ANTIBIOTIC DISCOVERY ACCELERATOR NETWORK (ABX)

VIRTUAL WINTER MEETING PROGRAMME 2021

Friday 17th December 2021

10:00 - 10:10 **Introduction**
Professor Mat Upton
Professor of Medical Microbiology – University of Plymouth

10:10 - 10:20 **Eliciting antimicrobial production using low level antibiotics**
Dr Amy McLeman
Postdoctoral Research Associate – Liverpool School of Tropical Medicine

10:20 - 10:30 **Old drug with new (re)purposes: Thioridazine as a new effective antimicrobial**
Daniela Alves Ferreira
Postdoctoral Fellow – Trinity College Dublin

10:30 - 10:50 **Antibiotics: New approaches required to address a failed market and failing research landscape?**
Professor Chris Dowson
Professor of Microbiology – University of Warwick

10:50 - 11:00 **Flash talks:**

Applying droplet fluidics for tuberculosis drug discovery
Antonia Molloy
PhD Student – Aston University

The discovery and characterisation of antimicrobials that enhance pyrazinamide activity against Mycobacterium tuberculosis
Eleanor Porges
PhD Student – UK Health Security Agency

Molecular mechanisms of spirotetronate antibiotic biosynthesis

Rebecca Clayton
PhD Student – The University of Warwick

11:00 - 11:05 **Break**

11:05 - 11:15 **A switch in focus: targeting AcrA dynamics to inhibit the AcrAB-TolC multidrug efflux pump**
Benjamin Lewis
PhD student – King's College London

11:15 - 11:25 **Altering adeABC Antibiotic Sensitivity Response with Quadruplex DNA**
Chisom Meludu
PhD Candidate and Associate Lecturer- Anglia Ruskin University

11:25 - 11:35 **Defining the role of efflux in bacterial biofilm formation and antimicrobial resistance to develop new treatments for infection**
Vicky Bennett
PhD student - University of Bath

11:35 - 11:45 **In vitro efficacy of relebactam versus avibactam against Mycobacterium abscessus complex**
Dr James Harrison
Postdoctoral Researcher– Aston University

11:45 - 11:55 **Antimicrobial resistance associated with Northern Irish calf houses**
Katie Lawther
PhD student – Queen's University Belfast

11:55 - 12:05 **Flash talks:**

Investigation into bacterial siderophores and their uses as novel therapeutics
Alazhar Colombowala
Research Assistant – Anglia Ruskin University

Innate Immune Factors as Antibiotic Replacements
Rushiil Ravichandran
IRC Enterprise Partnership Scholar – Trinity College Dublin

Macrophage-induced persisters; developing a scaffold for testing novel compounds against phenotypically resistant Mycobacterium tuberculosis
Suzie-Hingley-Wilson
Lecturer in Bacteriology – University of Surrey

12:05 - 12:10 **Break**

12:10 - 12:20 **Marine natural products as a source of new or novel antimicrobials – investigating hosts and microbial symbionts as producers**
Dr Grant Garren January
Research Fellow – University of Plymouth

12:20 - 12:30 **Marine derived Streptomyces microflavus producing antimicrobial compounds active against Gram positive pathogens**
Jazz Conway
PhD Student – University of Plymouth

12:30 - 12:40 **High-throughput approaches to chemotype and phenotype Pseudomonas aeruginosa (and other bacteria)**
Hannah Doherty
PhD student – University of Birmingham

12:40 - 12:50 **Prevalence of multidrug resistance in Pseudomonas spp. Isolated from wild bird faeces in an urban aquatic environment**
Dr Caray Walker
Senior Lecturer in Microbiology – Anglia Ruskin University

12:50 - 13:00 **Flash talks:**

Using Microbiome-derived antimicrobials to treat Acinetobacter baumannii
Peter Alexander
Postgraduate Research Student – Queen's University Belfast

Mapping Antarctic Marine Biodiversity: the diversity of microbes and antimicrobial discovery
Kudzai Hwengwere
PhD Candidate – Anglia Ruskin University, University of Plymouth, and British Antarctic Survey

13:00 - 13:30 **Lunch**

13:30 - 13:40 **Developing novel antibacterial agents targeting bacterial DNA gyrase**
Professor Tony Maxwell
Group Leader – John Innes Centre

13:40 - 13:50 **Chemoenzymatic synthesis of NDP sugars as chemical biology tools to explore the GDP-D-mannose dehydrogenase from Pseudomonas aeruginosa**
Professor Gavin Miller
Professor of Biological Chemistry – Keele University

13:50 - 14:00 **Antimicrobial efficacy of XF-73 against Gram-positive microorganisms**
Isabella Romeo-Melody
PhD Student – Aston University

14:00 - 14:30 **(New) Pathways to antibiotic approval: Implications for R&D**
Dr John Rex
Editor-in-Chief – AMR Solutions

14:30 - 14:45 **Questions**

14:45 - 16:00 **Discussion to end**

16:00 **Finish**