

Author	Title of abstract	Theme/Session	Poster number
Huiluo Cao	Global overview of the origin and expansion of <i>Staphylococcus aureus</i> Clonal Complex 59	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	4
Jia Yee Ho	Genome-resolved profile of antimicrobial resistant bacteria in wastewater through culture-enriched metagenomics	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	5
Calvin Chow	Diversity and antimicrobial resistance profile of <i>Enterococcus faecalis</i> in environmental samples	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	6
Trevor Tan	Utility of whole genome sequencing for detection of carbapenemase production in mCIM positive, Xpert Carba-R negative <i>Klebsiella pneumoniae</i> .	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	10
Xiaoqiong Gu	Gut Ruminococcaceae levels at baseline correlate with risk of antibiotic-associated diarrhea	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	11
Yaoping Liu	Rapid antimicrobial resistance gene expression profiling of low-abundance samples by electrostatic microfiltration-enabled pathogen enrichment interfacing nanopore direct RNA sequencing	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	12
Yerim Kim	Targeting autophagy to combat chronic urinary tract infections	The AMR Burden – Epidemiology, Population genetics, and Horizontal gene transfers	13
Lian Zheng Jie (Zack)	Genetic basis of I-complex plasmid stability and conjugation	Plasmid transmission and Evolution of Resistance	16
Wen Wen Low	Characterization of entry exclusion phenotypes in clinically relevant IncP plasmids	Plasmid transmission and Evolution of Resistance	17
Yahua Chen	Killing of low- and non-receptive recipients by a multidrug-resistant conjugative plasmid	Plasmid transmission and Evolution of Resistance	18
Chendi Zhu	Tracing the floating of antimicrobial resistance in <i>E. coli</i> across diverse hosts	Plasmid transmission and Evolution of Resistance	19
Guodong Oo	Restriction modification systems play a major role in carbapenemase-encoding plasmid acquisition in hvKp	Plasmid transmission and Evolution of Resistance	20
Piklu Roy Chowdhury	Are we using genomic epidemiology to its maximum capacity in AMR research?	Plasmid transmission and Evolution of Resistance	21

Michelle M. Mitchener	Uncovering a role for epitranscriptomic changes in <i>E. faecalis</i> growth and biofilm formation	Biofilms and microbiome	22
Rutuparna Kulkarni	MICROCOLONY DIFFUSION ANALYSIS ACROSS BIOFILMS USING SINGLE MOLECULE SPECTROSCOPY AND MICROSCOPY	Biofilms and microbiome	23
Stacey-Ann LEE	Hypervirulent <i>Klebsiella pneumoniae</i> induces bile dysbiosis during invasive gut infection	Biofilms and microbiome	24
Tan Si Yin	Investigating the Attachment of <i>Streptococcus pneumoniae</i> to the Host Cells	Biofilms and microbiome	25
Jingjing Sun	A platform for high-throughput tRNA modification profiling: Linking the tRNA epitranscriptome to metabolic pathways in <i>Pseudomonas aeruginosa</i>	Mechanisms of Drug Resistance	26
Wee Boon Tan	Primary role of the Tol-Pal complex in bacterial outer membrane lipid homeostasis	Mechanisms of Drug Resistance	27
Khoo Bo Yan	Evaluation of NG-Test CARBA 5 version 2, Cepheid Xpert Carba-R, and carbapenem inactivation methods in comparison to whole-genome sequencing for the identification of carbapenemases in non-fermenting Gram-negative bacilli	Mechanisms of Drug Resistance	28
Kumaravel Kandaswamy	Phytochemicals from <i>Combretaceae</i> spp Reduces the Emergence of Small Colony Variants both in single and dual species biofilms model systems	Mechanisms of Drug Resistance	29
Ngo Ngoc Phuong Thuy	The in vitro evolution and impact of azithromycin resistance mutations in <i>Salmonella</i> Typhi	Mechanisms of Drug Resistance	30
Zeus J. Nair	Combinatorial Genetic Approach to Disrupt Biofilm-associated Antimicrobial Resistance in <i>Enterococcus faecalis</i>	Mechanisms of Drug Resistance	31

Wilfried MOREIRA	Screening of the PA14NR transposon mutant library identifies genes involved in resistance to bacteriophage infection in <i>Pseudomonas aeruginosa</i>	Mechanisms of Drug Resistance	32
Justin Zik	A dual transposon sequencing (Dual-TnSeq) system to probe genome-wide genetic interactions in bacteria	Mechanisms of Drug Resistance	33
Cheam Guoxiang	Identifying minimum bacterial consortia to exert colonization resistance against <i>Klebsiella pneumoniae</i>	Vaccines, Alternative Therapies, and Drug discovery	34
Jun Hao Liew	DESIGNING OF A LAYERED PHAGE COCKTAIL AGAINST MULTI-DRUG RESISTANT MYCOBACTERIUM ABSCESSUS OF SMOOTH MORPHOTYPE	Vaccines, Alternative Therapies, and Drug discovery	35
Ning Li	Guanidinium-Perfunctionalized Multivalent Molecular Spheres as Highly Potent Antimicrobials against Planktonic Cells and Biofilm	Vaccines, Alternative Therapies, and Drug discovery	36
Belicia Sok Yee Chan	Investigation of the antimicrobial activity of <i>Andrographis paniculata</i> (AP) (Burm. f.) Nees	Vaccines, Alternative Therapies, and Drug discovery	37
Benjamin Sian Teck Lee	Characterization of a <i>Plasmodium falciparum</i> epitranscriptomic enzyme in the quest for novel antimalarial drug targets	Vaccines, Alternative Therapies, and Drug discovery	38
Boon Chong GOH	Engineered phage lysins as novel antibacterial agents	Vaccines, Alternative Therapies, and Drug discovery	39
Boon Chong GOH	A synergistic antibiotic combination against pulmonary NTM	Vaccines, Alternative Therapies, and Drug discovery	40
Jong-Seok Kim	Isoegomaketone Exhibits Potential as a New <i>Mycobacterium abscessus</i> Inhibitor	Vaccines, Alternative Therapies, and Drug discovery	41
Joseph Sungminshin	Exploring the Membrane-Active Interactions of Long-Chain Fatty Acids and Liposomal Fatty Acids for Antibacterial Applications	Vaccines, Alternative Therapies, and Drug discovery	42

LALIT MOHAN	FORMULATION OF AN EFFECTIVE PHAGE COCKTAIL FOR THE TREATMENT OF SEQUENCE TYPE 2 ACINETOBACTER BAUMANNII STRAINS	Vaccines, Alternative Therapies, and Drug discovery	43
Li Jianguo	Development of natural product based peptidomimetics targeting multi-drug resistant bacteria	Vaccines, Alternative Therapies, and Drug discovery	44
Liang Cui	LC/MS analysis of DNA modifications in mycobacteriophage Muddy	Vaccines, Alternative Therapies, and Drug discovery	45
Matti Jalasvuori	Phagenomics: an online platform for bacteriophage analysis – streamlining the path towards phage therapy	Vaccines, Alternative Therapies, and Drug discovery	46
Michelle Novais de Paula	Synergy in action: octapeptins potentiate repurposed drugs against antimicrobial resistance	Vaccines, Alternative Therapies, and Drug discovery	47
Ming Li	Degradable cationic polyimidazoliums synergize with colistin to exert strong bactericidal killing in colistin-resistant carbapenem-resistant Enterobacteriaceae (CRE) clinical isolates.	Vaccines, Alternative Therapies, and Drug discovery	48
Nurul Ayuni Norman	Strategic combination of phages for potential therapeutic application against Klebsiella pneumoniae	Vaccines, Alternative Therapies, and Drug discovery	49
Zhang Dong	Unveiling the antibacterial effect of membrane-intercalating conjugated oligo-electrolytes (COEs) and their impact on bacterial membrane composition	Vaccines, Alternative Therapies, and Drug discovery	50
Raksha Anand	Green Nanoparticle-Based Broad-Spectrum Biocidal Activity and Potential Enhancements	Vaccines, Alternative Therapies, and Drug discovery	51
Ron Chanvutha	PHAGE SUSCEPTIBILITY AND PHAGE RESISTANCE OF HYPERVIRULENT KLEBSIELLA PNEUMONIAE SEQUENCE TYPE 86 MEDIATED BY KL2-SPECIFIC PHAGES	Vaccines, Alternative Therapies, and Drug discovery	52
Ronni A G da Silva	Deploying vancomycin as the Achilles' heels of vancomycin resistance	Vaccines, Alternative Therapies, and Drug discovery	53

Shobana Rajaramon	Smart PVA Hydrogel Loaded with Ciprofloxacin and 5-NPPP for Targeted Treatment of Staphylococcus aureus Skin Infections: A Bioisosteric Approach	Vaccines, Alternative Therapies, and Drug discovery	54
Si-Nguyen T. Mai	Bacterial antagonistic interactions for suppressing multidrug-resistant Klebsiella pneumoniae	Vaccines, Alternative Therapies, and Drug discovery	55
Sumin Choi	Re-Sensitizing Colistin-Resistant Gram-Negative Pathogens Using Predatory Microbes	Vaccines, Alternative Therapies, and Drug discovery	56
Yushu Chen	A conserved membrane protein negatively regulates Mce1 complexes in mycobacteria	Vaccines, Alternative Therapies, and Drug discovery	57
Vaz S. S. Gnanam	Bactfast®: Enhancing ICU care through the identification of bacteria and Antimicrobial resistance (AMR) information using Next-generation Sequencing (NGS)	Industry Perspectives on AMR Solutions	9
Kai Yee Toh	Prevalence of Klebsiella pneumonia (Kp) carriage in Singapore healthy population assessed by metagenome-assembled genomes	Biofilms and microbiome	58