



Emergence and Dissemination of Antibiotic Resistance in Adsorption Processes for Water Treatment

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Medical Research Foundation National PhD Training Programme in AMR Research

Annual Conference

Monday 8th – Tuesday 9th August 2022

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

FINAL PROGRAMME

Day 1 – Monday 8 August

| Time | Event | Venue |
|-------|--|--------------------------|
| 12:00 | Registration | Mezzanine and Great Hall |
| 12:30 | Lunch and poster viewing | |
| 13:45 | Welcome address – Prof Matthew Avison , Academic Programme Lead, University of Bristol | Reception Room |
| 14:00 | Keynote lecture (Chaired by Prof Matthew Avison) Dr Catrin Moore Department of Infection and Immunity, St George's, University of London and Member of the Advisory Group for Critically Important Antimicrobials, World Health Organisation 'The Global Burden of AMR: Lessons Learned from GRAM and How This Evidence is Informing New Studies' | Reception Room |
| 14:40 | Antimicrobial Prescribing During the COVID-19 Pandemic Dr Wendy Thompson, University of Manchester 'Procedures Not Prescriptions Cure Toothache. Why COVID-19 Restrictions Caused Problems' | Reception Room |
| 14:55 | Laura Ciaccio, University of Dundee 'Effects of COVID-19 in Antibiotic Prescribing, Healthcare Utilization, and <i>E. coli</i> Resistance' | |
| 15:05 | Towards New Diagnostics, Drug Targets and Alternative Therapies Chair: Declan Kohl, University of Leeds Rebecca Hull, University of Sheffield 'Impact of Antimicrobial Resistance on Killing of <i>Staphylococcus aureus</i> by Immune Peptide LL-37' | Reception Room |

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| 15:20 | Jonny Burnett, University of Warwick 'Assays Old and New, Developing New Methods to Analyse the Kinetics and Turnover of Antibiotics Against Penicillin Binding Proteins' | |
| 15:35 | Dr Alen Krajnc, University of Ljubljana '(Bi)Cyclic Boronates: Magic Bullets Against Multi-Drug Resistant Bacteria?' | |
| 15:50 | Sarah Dodd, University of Bristol 'Mining Fungal Genomes in the Discovery of Novel Antibiotics' | |
| 16:05 | Refreshments and posters (30 mins) | Great Hall |
| 16:35 | Towards New Diagnostics, Drug Targets and Therapies cont. Chair: Declan Kohl, University of Leeds Daniel Buhl, University of Cambridge 'Novel Diagnostic Methods for Bacterial Infections' | Reception Room |
| 16:50 | Karen Adler, University of Leicester 'Optimisation of Bacteriophage Cocktail for Treatment of Antibiotic-Resistant Urinary Tract Infections' | |
| 17:05 | Dr Laia Pasquina Lemonche, University of Sheffield 'Antibiotic Effects on the Bacterial Cell Wall of Gram-Positive Species: A Look at the Nanoscale with Atomic Force Microscopy' | |
| 17:20 | Closing remarks Prof Chris Dowson, University of Warwick | Reception Room |
| 17:25 - 18:30 | Drinks reception – networking and poster session | Great Hall |

Day 2 – Tuesday 9 August

| Time | Event | Venue |
|-------|---|----------------|
| 09:10 | Welcome to Day 2 Dr Charis Marwick, University of Dundee | Reception Room |
| 09:15 | AMR Surveillance in One Health; Healthcare Settings, Natural and Farmed Environments Chair: Beatriz Llamazares (University of Bristol) William Matlock, University of Oxford ' <i>Enterobacteriales</i> -associated plasmid sharing amongst human bloodstream infections, livestock, wastewater, and waterway niches: a genomic surveillance study in Oxfordshire, UK' | Reception Room |
| 09:30 | Jordan Sealey, University of Bristol 'An Oasis of Resistant <i>Escherichia coli</i> in Animals in an Inner-City Zoo' | |
| 09:45 | Ryan Cook, University of Nottingham 'Hybrid Assembly of an Agricultural Slurry Virome Reveals a Diverse and Stable Community with the Potential to Alter the Metabolism and Virulence of Veterinary Pathogens' | |

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| 10:00 | Kevin Chau, University of Oxford 'Wastewater Surveillance of AMR in Human Populations' | |
| 10:15 | Refreshment break (30 minutes) | Great Hall |
| 10:45 | Keynote lecture (Chaired by Dr Nicole Stoesser, University of Oxford) Prof Iruka Okeke Professor of Pharmaceutical Microbiology, University of Ibadan, Nigeria 'Genomic Surveillance Under Nigeria's first Antimicrobial Resistance National Action Plan' (via Zoom) | Reception Room |
| 11:25 | AMR Surveillance in One Health; Healthcare Settings, Natural and Farmed Environments (cont.) Chaired by Dr Nicole Stoesser, University of Oxford Ahmed Raza, University of Dundee ' <i>Escherichia coli</i> Bacteraemia Antimicrobial Resistance: Bacterial Whole Genome Sequencing Linked to Patient Data' | Reception Room |
| 11:40 | Winnie Lee, University of Bristol 'Genomic Analysis to Understand Non-Typhoidal <i>Salmonella</i> Carriage: <i>Salmonella</i> Agona – the Bug That Won't Go Away' | |
| 11:55 | AMR and Antimicrobial Use: Behaviours and Interventions Chair: Claire Scott (University of Bristol) Nidhee Jadeja, Imperial College London 'The Path of Least Resistance: Infection Prevention and Control! A Systems Approach to Address the Drivers of AMR in Hospitalised Neonates in Botswana' | Reception Room |
| 12:10 | Esther Rottenburg, London School of Hygiene and Tropical Medicine 'WASH-ing AMR: Stitching and Unstitching Bacteria's Pathways' | |
| 12:25 | Ashleigh Myall, Imperial College London 'Integrating Multimodal Data to Improve Clinical CPE Outbreak Investigations' | |
| 12:40 | Becky McCall, University College London 'Story Bug: Personal Stories are Powerful – How Might They Influence Public Intentions, and Potentially Behaviours, to Help Mitigate the Emergence and Spread of Antibiotic Resistance?' | |
| 12:55 | Lucy Miller, Imperial College London 'Estimating the Burden of Respiratory Syncytial Virus Attributable Primary Care Antibiotic Prescriptions in England' | |

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| <p>13:10 to 15:00</p> | <p>Lunch and extended poster session (judging)</p> <p><i>Group 1 and 2 presenters and judges go to lunch first, please</i></p> <p>Presenters to be stood by their posters at the following times, please:</p> <p>13:30 – 14:10 Group 1: AMR Discovery Science and Technology Development</p> <p>13:30 – 14:10 Group 2: AMR in One Health; Healthcare Settings; Natural and Farmed Environments</p> <p>14:10 – 14:50 Group 3: AMR and Antimicrobial Use: Interventions and Behaviours</p> <p>14:10 – 14:50 Group 4: Biology of AMR</p> | <p>Great Hall</p> <p>Judges</p> <p>Prof Chris Dowson, Dr Andy Bailey & Prof Mark Holmes</p> <p>Dr Nicole Stoesser, Dr Charis Marwick & Prof Henry Buller (tbc)</p> <p>Dr Nicole Stoesser, Dr Charis Marwick & Prof Henry Buller (tbc)</p> <p>Prof Chris Dowson, Dr Andy Bailey & Prof Mark Holmes</p> |
| <p>15:05</p> | <p>Video competition showreel Prof Matthew Avison, Academic Programme Lead, University of Bristol</p> | <p>Reception Room</p> |
| <p>15:40</p> | <p>Prize giving for best posters and videos</p> <p>Prof Matthew Avison, University of Bristol (posters) Clare Soares, Medical Research Foundation (videos)</p> | <p>Reception Room</p> |
| <p>15:55</p> | <p>Closing remarks Prof Matthew Avison, Academic Programme Lead, University of Bristol</p> | <p>Reception Room</p> |
| <p>16:00</p> | <p>Conference close Please collect your luggage from Room 1.5 first but you are welcome to stay on and do some final networking in the Great Hall - the room is available until 17:00. Please don't forget to collect your poster!</p> | <p>Great Hall</p> |
| <p>18:45</p> | <p>Drinks and conference dinner (for the residential training cohort, Leadership Team and guests)</p> | <p>Mud Dock Café 40 The Grove, Bristol BS1 4RB</p> |