12:00	<b>Registration</b>	Mezzanine and Great Hall
12:30	<b>Lunch and poster viewing</b>	
13:45	<p><b>Welcome address –</b>  <b>Prof Matthew Avison</b>, Academic Programme Lead, University of Bristol</p> <p><b>Introduction to the Medical Research Foundation National PhD Training Programme in AMR Research:</b></p> <p><b>Prof Danny Altmann</b>, Trustee, Medical Research Foundation</p>	Reception Room
14:05	<p><b>Opening address and keynote lecture –</b></p> <p><b>Prof Kevin Outterson</b>            Professor and N. Neal Pike Scholar in Health and Disability Law, Boston University and Executive Director &amp; Principal Investigator, CARB-X</p> <p>'Policy options for antimicrobial resistance'</p>	Reception Room
14:45	<p><b>Biology of AMR, Discovery Science and Technology Development - 1</b>  <b>Chair:</b> Prof Dov Stekel, University of Nottingham</p>	Reception Room
14:45	<p><b>Rebecca Hull, University of Sheffield</b>            'Local factors driving <i>Staphylococcus aureus</i> evolution during infection'</p>	
14:50	<p><b>Farhana Alam, University of Birmingham</b>            'Effects of fungal-bacterial interactions on AMR in biofilms'</p>	
14:55	<p><b>Carly Webb, Queen's University Belfast</b>            'Molecular mechanisms of biofilm formation by <i>Klebsiella pneumoniae</i>'</p>	

15:00	<b>Rebecca Mekler, University of St. Andrews</b> 'Investigating epigenetic regulation by Type 1 restriction modification DNA methylation in historic collection of <i>Staphylococcus aureus</i> isolates'	
15:05	<b>Emily Whittle, University of Birmingham</b> 'Using flow cytometry to measure antibiotic accumulation'	
15:10	<b>Severine Rangama, University of Warwick</b> 'Investigating the secretory mechanism of a beta-lactamase producing <i>E. coli</i> ST131'	
15:15	<b>Célia Souque, University of Oxford</b> 'Integrins and antibiotic resistance'	
15:20	<b>Emily Mulligan, University of Newcastle</b> 'Studying hydrolases from <i>E. coli</i> '	
15:25	<b>Sarah Dodd, University of Bristol</b> 'Nature's Silent Pharmacy: Mining fungal genomes in the discovery of novel antibiotics'	
15:30	<b>Pauline Lang, University of Oxford</b> 'Structural studies on Beta-Lactamases'	
15:35	<b>Simone Arienti, University of Edinburgh</b> Metabolic plasticity of inflammatory neutrophils during infection	
15:40	<b>Claire Housley, University of Nottingham</b> 'Re-mooving AMR cow-selection drivers using sorbent materials'	
15:45	<b>Refreshments and poster viewing</b>	Great Hall
16:30	<b>Biology of AMR, Discovery Science and Technology Development - 2</b> <b>Chair:</b> Prof Chris Dowson, University of Warwick	Reception Room
16:30	<b>Christian Møller-Olsen, University of Warwick</b> 'Investigation of the molecular and cellular mechanisms of in vitro phage therapy in human cells'	
16:35	<b>Kerry Roulston, Royal Free, University of London</b> 'Improved detection and diagnostic strategies for multi drug resistant (MDR) Enterobacteriaceae in high risk patients'	
16:40	<b>Catherine Rowland, University of Warwick</b> 'The impact of lipid environment on a <i>Streptococcus pneumoniae</i> PBP1a'	
16:45	<b>William Richardson, University of Nottingham</b> 'Elucidating binding of lead compounds to PqsR'	
16:50	<b>Emily Lythell, University of Bristol</b> 'Triangulation of the MCR mobile colistin resistance mechanism'	
16:55	<b>Chris Proctor, Ulster University</b> 'Controlled delivery of furanones for the inhibition of biofilm formation in chronic wound pathogens'	

17:00	<b>Hector Newman, University of Warwick</b> 'Investigation of target-mediated $\beta$ -lactam resistance in penicillin binding proteins'	
17:05	<b>Oluwashina Akinsanmi, Ulster University</b> 'Removal of antibiotic residues & antibiotic resistant bacteria from wastewater using lignocellulosic waste materials'	
17:10	<b>Nathalie Karky, Manchester Metropolitan University</b> 'Novel effective antimicrobials against multidrug resistant strains of <i>Klebsiella pneumoniae</i> '	
17:15	<b>Samantha Walker, University of Strathclyde</b> 'Functionalising gold nanoparticles with antimicrobial peptides to improve their antibacterial ability'	
17:20	<b>Closing remarks</b> <b>Prof Chris Dowson</b> , University of Warwick	Reception Room

## Day 2

Time	Event	Venue
09:30	<b>Welcome to Day 2</b> <b>Prof Henry Buller</b> , University of Exeter	Reception Room
09:35	<b>AMR in Agriculture and the Environment</b> <b>Chair:</b> Prof Henry Buller, University of Exeter	Reception Room
09:35	<b>Elizabeth Cresswell, University of Bristol</b> 'Antimicrobial resistance in smallholding farms'	
09:40	<b>Ryan Cook, University of Nottingham</b> 'Exploring the diversity of bacteriophage on the dairy farm and their potential for AMR transfer'	
09:45	<b>Kevin Chau, University of Oxford</b> 'Wastewater influent and population-level surveillance of AMR using metagenomic sequencing'	
09:50	<b>William Hutton, Liverpool School of Tropical Medicine/Centre for Ecology and Hydrology</b> 'Determining the environmental drivers of antibiotic resistance'	
09:55	<b>Angkana Lekagul, London School of Hygiene &amp; Tropical Medicine</b> 'Towards understanding the use of antibiotics in pigs in Thailand'	
10:00	<b>Hayley Marshall, University of Nottingham</b> 'Optimising the use of foot bathing for the prevention of lameness in sheep'	
10:05	<b>Henry Todman, University of Nottingham</b> 'Modelling the spread of antimicrobial and metal resistance in the flow of agricultural waste on a UK dairy farm'	

10:10	<b>Laura Bulson, University of Exeter</b> 'Interactions of agricultural and veterinary antibiotics with bee health and selection and dissemination on AMR'	
10:15	<b>Jennifer Shelton, NERC Centre for Ecology and Hydrology</b> '#ScienceSolstice: citizen science meets mycology'	
10:25	<b>Keynote lecture –</b>  <b>Prof Alison Holmes</b> Professor of Infectious Diseases, Faculty of Medicine, Imperial College London and Director, National Institute of Health Research (NIHR) Health Protection Research Unit in Healthcare Associated Infections and AMR  'Patient pathways and prescribing contexts'	Reception Room
10:55	<b>Refreshments and poster viewing</b>	Great Hall
11:30	<b>AMR and Antimicrobial Use: One Health and Human Medicine</b> <b>Chair:</b> Prof Alison Grant, London School of Hygiene & Tropical Medicine	Reception Room
11:30	<b>Alice Tompson, London School of Hygiene and Tropical Medicine</b> 'Antibiotic use in the care of pet dogs'	
11:35	<b>Federica Boiocchi, Aston University</b> 'Indoor arthropods and associated bacterial communities'	
11:40	<b>Houda Bennani, Royal Veterinary College</b> 'Evaluating antimicrobial resistance surveillance in the UK from a One Health perspective'	
11:45	<b>Dr Bern-Thomas Nyang'wa, London School of Hygiene &amp; Tropical Medicine</b> 'The population pharmacokinetics and pharmacodynamics of investigational regimens in the TB-PRACTEAL trial'	
11:50	<b>Sara Gardner, Ulster University</b> 'Modelling the impact of antibiotic use and infection control agents on the incidence of methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)'	
11:55	<b>Victoria Carr, King's College, London</b> 'Metagenomic insights into the resistome and phageome of the oral cavity and gut'	
12:00	<b>Ellen Young, University of Edinburgh</b> 'Urinary catheters'	
12:05	<b>Ahmed Raza, University of Dundee</b> 'Characterising antimicrobial resistance in care homes using whole genome sequencing'	
12:10	<b>Fergus Watson, University of Southampton</b> 'The prevalence and relevance of hospital biofilms'	

12:15	<b>Dr Louise Hill, St. George's, University of London</b> 'Determining optimal dosing and duration of vancomycin to maximise clinical efficacy while minimising toxicity and selection of antimicrobial resistance in the treatment of Gram-positive neonatal sepsis'	
12:20	<b>Lunch and extended poster session (judging)</b> Presenters to be stood by their posters at the following times, please:  <b>12:30 – 13:10 Group 1:</b> AMR Discovery Science and Technology Development  <b>13:10 – 13:50 Group 2:</b> AMR in Agriculture and the Environment  <b>13:50 – 14:30 Group 3:</b> AMR and Antimicrobial Use: One Health and Human Medicine, Interventions and Behaviours  <b>14:30 – 15:10 Group 4:</b> Biology of AMR	Great Hall  <b>Judges:</b> Prof Christoph Walti & Dr Jessica Boname (MRC)  Prof Mark Holmes & Dr Andrew Singer  Prof Danny Altmann & Kerry Young (ESRC)  Prof Chris Dowson & Dr Stephen Webb (BBSRC)
15:15	<b>Diagnostics, Interventions and Behaviours</b> <b>Chair:</b> Prof Matthew Avison, University of Bristol	Reception Room
15:15	<b>Declan Kohl, University of Leeds</b> 'Engineering of rapid, point-of-care diagnostics for reduction of AMR'	
15:20	<b>Daniel Buhl, University of Cambridge</b> 'Rapid Identification of bacteria and AMR directly from clinical samples using mass spectrometry'	
15:25	<b>Shirin Aliabadi, Imperial College London</b> 'Mapping and evaluating interventions targeting AMR across the English healthcare economy'	
15:30	<b>Becky McCall, University College London</b> 'Storytelling to understand perceptions and behaviours around AMR'	
15:35	<b>Birgitta van Bodegraven, University of Manchester</b> 'Are interventions aimed at reducing antibiotic prescribing in UK primary care effective?'	
15:40	<b>Camille Simonet, University of Edinburgh</b> 'Prioritizing efforts in disease management and AMR control'	
15:45	<b>Nidhee Jadeja, Imperial College London</b> 'A systems thinking-based evaluation of the behavioural drivers of AMR: economic and epidemiological perspectives'	
15:50	<b>Prize giving for best posters</b> Prof Danny Altmann	Reception Room  Sponsored by the Medical Research Foundation

16:00	<b>Closing remarks</b> Prof Matthew Avison, Academic Programme Lead	Reception Room
16:05	<b>Refreshments and networking –</b> Please collect your luggage from Room 1.5 first but you are welcome to stay on, have a drink and network in the Great Hall. The room is available until 17:00  Please don't forget to collect your poster.	Great Hall
16:10	<b>Leadership Team meeting</b> (Leadership team only)	Room 1.5
18:45	<b>Drinks and conference dinner</b> (for core-funded cohorts, residential training cohort and Leadership Team)	<a href="#">Mud Dock Café</a> 40 The Grove, Bristol BS1 4RB