

BactiVac 7th Annual Network Meeting

Rio Othon Palace Hotel, Rio de Janeiro, Brazil, 10-12 November 2026

Speaker Profiles



Prof Stephen Baker

***Principal Scientist, A*STAR Infectious Diseases Labs (A*STAR IDL),
Agency for Science, Technology and Research, Singapore***

Stephen Baker is a Senior Principal Scientist at A*STAR Infectious Diseases Labs and an internationally recognised researcher in infectious diseases, bacterial genomics, and antimicrobial resistance (AMR). His work focuses on understanding the evolution, transmission, and clinical impact of multidrug-resistant bacterial pathogens, with a particular interest in translating scientific discovery into deployable interventions. Over the past 25 years, Stephen has held senior academic and research positions at University of Cambridge, University of Oxford, IAVI, and the Wellcome Sanger Institute. He previously spent more than a decade working in Vietnam, where he led major international collaborations on enteric infections, pathogen genomics, and global health research. His current research integrates genomics, immunology, microbiology, and translational biology to develop monoclonal antibodies, vaccines, and other non-antibiotic strategies against priority AMR pathogens, including *Acinetobacter baumannii* and *Klebsiella pneumoniae*. Professor Baker has published more than 500 peer-reviewed articles, secured major international research funding, and continues to lead collaborative programmes across Asia, Europe, and Africa focused on infectious diseases and global health.



Dr Madhu Emmadi

Senior Manager, Bharat Biotech International Limited, India

Dr. Madhu Emmadi is a Senior Manager at BHARAT BIOTECH INTERNATIONAL LIMITED, India, where he is leading Bacterial Vaccine R&D Department. Key areas of focus are glycoconjugate and outer membrane vesicle vaccines against life threatening AMR pathogens. Earlier, he worked at Max-Planck Institute for Colloids and Interfaces under the supervision of Prof. Peter H. Seeberger and later served as a Senior Scientist at Vaxxilon/Idorsia pharmaceuticals, Germany, in the field of semi-synthetic vaccine candidates.



Dr Ignacio Esteban

***Senior Policy Manager, Gavi the Vaccine Alliance, Switzerland
Associate Professor of Public Health, Austral University School of
Medicine, Argentina***

Dr. Ignacio Esteban is a paediatrician and public health professional trained in pulmonology and infectious disease epidemiology, with expertise in vaccine policy, new vaccine introductions, and a focus on equitable vaccine access. He has conducted research across low- and middle-income countries (LMICs), including serving as Research Associate and Head of Pharmacovigilance at the Infant Foundation, and in roles at the Johns Hopkins International Vaccine Access Center (IVAC). He is currently Senior Policy Manager at Gavi, the Vaccine Alliance, where he leads analyses and efforts on new vaccine introductions, including RSV, GBS, tuberculosis, and dengue, to support and promote the introduction of these vaccines in low-income countries. He also serves as Associate Professor of Public Health at Austral University School of Medicine.



Dr Malick Gibani

***Clinical Associate Professor in Vaccinology, Imperial College London;
Consultant in Infectious Diseases and Medical Microbiology, Chelsea
and Westminster NHS Foundation Trust, UK***

Dr Malick M Gibani is a Clinical Associate Professor in Vaccinology at Imperial College London and a Consultant in Infectious Diseases and Medical Microbiology at Chelsea and Westminster NHS Foundation Trust. His research uses controlled human infection models, clinical trials and experimental medicine to accelerate vaccine development against priority bacterial pathogens. He has led Salmonella human challenge studies to define mechanisms and determinants of protective immunity, including antibody-mediated protection, mucosal responses and systems immunology approaches. His work integrates clinical microbiology, immunology, bacterial pathogenesis and translational vaccine science, with particular interests in correlates of protection, antimicrobial resistance and evidence generation for policy and licensure. At Imperial, he leads a clinical and translational research group developing human experimental platforms to generate actionable evidence for vaccines, monoclonal antibodies and other interventions.



Dr Lely Stella Guzmán-Barrera

***International Immunization Advisor, Coordinator, Pan American
Health Organization (PAHO), Brazil***

Dr. Lely Stella Guzmán Barrera is a senior immunization leader with extensive experience in public health strategy, epidemiological surveillance, and international technical cooperation. Since joining PAHO/WHO Brazil in 2017, she has Immunization Advisor, leading strategic initiatives to strengthen Brazil's National Immunization Program. Her work has included coordination of vaccination microplanning, support to emergency preparedness and response, and technical leadership during major public health challenges, including the yellow fever and measles outbreak and the COVID-19 pandemic. Previously, she held senior public health positions in Colombia, including Director of Public Health in Boyacá and La Guajira, and contributed to regional cooperation initiatives in countries of Central and South America since PAHO/WHO. Her academic background in Bioethics, Epidemiology, Health Entity Management, and Public Administration supports a results-oriented approach focused on evidence, equity, and institutional strengthening. In recognition of PAHO Brazil's technical cooperation with the national immunization agenda, the Government of Brazil awarded the Organization the Oswaldo Cruz Gold Medal in 2024.



Prof Ian Henderson

***Executive Director, Institute for Molecular Bioscience, University of
Queensland, Australia***

Professor Ian Henderson received a PhD in 1997 and is Executive Director of the Institute for Molecular Bioscience. Prof. Henderson was the founding Director of the Institute for Microbiology and Infection, at the University of Birmingham. Prof. Henderson's research is focused on basic and translational science investigating the assembly of the bacterial cell surface and the interaction of cell surface components with host cells. This work includes his PhD research which reveal the function of the now well studied Escherichia coli biofilm forming protein Antigen 43, and the discovery of how expression of Antigen 43 was regulated by a novel epigenetic mechanism. Prof. Henderson coined the moniker Type 5 secretion, for the largest class of Gram negative bacterial

secreted proteins, established a genome sequencing company that currently employs 20 people, and developed a therapy based on the understanding of the interaction of antibody with the bacterial cell surface, which has been deployed in clinic to treat patients with recalcitrant infections. He has a proven track record in coordinating and working in multi-faceted research programs, including as the Director of the Wellcome Trust PhD training program in Antimicrobial Resistance, and has published in journals such as Science, Cell, Nature Communications, J Exp Med, PNAS, EMBO Reports, eLife, and PLoS Genetics. The majority of his career has included substantial teaching (125 contact hours per year, plus coordination of 7 courses: 2001-2018) and management commitments (Head of Department, Institute Director: 2011-present). In this period he has published ca. 150 articles, reviews and chapters (h-index 67; ~18,000 cites). He will contribute his expertise in biofilm formation, murine models of infection, and microbial cell biology.



Dr Helene Bæk Juel

Senior Scientific Manager, Novo Nordisk Foundation, Denmark

Helene is a Senior Scientific Manager at the Novo Nordisk Foundation, where she helps shape and co-develop strategic initiatives that accelerate vaccine research and development of tools and products to combat respiratory infections. She holds a PhD in immunology and brings cross-sector experience from academia, public sector research and the biopharmaceutical industry. A self-described scientific generalist, Helene has worked across vaccinology, controlled human infection models, and omics-driven biomarker discovery; in diseases spanning from typhoid fever and fatty liver disease to bacterial vaginosis. The consistent thread through her career is a focus on clinical trials and translational development: connecting mechanistic insights to study design, endpoints, and decision-making that move candidates towards impact. In her current role, she partners with investigators, consortia and industry to identify gaps, build collaborative programmes, and align funding with the practical realities of product development, manufacturing and equitable access, while building in support for open science, capacity building across diverse global settings, and maintaining scientific independence for the researchers. As an invited speaker, Helene will discuss how philanthropic capital can de-risk innovation, enable shared infrastructure and standards, and convene stakeholders to shorten the path from promising science to clinical tools that reach the people who need them.



Dr Debbie King

Vaccines Research Lead, Wellcome Trust, UK

Infectious Diseases at Wellcome. She leads a programme of work focused on developing affordable vaccines to reduce the risk and impact of infectious diseases and facilitate their evidence-based use. Her research interests include the role of correlates of protection in vaccine development, and how better understanding of protective immunity can inform vaccine design. She completed a PhD in Virology at Kings College, London, focused on HIV. In her postdoctoral research, she continued her work in HIV prevention characterizing primary viral replication models, immunogen design, and immunization strategies at Imperial College London. She moved to the IAVI Human immunology laboratory where she managed a large programme supporting early phase clinical trials of vaccine candidates for HIV, and other infectious diseases. She later directed research focused on identifying signatures of viral control in an acute HIV infection cohort. She joined Wellcome in 2020 and has developed a strategic programme of work that seeks to support a more sustainable ecosystem for vaccine development, including expanding vaccine manufacturing in Africa, and identifying innovations in clinical trials to improve feasibility of development, focusing on the role of correlates of protection. She leads a joint programme of work with CEPI which seeks to identify correlates of protection to inform vaccine development decisions for viral and bacterial pathogens and tools to evaluate biomarker data packages.



DVM Bernardo Lozano Dubernard

Chief Executive Officer, LABORATORIO AVI-MEX, SA DE CV (Avimex®), Mexico

Dr. Bernardo Lozano-Dubernard is the General Director of Laboratorio Avi-Mex, S.A. de C.V., (Avimex®) a company aligned with the concept of One Health and with presence in over 25 countries. A graduate of the National Autonomous University of Mexico (UNAM) as a veterinarian, he furthered his education with diplomas in Senior Management, Innovation and Technology and Executive coaching. He has had a distinguished academic career, teaching at UNAM Avian Clinics. He has published more than 100 scientific articles and delivered over 150 international conferences. He is a coinventor of 8 patents and 2 patent submissions. He was president of ANECA (National Vet poultry Assoc) in 1986 and of INFARVET (Vet Pharma Chamber) in 1996. Since 2021 he is Honorary Academic at the Mexican Veterinarian Academy. That same year he was awarded the "Professional Merit" by the Federation of Colleges and Associations of Veterinarian Professionals of Mexico, and he also obtained the recognition as Entrepreneur of the Year in Mexico by the consultancy firm EY in 2022. His leadership has been crucial for the advancement of the poultry industry in Mexico, which now expands to human health with the creation of the human division of Avimex® for the development of the COVID-19 vaccine based on antigen AVX/COVID-12 (Patria) in Mexico.



Dr Vega Masignani

Alliance Director, CARB-X, Italy

Vega holds a degree in Pharmaceutical Chemistry and a PhD in Biotechnology. She has spent 20+ years in the R&D of big pharmas, working as Project Leader on multiple vaccine programs, with a special focus on meningococcal and pneumococcal vaccines. Her scientific background spans molecular biology, bacterial and viral pathogenesis, toxins, structural bioinformatics, computational biology, and vaccinology. She has spent more than 20 years in the R&D of large pharmaceutical companies (Chiron Vaccines, Novartis Vaccines and GSK) mainly working the infectious disease area. She served as Discovery Project Leader and Vaccine Development Leader on multiple vaccine programs, with a special interest in meningococcal and pneumococcal vaccines. In these roles, she was involved in setting the program strategy, ensuring operational execution and coordinating team's effort toward common objectives. She significantly contributed to the initial design and clinical development of 4CMenB, the first serogroup B meningococcal vaccine, which is now licensed in more than 50 countries all over the world. She has published more than 70 scientific papers and reviews on bacterial pathogenesis, antigen characterization and vaccine development and has participated as speaker at several international conferences. She is currently Alliance Director at CARB-X, a global non-profit partnership aimed at accelerating antibacterial products to address drug-resistant bacteria, where she manages a portfolio of Preventatives programs.



Dr Eliane Miyaji

Research Scientist, Instituto Butantan, Brazil

Eliane Miyaji is a Research Scientist in the Bacteriology Laboratory at Instituto Butantan (Brazil). Her research focuses on the development of cost-effective alternative pneumococcal vaccines, mainly vaccines based on liposomes containing protein antigens and extracellular vesicles for mucosal and parenteral immunization. She has a degree in Biological Sciences (1992) and a PhD in Genetics (1997), both from the University of São Paulo (Brazil).



Dr Ebrahim Mohamed

Head of Science and Innovation, The Biovac Institute, South Africa

Ebrahim Mohamed is a Synthetic Organic Chemist by training with over 18 years' experience in pharmaceuticals with expertise covering business development, product development, technology transfers, process optimizations and cGMP. After completing his PhD from the University of Cape Town in 2009, he joined the Science and Innovation (S&I) Department at the Biovac Institute (BIOVAC) where he established his expertise in the development of glycoconjugate vaccines against diseases such as *Haemophilus influenzae B*, *Streptococcus Pneumoniae*, *Group B Strep* and *Cholerae*. As Head of Science and Innovation he currently manages all the CMC related activities with the Science and Innovation department. He has accumulated experience in both inward and outward-bound technology transfers of clinical vaccine candidates and commercial products. In 2015 Ebrahim also became a key member of the secretariat team of the African Vaccine Manufacturing Initiative (AVMI) where he has played a pivotal part in assisting with the coordination of the AVMI Vaccine Manufacturing and Procurement in Africa (VMPA) study. Subsequently elected as a member of the AVMI board, Ebrahim represented the Southern African Region between 2016 and 2021. In 2021 he was elected as part of the Scientific Working group addressing Technology and IP in the 'Partnerships for African Vaccine Manufacturing' (PAVM) study coordinated by the African CDC. He also serves as Working Group Lead on the Emerging Biopharmaceuticals Manufacturers Network (EBPMN) scientific committee. Ebrahim has published several publications in reputable peer-reviewed journals.



Dr Eve Nakabembe

Senior Obstetrician Gynaecologist, Makerere University College of Health Sciences, Uganda

Eve Nakabembe (MD, PhD) is a senior Obstetrician/Gynaecologist, clinical researcher and academic based at Makerere University School of Medicine. She is a clinician at Mulago Specialized Women and Neonatal hospital in Kampala, Uganda. Her research work focuses on safety and immunogenicity of vaccines given to pregnant women and newborns living in LMICs including pregnant women living with HIV. She has more than 20 years' experience working in Sub Saharan Africa on different programs to improve maternal, new-born and child health.



Prof Marcela Pasetti

Professor of Paediatrics, Centre for Vaccine Development, University of Maryland School of Medicine, USA

Marcela F. Pasetti, Ph.D., is a Professor in the Departments of Pediatrics and Microbiology & Immunology and a faculty member of the Center for Vaccine Development (CVD) at the University of Maryland School of Medicine in Baltimore. She is a leading expert in clinical and vaccine immunology and investigates mechanisms of protective immunity following infection and vaccination. Her research focuses on maternal–infant immunity, pediatric vaccines, mucosal immunity, and immunological correlates of protection. Dr. Pasetti has published extensively on vaccines against bacterial pathogens, and her work has been continuously supported by the NIH, other federal agencies, foundations, and industry. She directs a robust basic research program and leads the Applied Immunology Section at the CVD, where she applies innovative immunological approaches to characterize immune responses in support of clinical studies. She serves as a co-investigator on major NIH-funded CVD initiatives, including the Vaccine and Treatment Evaluation Unit (VTEU), the Infectious Diseases Clinical Research Consortium (IDCRC), and the Collaborative Influenza Vaccine Innovation Centers (CIVICs). In addition to her

research leadership, Dr. Pasetti teaches immunology and mentors graduate students, postdoctoral fellows, and junior faculty. She is a Fellow of the American Academy of Microbiology and a Senior Editor for *mSphere*, a journal of the American Society for Microbiology.



Prof Tatiana Pinto

Associate Professor, Instituto de Microbiologia, Universidade Federal do Rio de Janeiro

Tatiana Pinto is an Associate Professor of Microbiology and Principal Investigator of the Streptococcus Laboratory at the Federal University of Rio de Janeiro (UFRJ), Brazil. She serves on the committees of the International Symposium on Streptococcus agalactiae Diseases (ISSAD) and the Lancefield International Symposium on Streptococcus and Streptococcal Diseases (LISSD). Actively engaged in international scientific communities, she is a member of the International Society for Infectious Diseases (ISID), the American Society for Microbiology (ASM), and technical advisory groups such as the WHO Technical Advisory Group on Group B Streptococcus Vaccine Development (TAG-GBS). With over 70 scientific publications, her research focuses on applied microbiology, particularly on the molecular characterization of Gram-positive cocci through phenotypic, genotypic, and multi-omics approaches. Her work emphasizes antimicrobial resistance, bacterial virulence and molecular diversity, as well as the diagnosis and control of maternal and child bacterial infections, including vaccine development. Beyond research, she leads science communication initiatives such as the ASM/UFRJ International Student Chapter and the DivulgaMicro project.



Dr José Procopio Senna

Senior Public Health Research Specialist, Fiocruz, Brazil

Dr. Senna is graduated in Pharmacy from the Federal University of Rio Grande do Sul (1987), obtained a master's degree in Microbiological Ecology, Pathogenesis of Microorganisms, and Anti-infective Agents from the University of Paris Sud (1995), a doctorate in Cellular and Molecular Biology from the Federal University of Rio Grande do Sul (2001), and a post-doctoral degree from the Pasteur Institute, Antibacterial Agents Unit (2003). He is a public health specialist at the Institute of Technology in Immunobiologicals, BioManguinhos, at Fiocruz. He has experience in the field of immunobiologicals, with an emphasis on microbiology, mainly working on the following topics: multidrug-resistant bacteria, development of passive immunotherapy—therapeutic monoclonal antibodies, vaccines, and aptamers for the treatment, identification, and prophylaxis of multidrug-resistant bacteria. He is currently the Coordinator of the CEUA (Ethics Committee on the Use of Animals) at BioManguinhos. Current Vice Coordinator of the Professional Master's Program in Immunobiological Technology at BioManguinhos.



Prof Neil Ravenscroft

Emeritus Professor, University of Cape Town, South Africa

Neil Ravenscroft is an Emeritus Professor in the Department of Chemistry at the University of Cape Town. He is a carbohydrate chemist who obtained his PhD from UCT for structural studies on Klebsiella bacteria. After postdoctoral studies on the structure of bacterial antigens in Canada and Germany, he worked in R & D of vaccines for five years at Chiron (now GSK) Vaccines (Italy). He returned to UCT in 2000 and continues to apply NMR spectroscopy to characterize new serotypes and assist with the development of carbohydrate-based vaccines with local and international partners. Since 2004 he has been a consultant on PATH's meningococcal and pneumococcal vaccine projects. He has worked with the World Health Organization and the US Pharmacopeia Expert Panel on developing guidance for conjugate vaccines.



Dr Senjuti Saha

Deputy Executive Director, Child Health Research Foundation, Bangladesh

Dr. Senjuti Saha is Deputy Executive Director of the Child Health Research Foundation in Bangladesh, where she leads research on paediatric infectious diseases, pathogen discovery, antimicrobial resistance, vaccine preventable diseases, and genomic epidemiology. Her work focuses on generating evidence from Bangladesh to improve child health, strengthen public health decision making, and ensure that advances in science benefit communities most affected by infectious diseases. Dr. Saha and her team have contributed to national and global evidence on typhoid fever, respiratory syncytial virus, pneumococcal disease, antimicrobial resistance, and pathogen genomics. Their work has supported vaccine policy and implementation in Bangladesh, including evidence generation for introduction of the typhoid conjugate vaccine in Bangladesh. She is also committed to building scientific capacity in low and middle income countries and founded the Building Scientists for Bangladesh initiative, which has reached thousands of young learners and early career scientists. Dr. Saha serves on several international advisory groups, including at the WHO, and is a strong advocate for equitable science, locally led research, and science communication. She has authored more than 100 peer reviewed papers, and her work bridges laboratory science, surveillance, policy, and public engagement.



Dr Sushant Sahastrabuddhe

Associate Director General, International Vaccine Institute, Korea

Dr. Sushant Sahastrabuddhe (MD, MPH, MBA) is the Associate Director General for the Innovation, Initiatives and Enterprise Development unit at the International Vaccine Institute in Seoul, South Korea. Sushant is working at IVI since 15 years and has led multiple vaccine development programs involving typhoid conjugate, Chikungunya, and COVID-19 vaccines. Sushant is a medical graduate from India with Masters in Public Health from Johns Hopkins Bloomberg School of Public Health, Baltimore, USA and an MBA from the Indiana University, USA. Before joining IVI, Sushant worked with National AIDS Research Institute (NARI) under the umbrella of Indian Council of Medical Research (ICMR) and International AIDS Vaccine Initiative (IAVI). Sushant has over 40 manuscripts and 2 book chapters and is affiliated with Yonsei University, Seoul, South Korea as Adjunct Professor in the College of Medicine; Research Fellow, at CIRI – Centre International de Recherche en Infectiologie, Team GIMAP, Université Jean Monnet, Université Claude Bernard Lyon 1, France and Visting Professor, Department of Infectious Disease Epidemiology and Dynamics, Institute of Tropical Medicine, Nagasaki University, Japan. Sushant has been awarded with Honorary citizenship from Seoul Metropolitan Government for his contributions to global public health in 2021.



Dr Germie van den Dobbelsteen

Executive Director Bacterial Vaccines, Communicable Diseases, J&J Innovative Medicine, The Netherlands

Germie van den Dobbelsteen, Ph.D. is Executive Director of Bacterial Vaccines at Communicable Diseases, J&J Innovative Medicine in Leiden, the Netherlands. She leads bacterial vaccine teams across Leiden, Spring House, and Raritan, advancing vaccine candidates against bacterial infections that contribute to antimicrobial resistance, including ExPEC and *S. aureus*. Previously, she served as Senior Director, Immunology, Bacterial Vaccines, where she was responsible for the development of humoral and cellular immunological assays, animal models, in vivo immunogenicity and challenge studies, and the analysis of clinical study samples. Before joining Janssen in 2011, Dr. van den Dobbelsteen spent 15 years at the Netherlands Vaccine Institute (NVI) and the Dutch National Institute for Public Health and the Environment (RIVM) in Bilthoven, where she contributed to the development of meningococcal, pneumococcal, and pertussis

vaccines. She earned her PhD from Vrije Universiteit Amsterdam in 1994, focusing on mucosal immune responses to pneumococcal polysaccharides, followed by a two-year postdoctoral appointment on an EU-funded project. She has authored more than 75 peer-reviewed publications in the field of vaccine development.



Dr Caroline Vipond

Group Leader Bacterial Vaccines R&D, National Institute for Biological Standardisation and Control, Medicines and Healthcare products Regulatory Agency (MHRA), UK

Dr Caroline Vipond is a vaccinologist specialising in bacterial vaccines, vaccine regulation, immunology, and translational vaccine science. She holds a BSc in Molecular Biology from the University of Bath and a PhD from Imperial College London, where her research focused on outer membrane vesicles, a platform central to vaccine development for Gram-negative bacteria. Her work focuses on bacterial pathogens, including *Neisseria* spp., *Shigella*, *Salmonella* and *Streptococcus pneumoniae*, integrating immunology with vaccine stability and detailed product characterisation. She has particular expertise in vesicle-based vaccine technologies and in developing methods to assess vaccine potency and immunogenicity. Dr Vipond has a strong track record in standardisation and harmonisation of immunological assays, including the development of reference standards to enable comparability of data across laboratories and studies. Her work supports robust approaches to ensuring product safety, quality, and consistency within regulatory science, with direct application to vaccine development and batch release. She is also engaged in advancing the 3Rs (Replacement, Reduction, Refinement) through the development of non-animal assay systems, improving both ethical standards and scientific reliability in vaccine testing. Her work brings together innovation in bacterial vaccine design with a focus on global public health impact.



Prof Mark Walker

Group Leader, Institute for Molecular Bioscience, The University of Queensland, Australia

Prof. Walker undertook post-doctoral research at the Helmholtz Centre for Infection Biology in Braunschweig, Germany. He next took up an academic position at the university of Wollongong 1992-2010, then joined the University of Queensland in 2010. He is a Group Leader in the Institute for Molecular Biosciences. Prof. Walker's research focuses on the mechanism by which group A streptococcus causes invasive disease and the development of a vaccine to prevent infection and disease.