



**UNIVERSITY OF
PLYMOUTH**
Faculty of Medicine and
Dentistry



The First ABX Summer Meeting

11th – 12th July 2019

TRAINING ROOMS 2 & 3, THE FOUNDATION BUILDING

THE EDEN PROJECT, BODELVA, CORNWALL PL24 2SG

PROGRAMME

Thursday 11th July

- 11:30 - 12:00 Arrival and registration
- 12:00 - 12:30 Overview of ABX and buffet lunch
- 12:30 - 12:40 **Introduction**
Professor Mat Upton – University of Plymouth
- 12:40 - 12:50 **Extreme Antimicrobial Discovery**
Dr Garry Farnham – University of Plymouth
- 12:50 - 13:00 **Good drugs for bad bugs: *Finding new antibiotics for tuberculosis***
Dr Jonathan Cox – University of Aston
- 13:00 - 13:10 **DNA topoisomerases as targets for antibacterial chemotherapy**
Professor Tony Maxwell - John Innes Centre Norfolk
- 13:10 - 13:20 **Bioprospecting for novel, natural product-based antibiotics from deep-sea sponges**
Dr Catherine Back – University of Bristol
- 13:20 - 13:30 **Metagenomic sample selection: A guided approach to Natural product discovery?**
Sam Williams – University of Bristol
- 13:30 - 13:40 **DNA Quadruplexes in Antimicrobial Resistance Gene Regulation**
Dr Christopher O'Kane – Anglia Ruskin University
- 13:40 - 13:50 **Integrative structural biology of tripartite efflux-pumps and the cell envelope in Gram-negative bacteria**
Dr Vassiliy Bavro – University of Essex
- 13:50 - 14:00 **Simulation-guided de novo design of antimicrobial peptides**
Dr Martin Ulmschneider – King's College London
- 14:00 - 14:20 **Break**

- 14:20 - 14:30 **Understanding mechanisms of antibiotic toxicity and searching for new antimicrobials**
Dr Mark Shepherd – University of Kent
- 14:30 - 14:40 **Biologics Drug Discovery in Infectious Diseases**
Dr Soumya Palliyil – University of Aberdeen
- 14:40 - 14:50 **Green pharmacy in antibiotic development – prolonging efficacy by prioritising compounds least likely to select for resistance**
Dr Aimee Murray – University of Exeter
- 14:50 - 15:00 **Interference with the E. faecalis pCF10 pheromone responsive plasmid system**
Amy Sterling – Ulster University
- 15:00 - 15:10 **Cell-free synthetic biology for natural products**
Dr Simon Moore – University of Kent
- 15:10 - 15:20 **Cross-resistance and collateral sensitivity between clinical antibiotics and natural antimicrobials: the case of Cornish seaweeds**
Michiel Vos – University of Exeter
- 15:20 - 15:30 **Promoting the Antarctic as an ecosystem for antibiotic discovery**
Professor Melody Clark – British Antarctic Survey
- 15:30 - 15:40 **Integrating interdisciplinary approaches to tackle antibiotic resistance in tuberculosis (TB)**
Professor Sanjib Bhakta – University of London
- 15:40 - 16:00 **Old drugs learn new tricks: drug repurposing as a strategy to uncover effective antibacterials**
Dr Marta Martins – University of Dublin
- 16:00 - 16:10 **Boolean modelling of Pseudomonas aeruginosa virulence and quorum sensing networks**
Dr Marie Lisandra Zepeda Mendoza – University of Birmingham
- 16:10 - 16:20 Summary of first day- focus for tomorrow
- 16:20 - 18:00 Breakout at Eden Project - closes at 18:00
- 18:00 Transport to hotel
- 19:30 Evening meal at Carlyon Bay Hotel

Friday 12 July

- 09:00 - 10:30** Smaller discussion in 3 or 4 groups. Example topic ideas: natural/ products/ synthetic/ chemical. Bottlenecks/ issues.
- 10:30 - 11:00** Break
- 11:00 - 13:00** Round table meeting – addressing bottlenecks. How to take ABX further. Potential soil sample provided by the Eden Project for all attendees to work on using their expertise. Consolidate expertise information for registry. Talk about second meeting.
- 13:00** Finish