WHO Guidelines on laboratory diagnosis of lower respiratory tract infections using in vitro diagnostic tests

Biographies of proposed Guideline Development Group members [21 October 2025]

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Altaf Ahmed, Pakistan Kidney and Liver Institute and Research Centre
Dr Altaf Ahmed is a leading clinical microbiologist and infection prevention specialist, currently serving as Chairman of Infection Prevention and Control and Head of the Department of Microbiology at the Pakistan Kidney and Liver Institute (PKLI), Lahore, since 2017.

He received his M.B.B.S. from Islamia University, Bahawalpur (1985), followed by a Diploma in Bacteriology from the University of Manchester (1989) and a Diploma in Tropical Medicine and Hygiene from the University of Liverpool (1991). He earned his MD in Clinical Microbiology from Ziauddin Medical University, Karachi, in 1998.

Dr Ahmed has been an active member of several national and international organizations, including the WHO GDG group on CLABSI, Punjab Technical Working Groups on Infection Control, COVID-19, Typhoid, and AMR, and the Medical Microbiology and Infectious Diseases Society of Pakistan, where he also served as President. He is an Associate Member of IFIC, and part of the American Society of Microbiologists, Pakistan Society for Microbiology, and Pakistan Antimicrobial Resistance Network.

His notable contributions include establishing one of Pakistan's largest TB diagnostic labs with advanced BSL2 and BSL3 facilities, pioneering the use of GeneXpert testing in the country, and developing IPC curricula with WHO and partner institutions. He has directed national campaigns on hand hygiene, created free-access IPC learning platforms, and launched Pakistan's first pre-recorded IPC course.

With over 48 peer-reviewed publications, Dr Ahmed continues to play a central role in advancing infection prevention, antimicrobial resistance control, and medical microbiology in Pakistan and beyond.

Agnese Comelli, Médecins Sans Frontières, Italy
Agnese Comelli is a Medical Doctor and Specialist in Infectious and Tropical Diseases, with extensive experience in antimicrobial resistance (AMR) across clinical care, project management, surveillance, and research. She is currently completing a Master of Science in Public Health at the London School of Hygiene and Tropical Medicine (LSHTM).

Since 2023, Dr Comelli has been working with Médecins Sans Frontières (MSF), first as an AMR Flying Coach in the Central African Republic and the Democratic Republic of Congo, and currently as Antimicrobial Stewardship (AMS) Referent for the Middle East Medical Unit, covering 14 countries in Asia, the Middle East, Africa and Central America. In this role, she provides clinical and strategic support to AMS programs in both inpatient and outpatient settings, conduct operational

research to inform practices and adapt stewardship models, and collaborate with colleagues in advocacy, surveillance, microbiology, and data analysis.

Prior to MSF, Dr Comelli worked as a physician in two Italian hospitals and as a consultant for regional health authorities, contributing to microbiological monitoring, surveillance systems, and automated analysis of microbiological and patient-level data to inform AMR-related policies and initiatives.

Since 2022, she has also served on the steering committee of the Italian Society of Tropical Diseases and Global Health (SIMET), where she co-led projects such as developing national guidelines for imported tropical diseases and advancing policies and training programs on global health.

Claudia Denkinger[1], Heidelberg University Hospital, Germany
Claudia Denkinger is the medical director of the Department of Infectious Diseases at the Heidelberg University Hospital. She is an infectious disease specialist with extensive expertise particularly on diagnostics for epi- and pandemic relevant respiratory pathogens and Global Health. She contributed to advancing the field through diagnostics development (co-developed several WHO recommended diagnostics tests), large scale clinical trials (led > 20 studies incl. multi-center studies of TB, SARS-CoV-2 diagnostics), enabling policy development on the national and international level, incl. WHO global policy reviews for TB, hepatitis, SARS-CoV-2.

Anita Desai, Formerly Professor & Head, Department of Neurovirology, National Institute of Mental Health and Neurosciences (NIMHANS), India
Anita Desai's area of diagnostic work and research has focused on clinical and molecular virology. Early in her career, she received two awards from the Wellcome Trust, London enabling her to initiate studies on molecular diagnosis, pathogenesis, immunology and epidemiology of viruses such as Japanese encephalitis virus (JEV), Rabies, HIV, Influenza, Chikungunya, Dengue and SARS-CoV-2.

In the last couple of years, in a project on AES surveillance in India, our group developed and validated an algorithm that enhanced etiological identification from 16% to 48%. The findings had a significant impact on policy and treatment in the 3 states and the national testing algorithm for AES changed by ICMR and NVBDCP.

As In-Charge of the national programs on HIV at NIMHANS, she has worked with the NACO-CDC core group of experts to implement quality system essentials in the testing centers across the country. During the COVID-19 pandemic, besides SARS-CoV-2 testing, she has been in the forefront with mentoring of laboratories, evaluation of kits, serving as one of the 11 mentoring sites

[1] Proposed Guideline Development Group Co-Chair.

in the country for the National Clinical Registry for COVID-19 (ICMR) and establishing genomic surveillance for SARS-CoV-2 leading to inclusion of NIMHANS as one of the 10 core institutes involved in whole genome sequencing under DBT (INSACOG) for recognizing variants.

In her academic pursuits, she has mentored 20 PhD students as a guide (10) and joint guide (10). Her research has been funded by 25 grants – 11 international from the Wellcome Trust, NIHR, BMGF, CDC, NIH and 14 national grants from ICMR and DBT and has 140 publications to her credit.

She has served WHO as a Temporary International Professional as well as a consultant to strengthen laboratory systems in South East Asian countries, assisted countries to develop the national laboratory policy and strategic and operational plans and has coordinated and contributed to manuals and guidelines. She also serves on the ICMR, DBT, NACO and NVBDCP, GOI as an expert.

Post superannuation from NIMHANS, she has been included in the WHO roster of consultants for strengthening laboratory quality management systems in South East Asia and appointed as a member of the WHO - GDG for developing global guidelines for prevention of catheter associated bloodstream infections. She was invited as external reviewer to review guidelines on COVID-19 and Monkeypox by WHO. On short assignments as external consultant with FIND-India from January 2024, working on strengthening laboratory systems in Bihar, India.

Valeria Fabre[2], Johns Hopkins School of Medicine, United States of America
Dr Valeria Fabre is an Associate Professor of Medicine at the Johns Hopkins University School of Medicine. She received her M.D. from Universidad de Buenos Aires, Argentina. She completed her residency in internal medicine at Brown University, and a fellowship in infectious diseases at Johns Hopkins University. She is clinically active and attends the general infectious diseases consult service at The Johns Hopkins Hospital. Dr Fabre's research focuses on antimicrobial stewardship, diagnostic stewardship, and healthcare epidemiology, both nationally and internationally. Dr Fabre has led several CDC-funded projects related to infection prevention and antimicrobial stewardship. Dr Fabre has authored over 50 peer-reviewed manuscripts and was the lead author of the SHEA Principles of Diagnostic Stewardship position paper. Dr Fabre was a member of IDSA and SHEA diagnostic stewardship workforce (still actively involved in SHEA Diagnostic Stewardship initiatives).

Nazir Ahmed Ismail, University of the Witwatersrand, South Africa
Prof Nazir Ismail is the Head of the Department for Clinical Microbiology and Infectious Diseases at Wits University and NHLS' Charlotte Maxeke Academic Complex in Johannesburg, South Africa. He formerly led the diagnostics team at the WHO's Global Tuberculosis (TB) Programme in Geneva, Switzerland, where he was responsible for developing global policies, norms and standards for TB

[2] Proposed Guideline Development Group Co-Chair.

diagnosis and laboratory strengthening. He is a medical doctor by training and specialised in microbiological pathology. His experience covers diagnostics, epidemiology, public health responses, and transmission.

Sameera Al Johani, Adjunct Associate Professor at King Abdullah International Medical Research Center, Kingdom of Saudi Arabia
Dr Sameera Al Johani is a graduate of King Saud University in Riyadh, Kingdom of Saudi Arabia. She completed her medical microbiology residency at McMaster University, Ontario, Canada 2001-2006. She went on to receive training in advanced virology and molecular fellowship from McMaster University, Toronto Public Health Lab, Ontario, Canada 2005- 2006. She obtained the fellow of Royal College of Physician of Canada certification in June 2006 and the American board of medical microbiology in June 2011.

She is currently the Head of Microbiology & Virology, Department of Pathology and Laboratory Medicine and a Consultant Microbiologist in King Abdulaziz Medical City. Dr Al Johani is also an Associate Professor and an Associate Dean (2011-2023) King Saud bin Abdulaziz University for Health Sciences. She has over 45 publications in peer reviewed journals. She has been involved in many educational symposia and seminars in the field of medical microbiology over the past 10 years, nationally and internationally.

Dr Al Johani is also a member of several committees including: the infection control and prevention committee (KAMC/KFNGH), the Resident Education Committee (KAMC), and the antimicrobial subcommittee (KAMC/KFNGH). Dr AL Johani currently is the Editor-in-Chief for the Journal of Infection and Public Health.

Kushlani Jayatilleke, Sri Jayawardenapura General Hospital, Sri Lanka
Dr Kushlani Jayatilleke has been board-certified in Medical Microbiology since 2003 and has served as a consultant microbiologist across multiple hospitals in Sri Lanka, focusing on infectious diseases, infection prevention and control (IPC), and antimicrobial resistance (AMR). She contributed to Sri Lanka's National Strategic Plan (2017) and serves on the National Advisory Committee for AMR. She has co-authored national guidelines on IPC, antimicrobial stewardship, and antibiotic prescribing.

Internationally, Dr Jayatilleke was Specialist Registrar in Medical Microbiology at Lancashire Teaching Hospitals and Leeds Teaching Hospitals NHS Trust, UK (2003–2004). She is a member of the WHO Technical Steering Group, IPC Global Unit, and contributes to WHO guideline development groups, including the revision of AWaRe.

She has received multiple research awards, including the President's Award of Sri Lanka, and has numerous publications and conference presentations (ORCID: 0000-0002-3931-6630). She chaired the Expert Committee on Healthcare Quality and Safety of the Sri Lanka Medical

Association (2017/2018) and delivered the Siri Wickremasinghe Oration (2022) of the Sri Lanka College of Microbiologists.

Dr Jayatilleke is also an active educator, serving as trainer, supervisor, and examiner for postgraduate (MD, PG Diploma, MPhil, PhD) and undergraduate medical microbiology programs, and has been a speaker at many national and international conferences, including ESCMID Global 2025 and RCPath UK webinars.

Souha S. Kanj, American University of Beirut, Lebanon
Souha Kanj is a tenured Professor of Medicine at the American University of Beirut Medical Center (AUBMC), where she served as Head of the Division of Infectious Diseases (ID) until 2024. She is Chair of the Infection Control Program, co-Chair of the Antimicrobial Stewardship Program, and Consulting Professor at Duke University Medical Center where she trained in Internal Medicine and ID.

Professor Kanj has co-authored 325 peer-reviewed articles, book chapters, and UpToDate® cards. She serves as an advisory member for WHO programs in infection control, antimicrobial resistance, priority pathogens, diagnostic stewardship, COVID-19, and fungal infections. She is an advisory international board member for Lancet and Associate Editor for Mayo Clinics Proceedings. Her research focuses on nosocomial infections, antimicrobial resistance and stewardship, nosocomial infections, ID during wars, and fungal infections.

A fellow of several professional societies, including ACP, IDSA, RCP, ESCMID, and ECMM, she is President of the Lebanese Society of Infectious Diseases and Clinical Microbiology and President of the International Society of Antimicrobial Chemotherapy. Her accolades include awards from the Lebanese National Council for Scientific Research, Shoman Award for Research excellence in Arabs, Arab league Excellence in Medicine, Intissar Ahdab Award for Excellence in Research at AUB, the Faculty of Medicine Research Award at AUBMC, the Valkhof Professorship then an Honorary Doctorate Degree from Radboud University.

She ranks in the top 2% cited researchers in the Stanford University citation indicator for 2023-2025 and is the most cited researcher in ID in the Arab countries and number 8 in Asia.

Onur Karatuna, WHO Collaborating Centre for Standardisation of Antimicrobial Susceptibility Testing, Clinical Microbiology, Sweden
Assoc. Prof. Onur Karatuna, M.D. studied medicine at Istanbul University, Cerrahpasa School of Medicine (Istanbul, Türkiye). He completed his specialty training in medical microbiology in 2008 in Marmara University, Department of Medical Microbiology (Istanbul, Türkiye). After completing his military service and the obligatory state service, he worked at the Acibadem University (Istanbul, Türkiye) as an academic staff in the Department of Medical Microbiology between 2011 and 2019.

Between 2012 and 2018, he served as the scientific secretary of the Turkish Study Group ADTS (Standardisation of Antimicrobial Susceptibility Testing) which is recognized by the EUCAST as the National Antimicrobial Susceptibility Testing Committee (NAC).

He was an executive committee member of the ESCMID Study Group for Antimicrobial Resistance Surveillance (ESGARS) between 2016 and 2022. Starting from 2014, he has been actively collaborating in the CAESAR network as a WHO consultant on antimicrobial resistance (AMR). He is a member of the CAESAR Advisory Board since 2016. In 2022, he became a member of the ESCMID Education Subcommittee.

Since 2018, he is working at the Clinical Microbiology Laboratory, Central Hospital in Växjö, Sweden. The laboratory serves as the national reference laboratory for phenotypic AST, hosts the EUCAST Development Laboratory, is designated as the EU Reference Laboratory (EURL) for Public Health in the Field of AMR in Bacteria, and is a WHO Collaborating Centre for Standardization of AST of Bacteria. Dr Karatuna is the lead scientist of the WHO Collaborating Centre and is in charge of liaising with the WHO.

Marimuthu Kalisvar, National Infection Control and Healthcare Epidemiology Division (NICHE), Singapore

Dr Kalisvar Marimuthu earned his medical degree from the University of Malaya in 2003 and a master's degree in Epidemiology from the London School of Hygiene and Tropical Medicine. He completed his specialist training in Infectious Diseases in 2013 and is currently a practicing Infectious Diseases and Infection Control Consultant at the National Centre for Infectious Diseases and Tan Tock Seng Hospital, Singapore. He also serves as Director of the National Infection Control and Healthcare Epidemiology (NICHE) Division at the Communicable Diseases Agency, Singapore. In addition, Dr Marimuthu is an Adjunct Assistant Professor at the Yong Loo Lin School of Medicine, National University of Singapore, and a Consultant for Infection Control at the Institute of Mental Health. His primary research interests focus on the transmission dynamics of emerging infectious diseases and multidrug-resistant organisms (MDROs).

Appiah-Korang Labi, University of Ghana Medical School, Ghana

Dr Appiah-Korang Labi is a Ghanaian medical doctor with specialisation in clinical microbiology. He is a graduate of the University of Ghana Medical School and holds a PhD in molecular bacteriology and infection from the University of Copenhagen. He has previously worked as a technical officer on Antimicrobial Resistance Structured Operational Research training initiative with the World Health Organization Ghana office. He is currently a senior lecturer at the department of Medical Microbiology of the University of Ghana Medical School and the Korle-Bu Teaching Hospital. His research interests are in the areas of antimicrobial use and resistance as well as healthcare associated infections. Dr Labi has published over 50 peer-reviewed articles both local and international.

Felix Liauw, Harapan Kita Women and Children Hospital, Indonesia
Dr Felix Liauw is a general paediatrician currently pursuing a fellowship in paediatric intensive care. Since October 2023, he has been a member of WHO Task Force of AMR Survivors. Dr Liauw lost his son in 2020 due to drug resistant infection that had been treated with multiple antibiotics from first to third line of antibiotics. He practices at the Division of Paediatric Intensive Care Unit at the Harapan Kita National Women and Children Health Center in Jakarta, Indonesia, a tertiary hospital. Additionally, he is an active member of the Paediatric Acute & Critical Care Medicine Asian Network. In collaboration with other colleagues across Asia, they have collectively published several papers about paediatric acute respiratory syndrome. Beyond his role as a clinician, Dr Liauw is also involved in a civil society organization, named Yayasan Orangtua Peduli (The Concerned and Caring Parents Foundation) since 2010, which focuses on enhancing health literacy through community education programs across Indonesia.

Daniel J Morgan, University of Maryland, United States of America
Dan Morgan MD, MS is an infectious disease physician and epidemiologist. He is a tenured Professor and Director of the Center for Innovation in Diagnosis at the University of Maryland School of Medicine. He created testingwisely.com and the BIRD game. He headlined meetings at the WHO and CDC. Dr Morgan won the NIH New Innovator, SHEA Mid-Career and ACP Alvan Feinstein awards. He has had continuous federal funding and over 230 publications.

Alexandre Marra, Hospital Israelita Albert Einstein, Brazil
Dr Alexandre R. Marra is a researcher at the Einstein Hospital Israelita, São Paulo, Brazil, and a permanent professor in the Postgraduate Program at the Faculdade Israelita de Ciências da Saúde Albert Einstein (FICSAE). He received his medical degree from the Faculdade de Ciências Médicas de Santos (FCMS) in 1996. He completed his residency in Internal Medicine and Infectious Diseases at the Universidade Federal de São Paulo/Escola Paulista de Medicina (UNIFESP/EPM), finishing in 2000. He went on to earn a master's degree in Infectious Diseases at UNIFESP/EPM in 2002, followed by a PhD in Infectious Diseases from the same institution in 2004. Following his doctoral studies, he completed postdoctoral training in Hospital Epidemiology at Virginia Commonwealth University (VCU) from 2004 to 2005 and at the University of Iowa from 2016 to 2020.

Dr Marra's academic interests lie in infectious disease prevention and hospital epidemiology. His current research focuses on the epidemiology of healthcare-associated infections, including bloodstream infections, hand hygiene practices, and infection control strategies in diagnostic stewardship. He also serves as an Associate Editor for *Antimicrobial Stewardship and Healthcare Epidemiology* (ASHE), a journal of the Society for Healthcare Epidemiology of America (SHEA), and for the *Journal Einstein* (São Paulo).

Alessandra Oliva, Sapienza University, Italy

Alessandra Oliva is an Associate Professor of Infectious Diseases at Sapienza University of Rome and works as an Infectious Diseases specialist at Azienda Ospedaliero-Universitaria Policlinico Umberto I of Rome. After her degree in Medicine and Surgery, Prof. Oliva completed her PhD in "Infectious Diseases" and a master's degree in "Infection in Surgery". During her career, she had been working at the Microbiology Research Laboratory of the Infectious Diseases Clinic at the Policlinico Umberto I in Rome and, during her PhD, also in the Microbiology Research Laboratory at the Centre Hospitalier Universitaire Vaudois (CHUV) in Lausanne (Switzerland), gaining skills and abilities in the field of Clinical Microbiology.

Currently, Prof. Oliva is an Infectious Diseases consultant in several departments of the Hospital, including Intensive Care Unit, pneumology and Internal Medicine wards. She is actively involved in the Antimicrobial Stewardship Program of the Hospital, contributing to the development of local diagnostic and therapeutic algorithms regarding the principal infective syndromes. Prof. Oliva is member of the Italian Society of Infectious and Tropical Disease (SIMIT), European Society of Clinical Microbiology and Infectious Diseases (ESCMID) and is part of the executive committee of the SIMIT Antimicrobial Stewardship Group.

Her principal areas of interest are nosocomial infections, respiratory infections and infections caused by multi-drug resistant bacterial, as well as fungal infections and infective endocarditis. One of her principal attitudes is represented by the translational approach combining clinical and laboratory aspects in Infectious Diseases.

She is currently involved in several national research projects. Her scientific production consists of 172 full papers and 33 H-index (Scopus database).

Shivprakash Rudramurthy, Postgraduate Institute of Medical Education and Research (PGIMER), India

Shivaprakash M. Rudramurthy is a Professor of Medical Mycology at the Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India. He obtained his MD in Medical Microbiology from Mysore University in 1997, India, and his PhD from Radboud University, the Netherlands.

AT PGIMER, he oversees the WHO Collaborating Centre for Research on Fungi of Medical Importance, European Confederation of Medical Mycology Centre of Excellence (Diamond Status), the ICMR Collaborating Centre of Excellence, the Centre of Advanced Research in Medical Mycology, and is the Curator of the National Culture Collection of Pathogenic Fungi.

He served as Vice President of the International Society for Human and Animal Mycology (ISHAM) from 2018 to 2022 and is currently serving a second term as Vice President of ISHAM from 2025 to 2028. He also served as President of the Indian Society of Medical Mycologists (ISMM) from 2018 to 2020, as well as General Secretary and Treasurer of ISMM.

He is a Fellow of the National Academy of Medical Sciences (India), a Member of the National Academy of Sciences (India), and a core member of the Fungal Infection Study Forum.
Over his nearly three-decade career in medical mycology, Dr Rudramurthy has been deeply involved in clinical and translational research. His major research interests include molecular epidemiology, taxonomy, and typing of human pathogenic fungi; molecular diagnostics of fungal infections; and antifungal resistance. He has reported several rare fungi as agents of human mycoses and described new species of pathogenic fungi, such as *Malassezia arunalokei*, *Exophiala arunalokei*, and *Cunninghamella arunalokei*. His group has discovered novel drug resistance mechanisms in Aspergillus flavus and Trichophyton indotineae and has been at the forefront of fungal outbreak investigations across India.

Dr Rudramurthy's contributions are reflected in a strong publication record, with over 350 peer-reviewed research papers (H-index 48), more than 25 book chapters, and one edited textbook (Springer Nature).

Nyambura Moremi Sogone, National Public Health Laboratory, Tanzania
Nyambura is a Clinical Microbiologist and an AMR Technical Officer at African Centers for Disease Control and Prevention with 14 years of technical, administrative, and policy level experience in clinical practice, infectious disease surveillance and research, inter-agency coordination, program and laboratory systems strengthening. She is also the immediate past Director of the Tanzania National Public Health Laboratory.

Through different capacities, she has interacted and worked collaboratively with International Development Agencies and partners including the WHO, World Bank, Africa CDC, ASLM, US CDC and USAID in designing, overseeing and implementing public health programs. She has provided comprehensive technical, administrative and policy support to the global health security core elements including antimicrobial resistance (AMR) surveillance systems and antimicrobial stewardship programs.

Nyambura has engaged and contributed to country, regional and global initiatives to mitigate AMR including setting up the first of its kind global research agenda for AMR in human health. She was the Tanzania Principal Investigator for the MAAP study and the regional coordinator for the ODIN Project; a pilot study with a goal of strengthening environmental surveillance to advance public health action in Tanzania, DRC and Burkina Faso.

She successfully provided consultancy services at national and international level and through these engagements, Botswana, Somalia and Seychelles are poised to have their first ever laboratory policies.

As a passionate research scientist, she has contributed to and co-authored over 60 scientific articles in peer-reviewed journals.

Paul Turner, Cambodia Oxford Medical Research Unit, Cambodia
Paul Turner is a clinical paediatric microbiologist and director of the Cambodia Oxford Medical Research Unit (COMRU), based at Angkor Hospital for Children, Siem Reap. COMRU is a component of the Mahidol Oxford Tropical Medicine Research Unit, one of the Wellcome Africa and Asia Programmes. He is Professor of Paediatric Microbiology at the Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford.

Paul leads research on pneumococcal colonisation and the nasopharyngeal microbiota, paediatric invasive bacterial infection epidemiology and antimicrobial resistance (AMR). He is the principal investigator of the ACORN Asia-Africa clinical AMR surveillance network. His non-research work focuses on capacity development for diagnostic microbiology in low-resource settings, in particular improving laboratory informatics for better local data utilisation. Paul led development of the MICRO reporting framework for clinical microbiology data and chairs the steering committee for a Wellcome-funded SEDRI-LIMS open-source laboratory data management development project.

Andrew Whitelaw, National Health Laboratory Service, South Africa
Andrew Whitelaw completed his medical training at the University of the Witwatersrand, South Africa, in 1993. After completing an MSc in Medical Microbiology at the University of Cape Town in 1999, he qualified as a specialist clinical microbiologist from the Colleges of Medicine of South Africa in 2000. He worked as a consultant microbiologist at Groote Schuur Hospital from 2003 – 2012, and in December 2012 took up the post of Head of Department of Medical Microbiology at the University of Stellenbosch / Tygerberg Hospital NHLS, where he is currently based.
He remains active in a clinical advisory role focusing on antimicrobial stewardship (AMS), laboratory diagnostics and infection prevention and control (IPC) at provincial, national and international levels. His involvement includes past presidency of the Infection Control Society of South Africa and serving on the SA Ministerial Advisory Committee on AMR. He is currently a member of the World Society of Paediatric Infectious Disease Working Group in AMR; the St. Jude Global Pathology and Laboratory Medicine Program; and the KlebNET Global Surveillance Program. These activities mirror his research interests in antimicrobial resistance (AMR), AMS and IPC. He has authored / co-authored >150 manuscripts (primary research, guidelines and commentaries). He has contributed to laboratory, AMS and IPC practices and guidelines nationally and internationally. He is an editor / associate editor for three local and international journals. He is actively involved in under- and postgraduate teaching and training, and has supervised / co-supervised over 40 students at honours, masters and doctoral level.

Kamini Walia, Indian Council of Medical Research, India

Dr Kamini Walia is a senior public-health and infectious-diseases expert and Senior Scientist (Scientist G) & Head, Division of Epidemiology and Communicable Diseases (ECD) at the Indian Council of Medical Research (ICMR) in New Delhi. Trained as a microbiologist, she holds a PhD from the Postgraduate Institute of Medical Education and Research (PGIMER) and a Master of Public Health (MPH) from Johns Hopkins University.

With more than two decades of experience across infectious diseases, reproductive and child health (RCH), noncommunicable diseases (NCDs), human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), vaccines, and diagnostics, she has initiated and steered multiple national programmes. She previously served as Director, Research & Development at PATH (formerly Program for Appropriate Technology in Health).

Dr Walia currently leads ICMR's flagship Antimicrobial Resistance (AMR) Initiative, spanning surveillance, antimicrobial stewardship, and One Health approaches. She curated India's National Essential Diagnostics List (NEDL) to strengthen access to diagnostics at all levels of care. Internationally, she is a former member of the World Health Organization (WHO) Strategic Advisory Group of Experts on In Vitro Diagnostics (SAGE IVD) and has contributed to the Global Antibiotic Research & Development Partnership (GARDP), the Lancet Commission, and the Surveillance and Epidemiology of Drug-Resistant Infections Consortium (SEDRIC).

Author of 160+ publications, her recent work covers genomic surveillance of drug-resistant pathogens, antimicrobial-stewardship frameworks, and diagnostic-system strengthening. Her honors include the ICMR Shakuntala Amir Chand Award, the Indian National Science Academy (INSA) Young Scientist Award, and a Fogarty International Center Fellowship from the U.S. National Institutes of Health (NIH).

Heiman Wertheim, Radboud University Nijmegen Medical Center, The Netherlands
Heiman Wertheim is a professor in clinical microbiology and heads the clinical microbiology department at Radboud University Medical Center and is chair of the Radboud Center of Infectious Diseases (RCI, www.radboudrci.nl). Heiman is past president of the Netherlands Society of Medical Microbiology (www.nvmm.nl). Furthermore, he is president elect of the International Society of Antimicrobial Chemotherapy (www.isac.world) and board member of the Alliance for the Prudent Use of Antibiotics (APUA). For these societies he is developing a directed therapies global antibiotics guideline in collaboration with prof Souha Kanj (Lebanon). Until 2015, Heiman was director of the Oxford University Clinical Research Unit (OUCRU, www.oucru.org) in Hanoi, Vietnam. He coordinated laboratory capacity strengthening and conducted research in Southeast Asia.

One of his main interests is antibiotic resistance in both resource rich and resource constrained settings and does this through a multidisciplinary approach: health systems, policy development, behavior, surveillance, prevention, genomics, and clinical trials. He supervised activities for the

Global Antibiotic Resistance Partnership (GARP) in Vietnam, which did a situation analysis on antibiotic use and resistance. He received funding to set up a national AMR reference laboratory and to improve the governance structure of AMR in Vietnam. He demonstrated that C-reactive protein point of care testing can bring down antibiotic use safely in primary health stations in Vietnam.

Heiman is the PI of the ABACUS project that studies in 3 Asian countries and 3 African countries community antibiotic use. ABACUS project studies also how the appearance of antibiotics influences use (https://abacus-project.org). In the Netherlands he is active in the Gelderland Antibiotica Resistentie en Infectiepreventie Netwerk (GAIN) and member of the National Health Council (Gezondheidsraad). He currently is member of WHO's STAG-AMR and active as WHO consultant for Ukraine.