



# Antimicrobial Chemotherapy Conference

6 – 7 February 2024

**This virtual conference is jointly organised by GARDP and BSAC. For ACC2024, the collaborating organisations are the European Clinical Research Alliance on Infectious Diseases (Ecraid) and the Netherlands Antibiotic Development Platform (NADP)**



**ecraid**



More information about ACC2024 as well as previous and future ACC conferences can be found here: [www.acc-conference.com](http://www.acc-conference.com)

Learn more about the conference organisers and collaborators:

GARDP: [www.gardp.org](http://www.gardp.org)

BSAC: [www.bsac.org.uk](http://www.bsac.org.uk)

Ecraid: [www.ecraid.eu](http://www.ecraid.eu)

NADP: [www.adp.nl](http://www.adp.nl)





1300

## Introductory remarks

Dr Christopher Longshaw, Shionogi BV  
& BSAC Honorary Treasurer

## Session one: Keynote presentation

Chair: Dr Christopher Longshaw, Shionogi BV & BSAC Honorary Treasurer

1305

### The Quirks of EUCAST: what to consider when hoping for breakpoints for a new agent - from EUCAST and others

Professor Gunnar Kahlmeter, Professor of Clinical bacteriology & Head of the EUCAST Development Laboratory

1325

Q&A

1335

BREAK

## Session two: Drug discovery: new targets and new chemistry

Chair: Professor Nathaniel Martin, Leiden University

1345

### Discovery of semi-synthetic antibiotics and adjuvants

Dr Jayanta Haldar,  
Jawaharlal Nehru Centre  
for Advanced Research  
(JNCASR), Bangalore, India

1400

### Genome mining pipelines and tools to guide the discovery of new antibiotics

Professor Nadine Ziemert,  
German Centre for Infection  
Research (DZIF)

1415

### AI to discover new antibiotics for Gram-negative bacteria

Dr Jon Stokes, McMaster  
University

1430

Q&A

1440

BREAK

## Session three: Preclinical antimicrobial development

Chair: Dr François Franceschi, GARDP

1450

### Bugworks: New gyrase inhibitors

Dr Shahul Hameed,  
Bugworks Research Inc

1510

### GangaGen: Klebicins

Vivek Daniel Paul, GangaGen

1530

### Q&A

1545

**BREAK**

## Session four: PANEL DISCUSSION: How useful/successful are the WHO Priority Pathogen lists at identifying future targets for Antimicrobial Discovery Programmes?

Chair: Professor Evelina Tacconelli, Verona University Hospital, Italy & DZIF Clinical Research Unit, University of Tübingen, Germany

1555

### Panel discussion

Professor Stephan Harbarth, Geneva University Hospitals  
Dr Erin M Duffy, CARB-X  
Dr Hatim Sati, WHO AMR Division

1650

### Q&A

1700

### Closing remarks

Dr Alison Luckey, GARDP



1300

## Introductory remarks

Dr Alison Luckey, GARDP

## Session five: Clinical development and use of new agents

Chair: Dr Mike Allen, Regional Medical Advisor (Antibiotics), MSD UK

1305

### **Navigating the regulatory process for "niche" antibiotics - Lessons learned from a Pathogen-focused clinical development pathway**

Dr John O'Donnell, Innoviva Specialty Therapeutics

1320

### **Role of data platform in antibiotic clinical development**

Professor Philippe Guérin, University of Oxford

1335

### **Can we include assessment of risk of resistance in clinical trials for novel antibiotics?**

Dr Marco Cavaleri, European Medicines Agency (EMA)

1350

### **Q&A**

1400

**BREAK**

## Session six: Oral poster presentations

Chair: Dr Tom Ashfield, Pfizer Hospital Business Unit

1410

### **Development of Novel Antibiotics Targeting Bacterial Transcription: Promising Antimicrobial Activity and Pharmacological Properties**

Cheuk Hei Kan, The Chinese University of Hong Kong, China

1415

### **Oxiconazole Potentiates Gentamicin against Gentamicin-Resistant *Staphylococcus aureus* in vitro and in vivo**

Abdul Akhir, CSIR-Central Drug Research Institute, India

1420

### **Unveiling Overlooked Critical Parameters in the Hollow Fiber System for Tuberculosis Studies: Impact on Moxifloxacin Pharmacokinetics/ Pharmacodynamics**

Dr Diana A. Aguilar Ayala, University of Zaragoza, Spain

**Session six continued ...****1425****Antimicrobial Chemotherapy in Neurological Disorders: A Call for Action in Low- and Middle-Income Countries (LMICs)**

Dr M Faizan Siddqui, Osh State University, Kyrgyzstan & AIG Hospital, Asian Institute of Gastroenterology, India

**1430****Modified Carbapenem Inactivation Method (mCIM) as a tool of antibiotic stewardship for Gram negative bacteremia in Teaching Hospital Kandy**

Dr Kaushila Dinithi Galgamuwa, National Hospital Kandy, Sri Lanka

**1435****Q&A****1445****BREAK****Session seven: Ensuring long-term security of access to new antimicrobials**

Chair: Professor Jesús Rodríguez-Baño, Professor of Medicine, University of Seville & Head, Infectious Diseases division, Hospital Universitario Virgen Macarena, Seville, Spain

**1455****Implementation of AMS strategy across a diverse nation(s)**

Dr Abdul Ghafur, Apollo Hospitals, Chennai, India

**1510****Monitoring resistance and consumption of new antibiotics: who, how, when**

Dr Dominique L Monnet, ARHAI & ECDC

**1525****Antimicrobial shortages/supply chain analysis**

Dr Esmita Charani, University of Cape Town

**1540****Q&A****1550****BREAK**

## **Session eight: PANEL DISCUSSION: Are existing push and pull incentives sufficient to strengthen the antibiotic R&D pipeline and ensure treatments reach patients?**

Chair: Dr François Franceschi, GARDP

1600

### **Panel discussion**

Dr Lesley Ann Ogilvie, Global AMR R&D Hub

Luka Srot, IFPMA

Dr Rohit Malpani, Advisor (consultant), GARDP

1655

### **Q&A**

1705

### **Closing remarks**

Dr Christopher Longshaw, Shionogi BV

& BSAC Honorary Treasurer



## Dr Mike Allen

*Regional Medical Advisor (Antibiotics), MSD UK*

Mike has over 35 years of UK and Global pharmaceutical industry experience within the field of antibiotics, antimicrobial resistance and infectious disease. Mike started his career as a clinical pharmacologist working with the Pain & Opiate Research Group at the Nuffield Department of Anaesthetics in Oxford from 1979 to 1986.

Following appointments in Lederle Laboratories (later became Wyeth Pharmaceuticals), Novartis Pharmaceuticals and Cubist, Mike currently works as the Regional Medical Advisor (Antibiotics) and MSD Ltd UK, with medical responsibilities for MSD's broad portfolio of licensed antibiotics and pipeline molecules. Over his career in the pharmaceutical industry, he has worked collaboratively with the medical, commercial, policy and development teams at National, European and Global levels, including the coordination of a highly successful international antibiotic registry and multiple clinical and in vitro antibiotic studies.

Mike was elected to serve a 3-year term as General Secretary of BSAC in 2022 and has been an Ordinary Member of BSAC Council since 2018, having previously served as an Ordinary Member of Council from 2012-2015. He is a core member of the BSAC Resistance Surveillance Project Legacy Working Group, having served on the Steering Committee since the inception of the project in 1999, both as an industry representative and core member. Mike has been a member of the Antibiotic Research UK (ANTRUK) Scientific Committee since 2018.

Mike has co-authored over 40 publications with lead researchers in the UK and internationally, looking particularly at antibiotic resistance surveillance and the association between antibiotic use and infections caused by clinically significant pathogens including; Clostridium difficile, glycopeptide-resistant enterococci, MRSA, Pseudomonas aeruginosa and ESBL-producing Enterobacteriales



## Dr Tom Ashfield

*Senior Medical Affairs Advisor – Infection, antimicrobial resistance and stewardship, Pfizer Hospital Business Unit*

Tom is a GP with experience as a pharmacist, hospital doctor and ENT surgical trainee. He has worked in all core acute specialties and has experience spanning from rural GP to specialist tertiary services. Since 2019 he has been a Senior Medical Advisor for AMS/AMR with Pfizer and maintains a part-time GP service via an online telemedicine platform. He is committed to stewardship in all aspects of his work and his wealth of experience provides great insight into the challenges and opportunities presenting to the modern healthcare system. In 2022, he and the diverse cross-industry and third sector members of the Infection Management Coalition released their White Paper on holistic infection management ([www.theimc.org](http://www.theimc.org)). Prior to this, Tom was closely involved with the preparation and clinical aspects of Pfizer's contribution to the world's first antimicrobial subscription model. His current work encompasses policy, media, patient engagement, digital and clinical research.



## Dr Marco Cavaleri

*Head of Office, Health Threats and Vaccines Strategy, European Medicines Agency (EMA)*

Marco Cavaleri is Head of Office, Health Threats and vaccines strategy. He is the Chair of EMA COVID-19 Task Force (ETF) and responsible for EMA activities for emergent pathogens, vaccines and AMR.

He serves in different advisory groups at WHO, including PDVAC, AMR priority pathogens and R&D Blueprint SAG and clinical trials working group.

He is a Pharmacologist who spent several years in industry in R&D mainly in the area of anti-infectives covering different positions in preclinical and clinical development of new antibacterial, antitubercular and antifungal agents.

He has been driving the EMA AMR strategy on human medicines since 2009 including the international partnerships that lead to alignment of clinical trials requirements for new antibacterial agents with FDA, PMDA and HC.

He is co-author of several publications related to AMR, TB, antibiotics, vaccines and phages.



## Dr Esmita Charani

*Associate Professor, University of Cape Town*

Esmita is an Associate Professor at the University of Cape Town where she is undertaking a Wellcome Trust Career Development Fellowship investigating intersectionality and AMR (2023–2027). In the UK, she is a Reader in Infectious Diseases, AMR and Global Health at the University of Liverpool. She is a visiting Researcher at Haukeland University Hospital, Bergen Norway, and Adjunct Professor at Amrita Institute of Medical Sciences, Kerala India, where she is involved in helping implement and investigate national antibiotic stewardship programmes. Her work in AMR has been recognised through the Academy of Medical Sciences UK-India AMR Visiting Professor award. She is an expert advisor to the Commonwealth Pharmacy Association and a Global Health Fellow with the Office of Chief Pharmaceutical Officer, England. She is involved in mentoring and supporting clinical pharmacists across different healthcare settings and economies in implementing antimicrobial stewardship interventions. Her doctoral thesis investigated antimicrobial stewardship across India, Norway, France, Burkina Faso and England.



## Dr Erin M Duffy

*Chief of R&D, CARB-X*

Erin Duffy is the Chief of Research & Development at CARB-X. CARB-X is a global non-profit partnership dedicated to accelerating antibacterial research to tackle the global rising threat of drug-resistant bacteria. With up to US\$480 million to invest in 2016–22, CARB-X funds the world's largest early development pipeline of new antibiotics, vaccines, rapid diagnostics, and other products to prevent, diagnose and treat life-threatening bacterial infections. Prior to CARB-X, she worked at Melinta Therapeutics (fka Rib-X Pharmaceuticals) where she became EVP, Chief Scientific Officer and R&D site head. Erin began her pharmaceutical career at Pfizer Central Research.



## Dr François Franceschi

*Head of Asset Evaluation and Development and Serious Bacterial Infections Project Leader, GARDP*

François Franceschi is Head of Asset Evaluation and Development and Serious Bacterial Infections Project Leader at the Global Antibiotic Research & Development Partnership (GARDP).

François has over 25 years of experience in antimicrobial research and development. He previously served as Program Officer for Therapeutics Development (antibacterial and antifungal) at the National Institute of Allergy and Infectious Diseases (NIAID) in Maryland, US. Here, he also served as NIAID's liaison to CARB-X and as a member of its Scientific and Milestone Review Boards. François has held various director positions within antimicrobial R&D such as at Rib-X Pharmaceuticals (now Melinta Therapeutics). François was previously a principal investigator at the Max Planck Institute for Molecular Genetics (MPI) in Berlin, Germany, where his research focused on the structure and function of ribosomes, especially in complex with antibiotics. His group was a pivotal part of an international consortium headed by Ada Yonath, who won the Nobel Prize in Chemistry in 2009.

François earned his PhD in Chemistry at the Frei Universität Berlin, Germany after being awarded his Bachelor's degree in Biology at Universidad Simon Bolívar, Venezuela.



## Dr Abdul Ghafur

*Senior Consultant & Adjunct Professor in Infectious diseases, Apollo Hospitals, Chennai, India*

Abdul Ghafur is a Senior Consultant and Adjunct Professor in Infectious diseases at the Apollo Hospitals, Chennai, India. He is the primary author and coordinator of the "Chennai Declaration", a globally renowned document and initiative by medical societies in India, to tackle the challenge of antimicrobial resistance from an Indian perspective. He is the managing Trustee of "AMR Declaration Trust" - a public charitable Trust founded on the principles of Chennai Declaration. He is a former technical advisory committee member for the National antibiotic policy of the Indian Ministry of Health. He is very active in the academic, policy, research, and socio-economic and political aspects of Infectious diseases.

He is the Managing Partner and Lead strategist at QuorumVeda consulting services LLP, a dynamic healthcare consulting firm dedicated to transforming the way healthcare organizations operate and innovate.

He is an advisory and Jury member of the "Longitude Prize" - a ten million Sterling Pound Prize announced by the British prime minister. He had the honour to be interviewed by the British Medical Journal for the "BMJ confidential" to recognise the work in the antibiotic policy field. He has delivered lectures in numerous prestigious international Infectious diseases and antibiotic policy conferences and has been published in well-reputed journals such as the BMJ, Lancet, etc. He is an editorial board member and reviewer of many international journals. He received the Indian Medical Association oration award for his contribution towards tackling antibiotics resistance efforts.



## Professor Philippe Guérin

*Director of the Infectious Diseases Data Observatory (IDDO), Centre for Tropical Medicine & Global Health, University of Oxford*

Philippe Guérin is Director of the Infectious Diseases Data Observatory (IDDO) at the Centre for Tropical Medicine and Global Health, University of Oxford. He is a medical doctor specialising in public health; and a Professor of Epidemiology and Global Health at the University of Oxford.

His research interests focus on the feasibility, challenges and impact of establishing global data platforms for poverty related infectious diseases and emerging infections. He has been leading the development of the WorldWide Antimalarial Research Network (WWARN) – the prototypic model for IDDO. To date, IDDO is the largest global multi-infectious diseases clinical data platform.



## Professor Stephan Harbarth

*Director, Infection Control Division & WHO Collaborating Center, Geneva University Hospitals*

Stephan Harbarth earned in 1993 his medical degree from Ludwig-Maximilians-University in Munich, Germany, and completed his residency in internal medicine and tropical medicine at Munich University Hospitals. After serving as a clinical fellow in the Infectious Diseases Division in the Department of Internal Medicine at Geneva University Hospitals, he completed his master's degree in epidemiology at Harvard School of Public Health. He is board certified in infectious diseases, was appointed full professor at the University of Geneva in 2018 and is the Director of the Infection Control Division and WHO Collaborating Center at Geneva Univ Hospitals since 2022. His work has garnered several awards, incl. the prestigious Robert Koch Award (2022).

His research group has a strong academic track record. It is currently conducting several clinical and epidemiological studies to evaluate key questions related to the control of the acquisition, transmission and infection by multidrug-resistant microorganisms and related clinical and health-economic burden. He participates as WP leader in several ongoing large-scale EU-funded studies (REVERSE, PRIMAVERA, ECRAID, COMBACTE).



## Dr Jayanta Halder

*Professor, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, India*

Jayanta Halder is a Professor at the Antimicrobial Research Laboratory in the New Chemistry Unit (NCU) and School of Advanced Materials (SAMat), Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, India. He is the Editor-in-Chief of ACS Infectious Diseases, a frontier journal of the ACS publishing group. He has served as a member of editorial boards of various international journals in the field of infectious diseases and medicinal chemistry, such as RSC Medicinal Chemistry (till July 2023), ACS Infectious Diseases (till July 2023), Biomacromolecules, Microbial Pathogenesis, etc.

His research integrates an interdisciplinary Medicinal Chemistry and Chemical Biology-based approach for understanding and countering Antimicrobial Resistance (AMR), development of novel therapeutics and newer strategies for tackling infections caused by pathogenic bacteria, fungi and viruses. His laboratory works towards developing smart biomaterials which aid in preventing the spread of infectious diseases, as well as cure infection and enhance wound healing. His multifaceted research has been published in high-impact international journals and has led to many national and international patents.



## Dr Shahul Hameed

*Chief Scientific Officer, Bugworks Research Inc.*

Shahul Hameed received a Ph.D. in medicinal chemistry from Birla Institute of Technology and Science, Pilani, India. He has over 24 years of drug discovery and development in experience in anti-infectives, anti-inflammatory, and oncology therapy areas. His expertise spans medicinal chemistry, structure-based drug design, chemical toxicology, and pharmaceutical sciences.

As the CSO of Bugworks Research Inc., he is creating a robust pipeline of innovative and differentiated projects across the anti-infective and oncology space. Previously, he was project leader at AstraZeneca India Pvt. Ltd., where he gained global exposure in structure-based drug design, structure-activity (property) relationship (SAR/SPR), and drug discovery.

He has led many lead generation and lead optimization projects leading to clinical candidate selection, while balancing potency, cell entry and target engagement, safety, and DMPK in parallel, while simultaneously securing strong intellectual property. He is the primary inventor of two clinical candidates, MMV253 (Phase 2 anti-malarial drug) and BWC0977 (Phase 1 anti-bacterial drug), coinventor of TBA-7371 (Phase 2 anti-TB drug) and has 25 international peer-reviewed publications and 15 patents.



## Professor Gunnar Kahlmeter

*Professor of Clinical bacteriology & Head of the EUCAST Development Laboratory*

Gunnar Kahlmeter has worked in clinical microbiology since 1971 and specifically in the field of antimicrobial resistance since 1972. He has more than 35 years of experience in leading people in practical microbiology and in science.

Gunnar has spent 15 years in clinical microbiology and research at Lund University, Sweden. Since 1984 he has been an associate professor in the medical faculties of Lund and Uppsala. Between 1985 – 2016, he led three clinical microbiology laboratories and for 20 years he has been the head of the Swedish national reference laboratory on phenotypic susceptibility testing of bacteria.

In 2001, he was asked to develop EUCAST (the European Committee on Antimicrobial Susceptibility Testing) and has served as its chairperson. He has also served as the EUCAST Technical Data Coordinator and webmaster. He has led the EUCAST Development Laboratory for 10 years. Gunnar was the president of ESCMID between 2012 and 2014 and has served on many committees involved in antimicrobial resistance. He has published in excess of 200 scientific publications.

After receiving his medical degree from Lund University, Sweden, in 1979, he also defended a doctoral thesis on pharmacokinetics and toxicity of aminoglycosides in the same year.



## Dr Christopher Longshaw

*Senior Director, EU Scientific Affairs, Shionogi BV & BSAC Honorary Treasurer*

Christopher Longshaw studied Medical Microbiology at Leeds University, UK, gaining his PhD for work on the colonisation factors of coagulase-negative staphylococci. He joined Cubist Pharmaceuticals in 2001, working on a joint EU-project to find novel ways to prevent spread of antimicrobial resistance via inhibition of conjugative plasmid transfer. After a period with Syngenta BioPharma screening for novel medicinal antimicrobials from agrochemical libraries, he swapped R&D for Medical Affairs, joining Wyeth Pharmaceuticals UK (later Pfizer UK) as Scientific Advisor for their Anti-infective portfolio which included piperacillin-tazobactam and tigecycline. He joined Astellas Pharmaceuticals Europe in 2010 as Associate Director for Microbiology, working on the development, launch and commercialisation of multiple antimicrobials including telavancin, fidaxomicin, micafungin and isavuconazole and was Country Medical Affairs Manager for Basilea Pharmaceuticals, supporting the commercialisation of isavuconazole and ceftobiprole in the UK.

He joined Shionogi Pharmaceuticals in 2017 as EU Scientific Advisor for Infectious Diseases and works with medical, commercial and development teams at National, European and Global levels to provide medical and scientific leadership, most recently focused on the regulatory approval of the antibiotic, ceferocerol.

He has co-authored numerous peer-reviewed publications including high impact journals such as *Lancet Infectious Disease* and *Eurosurveillance* and was one of the EFPIA co-leads within the Innovative Medicines Initiative/New Drugs 4 Bad Bugs project, DRIVE-AB. Chris is a member of the Scientific Committee for Antibiotic Research UK and has been a member of council for the British Society for Antimicrobial Chemotherapy and Industry representative for the Resistance Surveillance Working Group before taking up the office of Honorary Treasurer from 2018.



## Dr Alison Luckey

*Senior Medical Lead, GARDP*

Alison Luckey joined GARDP in September 2021 as Medical Lead for the Zolifludacin program.

As a Pharmaceutical Physician, she brings a wealth and breadth of experience to the team as a result of her 22-year clinical research career, the last 8 years of which have been within late phase drug development in the anti-infectives therapeutic area. As EFPIA Lead (Astra Zeneca and Pfizer) for Innovative Medicine's Initiative's (IMI) COMBACTE CARE consortium, she has most recently been instrumental in developing and maintaining essential public-private collaborations, leveraging unique opportunities and novel ways of working, to successfully deliver the first interventional Phase 2a study of the program and start-up of a Phase 3 program through two corporate transitions and a pandemic.

Prior to this, she has worked as a Clinical Research Physician and Principal Investigator in early phase development in both the United Kingdom and New Zealand. Together with colleagues, she established a CRO in New Zealand with a 10-bedded facility specialising in early phase development, including First in Man studies and providing an end-to-end service for small biotech companies as well as large pharma. During this time, she was Deputy Chair of the Upper South Regional Ethics Committee, Ministry of Health, New Zealand.

She is a medical graduate (Southampton, UK, 1992) with post graduate clinical experience in Obstetrics & Gynaecology; she holds the Diploma of Pharmaceutical Medicine and is a Fellow of the Faculty of Pharmaceutical Medicine, Royal College of Physicians.



## Dr Rohit Malpani

*Advisor (consultant), GARDP*

Rohit Malpani is an advisor to the Global Antibiotic Research and Development Partnership, working on policy issues related to AMR. He also works on issues related to the ethics and governance of artificial intelligence for health and access to medicines. Previously he was the Director of Policy for the Médecins Sans Frontières Access Campaign, a Special Advisor to Oxfam, and an attorney for the law firm of Wilson Sonsini based in Palo Alto. He has a Doctorate of Jurisprudence from the New York University School of Law.



## Professor Nathaniel Martin

*Chair of Biological Chemistry, Leiden University*

Nathaniel Martin was born and raised in Western Canada and obtained his PhD degree from the University of Alberta in 2004. He subsequently performed postdoctoral studies at the University of California Berkeley and in 2007 moved to Utrecht University to start his independent career. In 2018 he was appointed Chair of Biological Chemistry at Leiden University where his research group works on developing new molecular strategies to address antibiotic resistance ([www.martinlab.nl](http://www.martinlab.nl)). With a firm foundation in bioorganic and medicinal chemistry, the approaches used by the Martin lab include the design and synthesis of new antibiotics as well as developing small molecule inhibitors of different resistance mechanisms. He has received a number of personal grants and awards in support of his research including the NWO VENI and VIDI grants as well as the ERC consolidator grant. To date, he has published 118 research papers and is named inventor on 9 patents. Since 2023 he is associate editor for the Journal of Medicinal Chemistry, where he oversees submissions on infectious disease and he also sits on the executive board of the Netherlands Centre for One Health ([www.ncoh.nl](http://www.ncoh.nl)). When not thinking about antibiotics he can most likely be found watching his favourite ice-hockey team.



## Dr Dominique L Monnet

*Head, Antimicrobial Resistance & Healthcare-Associated Infections (ARHAI)  
Section & European Centre for Disease Prevention and Control (ECDC),  
Stockholm, Sweden*

Dominique L. Monnet joined ECDC in October 2007 to lead ECDC's Disease Programme on Antimicrobial Resistance and Healthcare-Associated Infections. He is also representing ECDC in the EU-US Transatlantic Task Force on Antimicrobial Resistance (TATFAR).

Before joining ECDC, he worked in French hospitals, at the US Centers for Disease Control and Prevention (1993-1995) and at the Danish Statens Serum Institut (1997-2007) where he was coordinating surveillance of antimicrobial resistance and antimicrobial consumption in humans in Denmark.

His research interests include surveillance of antimicrobial resistance and antimicrobial consumption, the relationship between consumption of antimicrobials and resistance, and the factors that affect antimicrobial usage, both in hospitals and in primary care.



## Dr John O'Donnell

*Senior Vice-President & Head of Research, Innoviva Specialty Therapeutics*

John O'Donnell has over 30 years of pharmaceutical research and development experience. Prior to Innoviva Specialty Therapeutics he headed up the department of Drug Metabolism and Pharmacokinetics for Entasis where he was heavily involved with the development of Xacduro supporting the pharmacology, PK/PD, and ultimately the dose justification leading into the Phase 3 clinical trial. Prior to Entasis he headed up pharmacology departments at Pfizer and AstraZeneca within their respective infection portfolios. He currently leads discovery efforts at Innoviva Specialty Therapeutics with a team of medicinal chemistry, biology, and drug metabolism scientists.



## Dr Lesley Ann Ogilvie

*Global AMR R&D Hub*

Lesley Ann Ogilvie is Director of the Secretariat at the Global Antimicrobial Resistance Research and Development Hub (Global AMR R&D Hub), a global partnership focused on addressing challenges and improving co-ordination and collaboration in AMR research and development using a One Health approach. She is a microbiologist by training with a PhD from the University of East Anglia and over 15 years experience as a researcher and lecturer at the University of Brighton and the Max Planck Institute for Molecular Genetics. Her research focus has been the role of the human gut virome/microbiome in health and disease and the discovery and characterisation of therapeutic phage. Lesley represents the Global AMR R&D Hub on a number of advisory groups, including for the World Health Organisation and the European Commission, and is a member of the Applied Microbiology International One Health Advisory Group.



## Vivek Daniel Paul

*Head of Molecular Biology, GangaGen*

Vivek Daniel Paul is the Head of Molecular Biology at GangaGen. GangaGen is developing bacteriophage lysins and bacteriocins as novel non-traditional antibacterials to treat serious infections.

Vivek has over 20 years of experience in discovery and development of antibacterials to tackle AMR. His areas of expertise are molecular genetics and protein engineering. Vivek was instrumental in developing engineered Bacteriophages, Lysins and Bacteriocins platform at GangaGen and has several international patents to his credit.

Vivek is leading a CARB-X funded project to develop antibacterial proteins called klebicins as narrow-spectrum agents targeting multidrug-resistant *K. pneumoniae*, including the carbapenem-resistant and ESBL-expressing *K. pneumoniae*.



## Professor Laura JV Piddock

*Scientific Director, Global Antibiotic Research & Development Partnership (GARDP)*

Laura Piddock joined the Global Antibiotic Research and Development Partnership (GARDP) in January 2018. As GARDP's Scientific Director, Laura leads the Discovery and Exploratory Research and Scientific Affairs programmes, including the REVIVE programme. She also contributes to GARDP's Policy & Advocacy activities.

Laura has been involved in various Policy activities. She was the British Society for Antimicrobial Chemotherapy (BSAC) Chair in Public Engagement, and in this role was the Director of Antibiotic Action and led the secretariat of the UK All Party Parliamentary Group on Antibiotics from 2012 – 2017. Laura was a co-author of the first World Economic Forum report on AMR in 2013, and an expert adviser to the AMR review led by Lord Jim O'Neill.



## Professor Jesús Rodríguez-Baño

*Professor of Medicine, University of Seville & Head, Infectious Diseases division, Hospital Universitario Virgen Macarena, Seville, Spain*

Jesús Rodríguez-Baño is Professor of Medicine at the University of Seville and Head of the Infectious Diseases division at Hospital Universitario Virgen Macarena in Seville, Spain. He was President of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), and coordinator of the research programme in antimicrobial resistance in the Spanish network for research in infectious diseases CIBERINFEC. He was also a member of the Scientific Advisory Board for the Joint Programming Initiative on Antimicrobial Resistance (JPIAMR) of the European Union. He leads work packages in several European projects including ECRAID, ORCHESTRA, PRIMAVERA and REVERSE.

Jesús is a medical doctor and specialist in internal medicine, who gained his PhD in medicine in 1997 and expert degree in epidemiology and clinical research in 2000. He has since been a faculty member of the Infectious Diseases Division of Hospital Universitario Virgen Macarena. His main research interests are multidrug resistance in bacteria – its molecular basis, clinical implications, therapy and control – and bacteraemia, and healthcare-related infections.

Jesús is Associate-Editor of Clinical Microbiology and Infection and has been a member of the Program Committees for the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), ASM (American Society for Microbiology) Microbe and the European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) and IDWeek.

Jesús has published over 400 papers and has invented one patent and one software.



## Dr Hatim Sati

*Public Health Physician & Technical Officer, WHO AMR Division*

Hatim Sati is Public Health physician and a Technical Officer at the World Health Organization (WHO), AMR Division, leading priority-setting research for Antimicrobial Resistance (AMR) and Infectious Diseases (IFD). He was the leading technical officer for the WHO's first-ever Fungal Priority Pathogens List and is currently leading the updates for the 2017 WHO Bacterial Priority List.

In his current role, he is leading a number of global research projects aimed at setting global priorities for the research and development of new antimicrobial medicines, ensuring equitable access to existing treatments and other prevention and control interventions. Previous experience includes clinical medicine as well as communicable diseases surveillance, prevention, and control across over 22 countries in the WHO region of the Americas.



## Luka Srot

*Associate Director in Health Security, IFPMA*

Luka works as Associate Director in Health Security at IFPMA, where he manages the organization's policy and advocacy work on AMR, including leading on the cross-functional area of vaccines for AMR. In his role, he engages across industry and the global health community to identify solutions against AMR, with a focus on enabling AMR-related innovation. Previously, he also worked in the AMR Industry Alliance Secretariat, including as the interim Secretariat Lead. He holds a master's degree in pharmacy from the University of Ljubljana, Slovenia, and completed part of his master thesis at the Utrecht Institute for Pharmaceutical Sciences in the Netherlands.



## Dr Jon Stokes

*Assistant Professor, Department of Biochemistry & Biomedical Sciences, McMaster University*

Jon Stokes received his BHSc in 2011 and his PhD in antimicrobial chemical biology in 2016, both from McMaster University. From 2017–2021 he was a postdoctoral fellow at the Broad Institute of MIT and Harvard, carrying a prestigious Banting Fellowship from 2018–20. Upon completing his postdoc, he established his laboratory back at McMaster in the Department of Biochemistry and Biomedical Sciences, in August 2021. The Stokes lab leverages a mindful balance of experimental and computational approaches to discover and design the next generation of life-saving antibiotics with novel structures and functions that expand the capabilities of these medicines beyond the current state of the art.



## Professor Evelina Tacconelli

*Director, Infectious Diseases Section, Verona University Hospital, Italy & Department of Internal Medicine, DZIF Clinical Research Unit, University of Tübingen, Germany*

Evelina Tacconelli is Director of the Infectious Diseases Section at Verona University Hospital, Italy, and at the Department of Internal Medicine, DZIF Clinical Research Unit at the University of Tübingen, Germany.

Evelina coordinated the WHO priority list of antibiotic resistant bacteria for the research and development of new effective antibiotics as well as the WHO project on limitations of estimates of the burden of antibiotic resistant infections within the GLASS (Global Surveillance of Resistant Severe Infections) project. She is Chair of the European Committee for Infection Control (EUCIC), and a WHO and ECDC consultant for infection control and antimicrobial stewardship. Evelina has a wealth of experience in the participation and coordination of European projects and networks focused on antimicrobial resistance.



## Professor Nadine Ziemert

*Professor for Translational Genome Mining, German Centre for Infection Research (DZIF)*

Nadine Ziemert received her Diploma and PhD degrees from the Humboldt University in Berlin, followed by a postdoc and project scientist position at the Scripps Institution of Oceanography in La Jolla, California. Since 2015, she is a Professor at the University of Tübingen, where she leads an interdisciplinary research group focusing on genome mining approaches and the evolution of secondary metabolites in bacteria and their diverse functions. Her work focuses on developing bioinformatic tools for the discovery of natural products from microbial genomes, elucidating the evolutionary history of their biosynthetic gene clusters and tracing their distribution in the environment.

**Alarming level of multidrug resistance in poultry associated extraintestinal pathogenic *Escherichia coli* pathotypes with potential to affect the One Health**

Prem Raj Meena<sup>1</sup>, Arvind P. Singh<sup>2</sup>

*1 Department of Biomedical Engineering, Central University of Rajasthan, Ajmer, India Pin 305817; 2 School of Biotechnology, Jawaharlal Nehru University, New Delhi, India Pin 110067*

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**Diagnostic evaluation of a novel nanoplex polymerase chain reaction assay for the simultaneous detection of Vancomycin and Linezolid resistant genes In *Enterococcus***

Yusuf Wada<sup>1,2</sup>, Azian Harun<sup>1</sup>, Chan Yean Yean<sup>1</sup>, Zaidah Abdul Rahman<sup>1</sup>

*1 Department of Medical Microbiology and Parasitology, School of Medical Sciences, University Sains Malaysia; 2 Department of Zoology, Ahmadu Bello University, Zaria Nigeria*

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**Novel bacteriophages against *Pseudomonas aeruginosa***

Hyacinthe TUYUBAHE<sup>1,2</sup>, Barath Sivaraj<sup>1</sup>, Sutharsan Govindarajan<sup>1</sup>

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**Antibiotic De-escalation Practice In General Intensive Care Unit (GICU) Penang General Hospital**

ShiaoHui LIM<sup>1</sup>, Chen Chuan KUAI<sup>1</sup>, Chew Har LIM<sup>2</sup>

*1 Department of Pharmacy, Penang General Hospital, Malaysia; 2 Department of Anaesthesiology, Penang General Hospital, Malaysia*

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**Identification of new antimicrobial resistance genes in *E. coli* through network diffusion**

Mansouri A<sup>1</sup>, Durazzi F<sup>1</sup>, Ahmad Ihsan M<sup>4</sup>, Pasquini G<sup>1</sup>, Pasquali F<sup>1</sup>, Van der Putten B<sup>2</sup>, Schultsz C<sup>2</sup>, Britto B<sup>3</sup>, Malhotra S<sup>3</sup>, Valdramidis V<sup>4</sup>, Griffin S<sup>4</sup>, Remondini D<sup>1</sup>

*1 University of Bologna; 2 Amsterdam University Medical Center; 3 University of Antwerp; 4 University of Malta*

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**Tweaking of *Streptomyces coelicolor* for Antimicrobial Production: Robust Resazurin Assay**

Sita Ghimire<sup>1</sup>, Bishal Gurung<sup>2</sup>, Safalta Mallick<sup>1</sup>, Suprim Shrestha<sup>1</sup>, Sapana Shakya<sup>1</sup>, Anu Kumal<sup>2</sup>, Ashesh Basnet<sup>2</sup>, Pramod Aryal<sup>1</sup>, Rajani Malla<sup>1</sup>

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**Development of novel antibiotics targeting bacterial transcription: Promising antimicrobial activity and pharmacological properties**

Cheuk Hei KAN<sup>1</sup>, Yangyi QIU<sup>2</sup>, Cong MA<sup>2</sup>, Xiao YANG<sup>1</sup>

*1 Department of Microbiology, The Chinese University of Hong Kong; 2 Department of Applied and Chemical Technology, The Polytechnic University of Hong Kong*

## **Incorporating Piperidine into the Composition of Pyruvamide *N*<sup>4</sup>-Allylthiosemicarbazone for Increasing of the Antibacterial Activity of its Complexes**

Ianina Graur<sup>1</sup>, Victor Tsapkov<sup>1</sup>, Vasilii Graur<sup>1</sup>, Greta Balan<sup>2</sup>, Aurelian Gulea<sup>1</sup>

*1 Moldova State University, Chisinau, Republic of Moldova; 2 "Nicolae Testemitanu" State University of Medicine and Pharmacy, Chisinau, Republic of Moldova*

## **Characterization of Biofilm Formation and Cell-surface Properties of MDR and Carbapenem-resistant *Acinetobacter baumannii* clinical strains**

Ingrid Vianez Peregrino<sup>1,2</sup>, Roberta Ferreira V. Mendes<sup>1</sup>, Lucieri Olegário P. Souza<sup>3</sup>, André Luís S. Santos<sup>3</sup>, Ana Paula F. Nunes<sup>1,2</sup>

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## **Screening of Leaf Extracts of *Ricinus communis* for In-vitro Activity Against Some Bacterial Pathogens**

Fatima Muhammed Hamza<sup>1</sup>, Surayya Mustapha Salim<sup>2</sup>

*1 Department of Integrated Science, Federal College of Education, Kano, Nigeria; 2 Department of Biological Sciences, Bayero University, Kano, Nigeria*

## **Investigating heparin-type sulfated carbohydrates as agents against methicillin-resistant *Staphylococcus aureus* (MRSA) infection of skin epidermis**

Sally Williamson<sup>1</sup>, Edwin A. Yates<sup>2</sup>, Kate Phillips<sup>1</sup>, Andrew K. Powell<sup>1</sup>

*1 School of Pharmacy & Biomolecular Sciences, Liverpool John Moores University; 2 Institute of Systems, Molecular & Integrative Biology, University of Liverpool*

## **Identification of a Gene Cluster: Investigating Teixobactin Analogues**

Zoë A. Bell<sup>1</sup> Supervisors: Dr Hong Gao<sup>1</sup>, Professor Linda Popplewell<sup>1</sup>, Dr Claire Jennings<sup>1</sup>

*1 School of Health & Life Sciences, National Horizons Centre, Teesside University*

## ***In vitro* assessment of the antibacterial activity and pharmacodynamics of novel metal compounds derived from 1,10-phenanthroline-5,6-dione against *Acinetobacter baumannii* MDR clinical strains**

Ingrid V. Peregrino<sup>1,2</sup>, Luiz Felipe V. S. Amorim<sup>1</sup>, André L. S. Santos<sup>3</sup>, Ana Paula F. Nunes<sup>1,2</sup>

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## Antimicrobial and Antibiofilm activity of AG-Phendione and CU-Phendione against *Klebsiella pneumoniae* multidrug-resistant strains

Seabra, G<sup>1</sup>, Da Mata I S<sup>1</sup>, Carregari V C<sup>2</sup>, Baldasso P A<sup>2</sup>, Smith B J<sup>2</sup>, Leite D S<sup>2</sup>, Martins-De-Souza D<sup>2</sup>, Dos Santos A L S<sup>3</sup>, Nunes A P F<sup>1</sup>

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## Development of benzotriazole derivatives targeting cysteine biosynthesis as antimicrobial adjuvants

Marchetti M<sup>1</sup>, Annunziato G<sup>2</sup>, Spadini C<sup>3</sup>, Bova S<sup>1</sup>, Bergamo D<sup>2</sup>, De Bei O<sup>1</sup>, Ronda L<sup>1</sup>, Cabassi CS<sup>3</sup>, Pieroni M<sup>2</sup>, Costantino G<sup>2</sup>, Bettati S<sup>1</sup>, Campanini B<sup>2</sup>

*1 Department of Medicine and Surgery, University of Parma, Italy; 2 Department of Food and Drug, University of Parma, Italy; 3 Department of Veterinary Science, University of Parma, Italy*

## Biochemical and Biophysical Characterization of *Klebsiella pneumoniae* FabI, a Target for Antibacterial Drug Discovery

Soumya Biswas<sup>1</sup>, Gajraj Singh Kushwaha<sup>2,3</sup>, Mrutyunjay Suar<sup>1,3</sup>

*1 School of Biotechnology, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar, Odisha-751024; 2 Transcription Regulation group, International Centre for Genetic Engineering and Biotechnology, ICGEB Campus, New Delhi-110067; 3 KIIT Technology Business Incubator, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar, Odisha-751024*

## Wild Carnivores and Antibiotic Resistance Bacteria

Andreia Garcês, Isabel Pires

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## Abafungin rescues vancomycin from treatment failure in combating *Clostridioides difficile* infection

Ahmed A. Abouelkhair<sup>1</sup>

*1 Virginia Polytechnic Institute and State University*

## Rational development of membrane targeting antimicrobials against multi-drug resistant Gram negative bacteria

Jianguo Li<sup>1</sup>, Kai Yi Lim<sup>1</sup>, Chandra Verma<sup>1</sup>

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## Hunting for New Antibiotics from the Soil Bacteria of Tabuk's Natural Reserves

Najla A. Albalawi<sup>1</sup>, Hanaa A. Alatiyyat<sup>1</sup>, Renad A. Alatawi<sup>1</sup>, Areej A. Al-ghamdi<sup>1</sup>, Tarig M Alnour<sup>2</sup>, Rehab Ahmed<sup>3</sup>

<sup>1</sup> PharmD Program, Faculty of Pharmacy, University of Tabuk, Tabuk, Saudi Arabia; <sup>2</sup> Medical Laboratory Technology Department, Faculty of Applied Medical Sciences, University of Tabuk, Tabuk, Saudi Arabia; <sup>3</sup> Department of Natural Products and Alternative Medicine, Faculty of Pharmacy, University of Tabuk, Tabuk, Saudi Arabia

## GARDP: investigating unrealised targets for the discovery of antibiotics for Gram-negative bacteria

Maëlle Duffey<sup>1</sup>, Benjamin Blasco<sup>1</sup>, Laura J. V. Piddock<sup>1</sup>

<sup>1</sup> The Global Antibiotic Research & Development Partnership, Geneva, Switzerland

## Computational identification of potential inhibitors of *Mycobacterium tuberculosis* drug target N-acetylglutamate kinase

Adetutu Akinnuwesi<sup>1</sup>, Samuel Egieyeh<sup>2</sup>, Ruben Cloete<sup>1</sup>

<sup>1</sup> South African Medical Research Council Bioinformatics Unit, South African National Bioinformatics Institute, University of the Western Cape, Cape Town 7535, South Africa; <sup>2</sup> School of Pharmacy, University of the Western Cape, Bellville, Cape Town 7535, South Africa

## Valorization of *Camelus dromedarius* natural products as a novel source of antibacterial properties: New Strategies to Fight Antibiotic Resistance

RESSMI Amina<sup>1</sup>, RAQRAQ Habiba<sup>1</sup>, ANIBA Rafik<sup>1</sup>, DIHMANE Asmaa<sup>1</sup>, BARGUIGUA Abouddihaj<sup>1</sup>, SORAA Nabila<sup>2</sup>

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## Evaluation of the Antibacterial Activity of Peptides Produced by Endophytic Fungi Isolated from *Uvaria chamae* Leaves Against *Pseudomonas aeruginosa*

Ibrahim Mohammed Hussaini<sup>1</sup>, Vanessa Anosi Odidi<sup>1</sup>

<sup>1</sup> Department of Microbiology, Faculty of Life Sciences, Ahmadu Bello University, Zaria Nigeria

## Antibacterial Activity of Peptides Produced by Endophytic Fungi isolated from *Bryophyllum pinnatum* (Life Plant) Against Clinical Isolates of *Escherichia coli* and *Klebsiella pneumoniae*

Fatima Abdulyekeen<sup>1</sup>, Ibrahim Mohammed Hussaini<sup>1</sup>

<sup>1</sup> Department of Microbiology, Faculty of Life Sciences, Ahmadu Bello University, Zaria Nigeria

## *Helichrysum populifolium* bioactive compounds modulate virulence factors in *Neisseria gonorrhoea*

Vhangani E. Mulaudzi<sup>1</sup>, Idowu J. Adeosun<sup>1</sup>, Adeniyi T. Adewumi<sup>2</sup>

<sup>1</sup> Department of Biochemistry, Genetics and Microbiology, University of Pretoria, Lynnwood Road, Private Bag X20, Hatfield, 0028, South Africa; <sup>2</sup> Molecular Bio-computation and Drug Design Laboratory, School of Health Sciences, University of KwaZulu-Natal, Westville Campus, Durban, South Africa

**By-product extracts protect human cell host against bacterial pathogens**

Bryan Moreno-Chamba<sup>1</sup>, Julio Salazar-Bermeo<sup>1</sup>, Ma. Concepción Martínez-Madrid<sup>1</sup>, Domingo Saura<sup>1</sup>,

Nuria Martí<sup>1</sup>, Manuel Valero<sup>1</sup>

*<sup>1</sup>Instituto de Investigación, Desarrollo e Innovación en Biotecnología Sanitaria de Elche (IDiBE), Universidad Miguel Hernández de Elche, Alicante (Spain)*

**Bacteriological Quality Assessment of Borehole Water From Ahmadu Bello University Teaching Hospital, Shika**

Ibrahim Saheed Opeyemi<sup>1</sup>, Elijah Ekah Ella<sup>1</sup>

*<sup>1</sup> Department of Microbiology, Faculty of Life Sciences , Ahmadu Bello University, Zaria Nigeria*

**Surveillance of multidrug resistant bacteria in a Tunisian University Hospital (2022)**

Farah Azouzi<sup>1</sup>, Zied Fehri<sup>1</sup>, Sameh Boughattas<sup>1</sup>, Lamia Tilouche<sup>1</sup>, Soumaya Ketata<sup>1</sup>, Yomna Ben Lamine<sup>1</sup>, Abdelhalim Trabelsi<sup>1</sup>

*<sup>1</sup> Microbiology Laboratory, Sahloul University Hospital, Sousse, Tunisia*

**Exploring personalized medication in antimicrobial chemotherapy through artificial intelligence: a paradigm shift for Imics**

Azaroual Mouna, M.D<sup>1</sup>, Mohd Faizan Siddiqui, M.D<sup>2,3</sup>

*<sup>1</sup> Tambov State Medical University, Tambov City, Russia; <sup>2</sup> International Medical Faculty, Osh State University, Osh City, Kyrgyzstan; <sup>3</sup> Department of Neurology, AIG Hospital, Asian Institute of Gastroenterology, Hyderabad, Telangana, India*

**Non-Traditional Antimicrobial Therapies To Overcome The Short-comings Of Traditional Antimicrobial Therapies**

Sowmiya S<sup>1</sup>

*<sup>1</sup> Pharm. D (Intern), Department of Pharmacy Practice, Annamalai University, Tamilnadu, India*

**Modified Carbapenem Inactivation Method (mCIM) as a tool of antibiotic stewardship for Gram negative bacteremia in Teaching Hospital Kandy**

Galgamuwa KD<sup>1</sup>, Kothalawala M<sup>2</sup>, Kudagammana HDWS<sup>3</sup>

*<sup>1</sup> National Hospital Kandy; <sup>2</sup> National Hospital of Sri Lanka; <sup>3</sup> Department of Microbiology, Faculty of Medicine, University of Peradeniya, Sri Lanka*

**Potency of Henna extracts to combat multidrug-resistant clinically-relevant bacteria: phytochemical, quantitative antimicrobial and toxicological assessment**

Morufat Oluwatosin Olaitan<sup>1</sup>, Blessing Ifeoma Nwadike<sup>2</sup>

*<sup>1</sup> Department of Biology, Microbiology and Biotechnology, Faculty of Sciences, Nile University of Nigeria, FCT-Abuja, Nigeria; <sup>2</sup> Department of Microbiology, Faculty of Science, University of Ibadan, Ibadan, Nigeria*

**Discovery of new inhibitors for multidrug efflux pumps in Gram negative bacteria**

Juchan Hwang<sup>1</sup>, Yunmi Lee<sup>1</sup>, Hamin Kim<sup>1</sup>, Hyunjung Lee<sup>1</sup>, Soojin Jang<sup>1</sup>

*1 Antibacterial Resistance Laboratory, Institut Pasteur Korea, 16, Daewangpangyo-ro 712 beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do 13488, Republic of Korea*

**In vitro evaluations of a synthetic plant-based pyrrolidone derivative as a novel anti-MRSA agent**

Saiful Azmi Johari<sup>1</sup>, Mastura Mohtar<sup>1</sup>, Mazurah Mohamed Isa<sup>1</sup>, Hannan Abdul Wahab<sup>1</sup>, Mohd Fazli Mohammat<sup>2</sup>

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**Development of novel alkylquinolone modulators of Quorum Sensing *Pseudomonas aeruginosa***

Vadim Zubkov<sup>1</sup>

*1 National University of Pharmacy, Ukraine*

**A single-center description of bacterial antibiotic use in influenza patients in the post-pandemic period**

Ming-Yan Yang<sup>1</sup>, Yi-Hua Wang<sup>2</sup>, Min Tseng<sup>2</sup>, John Lee<sup>2</sup>

*1 Department of Medical Education, National Taiwan University Hospital, Taipei, Taiwan; 2 Department of Laboratory Medicine, National Taiwan University Hospital, Taipei, Taiwan*

**Antimicrobial chemotherapy in neurological disorders: a call for action in low- and middle-income countries (lmics)**

Dr. Mohd Faizan Siddiqui, M.D<sup>1,2</sup>, Dr. Azaroual Mouna<sup>3</sup>

*1 International Medical Faculty, Osh State University, Osh City, Kyrgyzstan; 2 Department of Neurology, AIG Hospital, Asian Institute of Gastroenterology, Hyderabad, Telangana, India; 3 Tambov State Medical University, Tambov City, Russia*

**Resistance Profile and Antibiogram of *Staphylococcus Aureus* Isolates Circulating in Yastebsheron Hospital, Sudan**

Mihad Altahir<sup>1</sup>, Mohammed Ibrahim Saeed<sup>2</sup>

*1 Graduate College, Infection Prevention and Control Masters, UMST University, Sudan; 2 Department of Medical Laboratory Science, Gulf Medical University, Ajman, UAE*

**Analytical sensitivity evaluation of a novel nanoplex polymerase chain reaction assay for the simultaneous detection of Vancomycin and Linezolid resistant genes in *Enterococcus***

Yusuf Wada<sup>1,2</sup>, Azian Harun<sup>1</sup>, Chan Yean Yean<sup>1</sup>, Zaidah Abdul Rahman<sup>1</sup>

*1 Department of Medical Microbiology and Parasitology, School of Medical Sciences, Universiti Sains Malaysia; 2 Department of Zoology, Ahmadu Bello University, Zaria Nigeria*

## Urinalysis and Prevalence of Uropathogens amongst the aged in Ghana

Emmanuel Armah<sup>1</sup>, Bright K Idun<sup>1</sup>, Freda Kwarteng Boampong<sup>1</sup>, Lawrenzia Kwarteng<sup>1</sup>, Isaac Agyapong<sup>1</sup>, Mawutor Kwame Ahiabu<sup>1</sup>, Mercy Oppong<sup>1</sup>, Naael Mohammed<sup>1</sup>, Cecilia Dhalstrom<sup>2</sup>, Prof Mike Yaw Osei Atweneboana<sup>1</sup>

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## Biological evaluation of MMV1578568 as potent molecule against drug-resistant mycobacterial infections

Md. Naiyaz Ahmad<sup>1,2</sup>, Shriya Singh<sup>1</sup>, Mohammad Imran<sup>1,2</sup>, Sidharth Chopra<sup>1,2</sup>, Arunava Dasgupta<sup>1,2</sup>

*1 Division of Molecular Microbiology & Immunology, CSIR-Central Drug Research Institute, Lucknow;*

*2 Academy of Scientific & Innovative Research, Ghaziabad*

## Oxiconazole Potentiates Gentamicin against Gentamicin-Resistant *Staphylococcus aureus* *in vitro* and *in vivo*

Kaul G<sup>1</sup>, Akhir A<sup>1</sup>, Shukla MI<sup>1</sup>, Shafi H<sup>2</sup>, Akunuri R<sup>3</sup>, Pawar G<sup>3</sup>, Ghouse M<sup>3</sup>, Srinivas N<sup>3</sup> and Chopra S<sup>1</sup>

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*3 Department of Chemical Sciences, NIPER Hyderabad, Hyderabad, Telengana, India*

## Rapid identification of pathogens from positive blood cultures by multiplex PCR technology in University Clinical Center of Kosovo

Greta Lila<sup>1,2</sup>, Yllka Begolli Shehu<sup>1</sup>

*1 University Clinical Center of Kosovo, Prishtina, Kosovo; 2 Faculty of Medicine, University of Prishtina, Prishtina, Kosovo*

## Vaccines as Tools to Prevent Antimicrobial Resistance: Opportunities and Challenges

Bello Olakeu Abdussalam<sup>1</sup>, Maryam Abdulkareem<sup>1</sup>, Egwu Kenneth<sup>2</sup>, Abdullah L-Awwal<sup>3</sup>

*1 Ahmadu Bello University, Zaria; 2 University of Nigeria, Nsukka; 3 University of Ilorin, Ilorin*

## Implementation of CLSI guideline on Disk Diffusion Testing directly from Positive Blood Cultures: 10 months experience in a Tertiary Care Hospital

Dr. Ina Joshi<sup>1</sup>, Dr. Raunak Bir<sup>1</sup>, Dr. Kuhu Chatterjee<sup>1</sup>, Dr. Priti Agarwal<sup>1</sup>, Dr. Archana Thakur<sup>1</sup>, Dr. (Lt. Gen.) Rajiv Mohan Gupta<sup>1</sup>

*1 ESIC Medical College and Hospital, Faridabad, Haryana, India*

## Antimicrobial resistance profile of Typhoidal *Salmonella enterica* clinical isolates with special emphasis on Ceftriaxone, Azithromycin and Fluoroquinolones

Dr. Ankita Rai<sup>1</sup>, Dr. Raunak Bir<sup>1</sup>, Dr. Priti Agarwal<sup>1</sup>, Dr. Kuhu Chatterjee<sup>1</sup>, Dr. Rahul Ranjan<sup>1</sup>, Dr. Rajiv Mohan Gupta<sup>1</sup>

*1 ESIC Medical College and Hospital, Faridabad, Haryana, India*

**Activity of Levofloxacin against Methicillin and Fluoroquinolone resistant Staphylococci**Kuhu Chatterjee<sup>1</sup>, Raunak Bir<sup>1</sup>, Ankita Rai<sup>1</sup>, Priti Agarwal<sup>1</sup>, Rajiv Mohan Gupta<sup>1</sup>

1 Employees' State Insurance Corporation Medical College and Hospital, Faridabad

**Prevalence of Extra-pulmonary Tuberculosis and Rifampicin Resistance by Cartridge based nucleic acid amplification test from a tertiary care center**Dr. Priya Karlapudi<sup>1</sup>, Jayanthi G<sup>1</sup>, Dr. Rahul Ranjan<sup>1</sup>, Dr. Ina Joshi<sup>1</sup>, Dr. Umesh Kumar<sup>1</sup>, Dr. Karteeka<sup>1</sup>, Dr. Sonam Gupta<sup>1</sup>, Dr. Sanchi Kashyap<sup>1</sup>, Dr. Raunak Bir<sup>1</sup>, Dr. Vishwanath Singh Yadav<sup>1</sup>, Dr. Priti Agarwal<sup>1</sup>, Dr. Rajiv Mohan Gupta<sup>1</sup>, Dr. Archana Thakur<sup>1</sup>

1 ESIC Medical College and Hospital, Faridabad, Haryana, India

**Prevalence of Non-tuberculous mycobacterium (NTM) in presumptive Pulmonary and Extrapulmonary tuberculosis patients in a tertiary care centre, Faridabad**Dr. Jayanthi G Rahul Ranjan<sup>1</sup>, Dr. Priya Karlapudi<sup>1</sup>, Dr. Ina Joshi<sup>1</sup>, Dr. Umesh Kumar<sup>1</sup>, Dr. Karteeka<sup>1</sup>, Dr. Raunak Bir<sup>1</sup>, Dr. Priti Agarwal<sup>1</sup>, Dr. Rajiv Mohan Gupta<sup>1</sup>, Dr. Archana Thakur<sup>1</sup>

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**In vitro antibacterial and antioxidant activity of crude extracts of *Cylindrospermum Alatosporum* NR125682 and *Loriellopsis Cavenicola* NR117881**AO Ikhane<sup>1</sup>, R.A Mosa<sup>2</sup>, F.O Osunsanmi<sup>1</sup>, A.R Opoku<sup>1</sup>

1 Department of Biochemistry and Microbiology, University of Zululand, KwaDlangezwa, South Africa;

2 Department of Biochemistry, Genetics and Microbiology, University of Pretoria, Hatfield, South Africa

**Exploring the prevalence of antibiotic resistance and its drivers among *Helicobacter pylori* in Asia**Navoneel Giri<sup>1</sup>, Tushar Midha<sup>1</sup>, Somesh Baranwal<sup>1</sup>

1 Department of Microbiology, School of Basic Sciences, Central University of Punjab, VPO Ghudda, Bathinda, 151401, India

**Screening for unapproved antibiotic combinations, along with the availability of reserved antibiotics approved for use in tertiary care hospitals Insights from South India.**Dr. Suresh Kumar<sup>1</sup>, Surendhar Amageeth<sup>2</sup>, Jasper Victoria<sup>3</sup>, M. Nitheeshwar C<sup>4</sup>

1 Infectious disease specialist, Senior Consultant, Apollo Hospitals; 2 Pharm D, School of Pharmaceutical Sciences, Vels Institute of Science Technology and Advanced Studies, Chennai &amp; Employment State Insurance Corporation Hospital Chennai; 3 Pharm.D intern, C.L. Baid Metha College of Pharmacy Pharm D; 4 Pharm D, Jaya College of Pharmacy

**Disturbing trends in antimicrobial resistance patterns of *Neisseria Gonorrhoeae* from across the Indian subcontinent - time to reflect**Devanshi Sharma<sup>1</sup>, Sumathi Muralidhar<sup>1</sup>, Naveen Chandra Joshi<sup>1</sup>, Leelamma Peter<sup>1</sup>, Vandana Agarwal<sup>2</sup>, Sunil Sethi<sup>3</sup>, Niti Khunger<sup>1</sup>

1 Apex Regional STD Centre, VMMC &amp; Safdarjung Hospital, New Delhi, India; 2 Dept. of Microbiology, Govt. Medical College, Nagpur, India; 3 Dept. of Microbiology, PGIMER, Chandigarh, India

## Landscape of national antibiotic consumption in Malaysia: an analysis of national pharmaceutical sales data from 2019 to 2021

Audrey Huili Lim<sup>1</sup>, Norazida Ab Rahman<sup>1</sup>, Siti Nur Su'aidah Nasarudin<sup>2</sup>, Mary Chok Chiew Fong<sup>2</sup>, Peter Seah Keng Tok<sup>1</sup>, Sheamini Sivasampu<sup>1</sup>

*1 Institute for Clinical Research, National Institutes of Health, Malaysia; 2 Pharmacy Policy & Strategic Planning Division, Pharmaceutical Services Programme, Ministry of Health, Malaysia*

## The Effect of Antimicrobial Stewardship Actions on Broad-spectrum Antibiotic Usage and Resistance Patterns of Gram-Negative Isolates at the Countess of Chester Hospital

Dr Eleanor Senior<sup>1</sup>, Dr Ildiko Kustos<sup>1</sup>

*1 Countess of Chester NHS Trust*

## Understanding Hand Hygiene Compliance among Healthcare Workers: A Comprehensive Assessment of Knowledge, Attitudes, Practices, and Hand Microflora

Parinitha Kaza<sup>1</sup>, Bharath Chhabria<sup>2</sup>, Harshith Rao<sup>2</sup>, Harshavardhan Rao B<sup>3</sup>

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## Not just R&D: How GARDP's REVIVE platform is providing open-access tools and resources for the antimicrobial R&D community

Alexandra Santu<sup>1</sup>, Shirine Derakhshani<sup>1</sup>, Astrid Pentz-Murr<sup>1</sup>, Laura J.V. Piddock<sup>1</sup>

*1 Global Antibiotic Research & Development Partnership (GARDP)*

## Global health, antimicrobial shortages, and supply chain analysis in low- and middle-income countries: Assessing preparedness

Dr. Mohd Faizan Siddiqui, M.D<sup>1,2</sup>, Dr. Azaroual Mouna<sup>3</sup>

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## The Antimicrobial Potential of Probiotics Strains and its Importance

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## Nitrosative stress response machinery as a plausible anti-pathogenic target in *Pseudomonas aeruginosa*

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## A retrospective review of the common childhood illnesses and the indications for antibiotic prescription at Community Hospital in Malawi

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## Prevalence and Antimicrobial Susceptibility of *E. coli* Causing Bloodstream Infections from a Tertiary Centre in Portugal, 2022

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## Computational Innovations in Antimicrobial Chemotherapy: Unveiling the Potential of Repurposing Approved Macrolide Antibiotics through Siderophore Conjugation

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## Usage of irrational antibiotic combinations in a tertiary care hospital, south India

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## The surveillance of overall susceptibility in *Escherichia coli*, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa* in a single medical center

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## Selection of antibiotics in surgical prophylaxis: impact of antimicrobial stewardship team in a South Indian secondary care hospital

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## Identification of *mcr-9* colistin resistance gene in *Enterobacter asburiae* isolated from the gut microbiota of an infant in Ireland

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## Antibiotics during discharge: importance of antimicrobial stewardship team in a secondary care hospital

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