2022 Annual Network Meeting

SPEAKER PROFILES

Tuesday 08 November 2022 - Thursday 10 November 2022

Professor Richard A Adegbola, FAS

Consultant & Research Professor, Nigerian Institute of Medical Research, Nigeria

Bactivac Network Advisory Board Chair

Professor Richard Adegbola, FAS, is an Independent Consultant in Immunisation & Global Health at RAMBICON, Lagos, Nigeria. Additionally, he is in a contract position as Consultant & Research Professor, at the Nigerian Institute of Medical Research in Lagos from January 2020. He trained as a Microbiologist in Nigeria and in the UK and has worked in diagnostic microbiology, academia, philanthropy and pharmaceutical industry, across three continents gaining unique and varied experiences. The impact of his work at the MRC Unit in The Gambia, now part of LSHTM, on Hib and pneumococcal diseases and vaccines is a matter of public record and is well recognized within the field. He joined the Bill & Melinda Gates Foundation, Seattle, USA, from the MRC Unit and worked as a Senior Program Officer and Lead for Pneumonia Clinical Studies. He also worked at GlaxoSmithKline Vaccines in Belgium as a Global Director for Scientific Affairs & Public Health with focus on external engagement on paediatric vaccines and, a portfolio covering countries in Africa and Asia. Richard Adegbola has achieved many recognitions of his work including an honorary Professorship at the University of Leicester, election to Fellowships of the UK's Royal College of Pathologists and Royal College of Physicians, the Nigerian Academy of Science and, African Academy of Sciences. He is passionate about his work and the role of vaccination in building healthy societies. Richard Adegbola was a member of the World Health Organization's Meningitis Vaccine Project Advisory Group and was Vice Chair of the European and Developing Countries Clinical Trials Partnership Board. He is a member of the WHO Africa Regional Immunisation Technical Advisory Group (RITAG) and serves as a member or Chair of several international scientific advisory boards. He is a Trustee of the Expanded Civil Society Initiative on Immunisation in Nigeria and, a Trustee of the SABIN Vaccine Institute, Washington DC, USA. He has written five book chapters and co-authored 247 articles in peer-reviewed journals.

Dr. Cristina Alaimo

Director Clinical and Regulatory Affairs, LimmaTech Biologics, Switzerland

Clinical Director at LimmaTech Biologics AG spearheading the clinical development of Shigella vaccines. She has extensive experience working in industry.

Professor Stephen Baker

Director of Research, University of Cambridge, UK

BactiVac Management Oversight Board Member

Stephen Baker is a Director of Research based in the Department of Medicine at the University of Cambridge and an Honorary Professor at The University of Oxford. His research focuses on studying the mechanisms and epidemiological influences of antimicrobial resistant Gram-negative bacteria. His research group exploits various genomic and laboratory techniques to understand how antimicrobial resistant bacterial emerge, spread, and how best they can be combated. He has published >400 scientific articles and is a recognised name in global health with a portfolio of work ranging from typhoid fever and other enteric diseases to hospital acquired infections and zoonoses.

Professor Philip Bejon

Executive Director, KEMRI-Wellcome Trust Research Programme, Kenya

My research career has primarily been in Kenya (i.e. the KEMRI-Wellcome Trust Research Programme, where I am now the Director). I first came to Kenya in 2002 to conduct Phase I and IIb clinical trials of a candidate malaria vaccine based on viral vectors, working between the Jenner at University of Oxford and KEMRI-Wellcome. I returned to Oxford in 2006 to complete specialist clinical training and to work as a senior fellow in the NIHR Oxford Biomedical Research Centre in 2009 working on bone infection. I led further trials of GSK's candidate malaria vaccine "RTS,S", and returned to Kilifi on an MRC Clinician-Scientist Fellowship in 2013, working on heterogeneity of malaria transmission. I became Executive Director of the KEMRI-Wellcome Trust Research Programme in September 2014. My current interests still include malaria vaccines, as well as Yellow Fever and Ebola vaccines, studies of malaria transmission dynamics including genotyping and work on a human malaria challenge model to study acquired immunity.

Professor Jay Berkley

Professor of Paediatric Infectious Diseases

University of Oxford, based at the KEMRI/Wellcome Trust Research Programme in Kilifi, Kenya

Dr Berkley leads a research group working on life-threatening infections and child survival among neonates and undernourished children. His work focusses on child survival, including antimicrobial treatments and resistance, identifying immune and metabolic mechanisms underlying mortality despite care, and developing risk-based clinical and public health strategies.

Jay is the founder and co-Director of the Childhood Acute Illness and Nutrition (CHAIN) Network of sites in Africa and S. Asia which aims to identify and test actionable interventions to reduce mortality among sick children in hospital and after discharge. Dr Berkley has led randomised clinical trials ranging from early phase pharmacokinetics and safety to multicentre phase 3 trials. He chairs several Data Safety Monitoring Committees and sites on several Trial Steering Committees overseeing external studies.

Professor Adam Cunningham

Co-director of BactiVac, Professor of Functional Immunity

University of Birmingham, UK

Professor Adam Cunningham gained his PhD from Southampton University for studies on antibody responses to Chlamydia pneumoniae. After a short-term position in The Gambia, funded by the WHO, he had his first post-doctoral position in Birmingham studying the cell wall of Mycobacterium tuberculosis. From here, he started work in Prof. Ian MacLennan's group examining how antibody responses develop and are regulated. During this time, he incorporated the use of Salmonella and its component antigens into this work, leading to an independent position as a RCUK Roberts Academic Fellow, studying how immune responses develop to pathogens and vaccines. He was made Professor of Functional Immunity in August 2011 and his research is focused on how adaptive immunity to pathogens and their component antigens are induced, maintained and function. These studies help us understand why some responses are protective, whilst others are not or can even be harmful.

Dr Jo Dean

BactiVac Network Operations Manager
University of Birmingham, UK

Jo was awarded her undergraduate degree in Microbiology & Virology and then went onto complete her PhD in molecular virology at the University of Warwick. Jo worked as a Research Fellow at Warwick and at Birmingham University, after which she went into the commercial sector working as a Transition Project Manager at IBM for 4 years. Jo then returned to the academic sector and undertook various management roles, including management of the Birmingham Clinical Trials Unit, the School of Cancer Sciences, the Birmingham CRUK Centre and the Institute of Microbiology & Infection at the University of Birmingham.

Jo is now the BactiVac Network Operations Manager and works closely with the admin team to deliver all the operational aspects of the Network's activities.

Professor Sinead Delany-Moretlwe

Research Professor and Director of Research, University of Witwatersrand, South Africa

Sinead Delany-Moretlwe, MBBCh PhD DTM&H is a Research Professor and Director: Research, Wits RHI at the University of the Witwatersrand, Johannesburg. Her research interests span the intersections between sexual and reproductive health and infectious diseases, particularly in adolescent girls and young women. She has worked on several phase III trials of new HIV prevention technologies, including oral, topical and most recently long-acting injectable PrEP. She is also principal investigator on a population impact evaluation of the HPV vaccination programme in South Africa. She has served on the South African National Department of Health PrEP technical working group, and several WHO advisory committees, including PDVAC.

Professor Susanna Dunachie

Professor of Infectious Diseases and NIHR Global Research Professor, University of Oxford, UK

Susanna is a Professor of Infectious Diseases in the department of Tropical Medicine at the University of Oxford, undertaking research to define immune correlates of protection against global infections including the neglected tropical disease melioidosis, other Gram-negative bacteria and SARS-CoV-2. She spent four years living in Thailand and has ongoing research collaborations in Thailand, Vietnam, Indonesia, Bangladesh, India, Kenya and USA. In Oxford her research laboratory focuses on T cell immunity to infection, and understanding why people with diabetes get more severe infections. Susanna is working with collaborators at University of Nevada, Reno to undertake MELVAC-1: the world's first vaccine trial in humans for melioidosis. She is the Joint Chief Investigator of PITCH (Protective Immunity from T cells against COVID-19 in Healthcare workers) - a UK Department of Health and Social Care (DHSC) funded multisite consortium evaluating the immune response to SARS-CoV-2 infection, Pfizer and AstraZeneca vaccines, and cross protection against variants of concern including delta and omicron. She is also part of the VIBRANT study (looking at vaccine breakthrough infections in healthcare workers with Public Health England and the SIREN Study), the national OCTAVE study looking at vaccine responses in vulnerable groups, and a co-author on the Oxford Vaccine (now AstraZeneca) clinical trials. Susanna was awarded a Hamied Foundation / Academy of Medical Sciences Visiting Professorship to India, and is an Honorary Consultant in Infectious Diseases and Microbiology at Oxford University Hospitals NHS Foundation Trust, where she is Travel Health Lead and specialises in the complex traveller.

Dr Mainga Hamaluba

Head of the Clinical Trials Facility, KEMRI-Wellcome Trust Research Programme, Kenya

Dr Hamaluba briefly joined the KEMRI-Wellcome Trust in 2007 as a Wellcome Trust visiting fellow and returned in 2016 where has been the Head of the Clinical Trials Facility for 2.5 years. She read Medicine at the University of Aberdeen and completed her paediatric training in Oxford. She has 18 years of experience in clinical medicine and started working in clinical trials over 13 years ago. Her department focuses on trials in the area on critical care, HIV & HIV related conditions, malnutrition, sickle cell disease, neurosciences and vaccinology. Her early research was in pneumococcal population biology, her current research is primarily in vaccine development. She oversees a portfolio of over 30 clinical trials and leads vaccine development projects for malaria and shigella where she is principal investigator in 2 phase 1 first in human trials which the KEMRI-Wellcome Trust.

Dr E. Wangeci Kagucia

Mid-Career Research Fellow, KEMRI-Wellcome Trust Research Programme, Kenya

Wangeci is a non-clinical epidemiologist. She joined the KEMRI-Wellcome Trust Research Programme in 2019 as the Project Director for the Pneumococcal Conjugate Vaccine Impact Study, a longstanding assessment of the impact of PCV on pneumococcal carriage and clinical disease in Kenya. She is the Principal Investigator for an ongoing integrated multi-site serosurveillance study as well as for a COVID-19 vaccine safety study, and serves as a co-investigator on several other studies at KWTRP. Prior to joining KWTRP, Wangeci worked at the Johns Hopkins Bloomberg School of Public Health in the US on various vaccine-related studies, including global evaluations of the impact of PCVs on invasive pneumococcal disease. She obtained her PhD from the Johns Hopkins Bloomberg School of Public Health in 2018.

Dr Robert Kaminski

Principal Consultant II, Latham BioPharm Group, USA

Dr. Kaminski has over two decades of experience in the field of Enterics, has been involved with many phase 1 and phase 2 clinical studies evaluating the safety, immunogenicity and efficacy of enteric vaccines. His research interests focus on understanding the immunological basis of protection against Shigella. As a Principal Consultant at Latham BioPharm Group (LBG), Dr. Kaminski provides subject matter expertise related to product development, including immunology, development and refinement of animal models, cGMP manufacturing, controlled human infection model (CHIM) studies, immunoassay (development, qualification, and validation), as well as planning and executing domestic and international clinical studies. Prior to joining LBG, Dr. Kaminski was the Chief of the Diarrheal Disease Research department at Walter Reed Army Institute of Research and led a team of research scientists in the development, testing and evaluation of enteric countermeasures, to include vaccines, monoclonal antibodies, and hyperimmune bovine colostrum products. He has been involved with the development and refinement of pre-clinical animal models, development and qualification of immunoassays and cGMP production of vaccines and enteric bacterial challenge strains.

Dr Dorcas Kamuya

Chair Health Systems Research and Ethics, KEMRI-Wellcome Trust Research Programme, Kenya

I am a Wellcome Trust Society & Ethics fellow, conducting empirical ethics research examining if and how communities could be engaged on complex ethical topics, with bio-banking as a case study. Alongside this, I co-lead three areas of scientific protocols on ethically complex topics, in which, together with colleagues in the department, we are exploring ethical and social-cultural issues in order to contribute to current discourses, address important knowledge gap, and inform policy and practice. The three areas include the Human Infection Studies (HIS), Neuro-developmental studies; and community and public engagement. I am the current chair of the Health Systems Research Ethics Department (HSRE) at the KEMRI-Wellcome Trust Research Programme and are a member of several local and international networks, chair/co-lead several collaborative research initiatives and strategically contribute to the KWTRP strategic management as a member of the Heads of Scientific Department. I continue to attract increasing levels of competitive research funding involving collaborative research. My research work is shared through a growing list of publications, presentations in many national and international meetings and conferences. My PhD, awarded by the Open University, UK (2013), examined ethical dilemmas for frontline research staff. I hold a Master's in Public Health (health promotion) from London School of Hygiene and Tropical, and a BSc. in Agricultural Economics from Egerton University, Kenya.

Professor Melissa Kapulu

Principal Research Investigator, Department of Biosciences, KEMRI-Wellcome Trust Research Programme, Kenya

Melissa Kapulu is a Zambian trained immunologist and vaccinologist. She holds a BSc in Molecular Biology and Genetics from the University of Zambia; an MSc in Immunology of Infectious Diseases from London School of Hygiene and Tropical Medicine, University of London; and a DPhil in Clinical Medicine, University of Oxford (thesis on malaria transmission-blocking vaccines).

Melissa has been based at the KEMRI-Wellcome Trust Research Programme, Kilifi Kenya since May 2013 where she is a Principal Research Investigator. She runs a research group and programme of work that includes better understanding of naturally acquired immunity for the design, development, and testing of vaccines (pre-clinical and clinical). This involves understanding mechanisms of immunity following infection (natural and deliberate/induced infections) and vaccination. She works to developing and/or establishing controlled human infection models, to identify, characterise, understand, and evaluate vaccines, in disease endemic populations.

She is project lead on the human infection studies platform in Kenya (the first such approach to be developed on the continent). In addition to general expertise on setting up human infection models in LMICs, she is a member of WHO working groups advising on human infection studies in LMICs and more recently on human infection studies on COVID-19. She is an Affiliate of the African Academy of Sciences with over 40 peer-reviewed journal articles/publications and is a principal investigator leading programmes of work on internationally competitively awarded grants. Primary area of interest includes development of vaccines for malaria and Shigella. She is committed to and has successfully trained and supervised young African scientists at BSc, MSc, and PhD level.

Professor Sam Kinyanjui

Head of Training and Capacity Building, KEMRI-Wellcome Trust Research Programme, Kenya Director, Initiative to Develop African Research Leaders, Associate Professor, Nuffield Department of Medicine, Oxford University, UK

I have been involved in research for 25 years. My primary interest in understanding immunity to Malaria. However, over the last 12 years my focus has been on building research capacity in Kenya and Africa in general. Over this period, I have raised and managed over 2.5 billion shillings for capacity building as the principal recipient and nearly 5 billion shillings as a co-recipient. With the funding I established a highly productive pipeline for attracting young Kenyans and Africans to research, providing high quality Masters and PhD training and nurturing emerging local research leaders. To date, the pipeline, designated "Initiative to Develop African Leaders" (IDeAL) has provided research training to over 900 Kenyans including 276 graduate interns (Postgraduate Diploma in health research methods), over 200 Masters and 105 PhD students. Importantly, most of the trainees are still doing research in Kenya and have attracted further research grants worth over 5 billion shillings. A substantial number of IDeAL's past trainees are currently at the heart of Kenya's COVID-19 response including leading in testing, modelling transmission, genome sequencing, sero-surveillance and the ongoing Astra Zeneca vaccine trial in Kenya.

Beyond individual training I have initiated and supported the establishment of a postgraduate programmes at local universities including the Pwani University Biosciences Research Centre, an NIH-Fogarty-funded Bioinformatic Masters course at Pwani university, and a DAAD-funded PhD in Healthcare Management at Strathmore University.

At international level, has been a strong advocate for more funding for African research and was involved in drafting the AU-led Accra Declaration for Health Research in 2006 and the Bamako Call to Action on Research for Health in 2007 and more recently the Health Research And Innovation Strategy For Africa (HRISA) 2018-2030. Further, I was centrally involved in the consultations with the Wellcome Trust and other funders that led to the development of a £100 million scheme to support research capacity building in Africa (AESA-DELTAS). Kenya has been a beneficiary of these funds through several research consortia based in Kenya, including IDeAL. My efforts in building research capacity are recognized internationally and I have been appointed to advisory boards of over 15 programmes and initiatives including those of the World Health Organization, Harvard university and Oxford university.

Dr Josphat Kosgei

Principal Research Investigator & Head, Regulatory Affairs at the Kenya Medical Research Institute/ US Medical Research Directorate, Africa/Kenya

I am a Principal Research Investigator and a Research Physician at the Kenya Medical Research Institute Walter Reed Project HIV program Kericho. I am trained and board licensed medical doctor with a Masters degree in Infectious Diseases and additional trainings on HIV/AIDS. I have participated in development, implementation and execution of research protocols as a Principal Investigator, Associate Investigator and study Medical Officer in HIV Vaccine, Cohort as well as Therapeutic studies. I also head the department of regulatory affairs at the research center.

Professor Cal MacLennan

Director of BactiVac, UK; Senior Program Officer, Bacterial Vaccines, Global Health - Enteric & Diarrheal Diseases, Bill & Melinda Gates Foundation, USA; Senior Clinical Fellow and Group Leader, Jenner Institute, University of Oxford, UK; Professor of Vaccine Immunology, University of Birmingham, UK; Consultant Immunologist, Oxford University Hospitals, UK

Cal MacLennan, BactiVac Director, is Senior Program Officer for Bacterial Vaccines in the Enteric and Diarrheal Diseases (EDD) team at the Bill & Melinda Gates Foundation. The overall aims of the EDD team are to end diarrheal disease deaths in children under five years and to eliminate typhoid as a public health problem globally. His responsibilities focus on bacterial vaccine product development, specifically against Shigella, Typhoid and other Salmonellae. After qualifying in medicine from Oxford, he studied for a doctorate in neurosciences before developing an interest in infectious disease immunology. During his higher specialist training in clinical immunology, Prof MacLennan spent time at the Wellcome Trust Major Overseas Programmes in Kilifi, Kenya and then Blantyre, Malawi investigating immunity to invasive Salmonella disease, work which led to insights that could be translated into vaccine development. From 2010 to 2014, he was Head of the Exploratory Programme at the Novartis Vaccines Institute for Global Health, in Siena, Italy. There his programme developed new candidate vaccines against Salmonella, Shigella and meningococcus, and was involved in the development of the WHO-prequalified typhoid conjugate vaccine, TyphiBev.

Following a sabbatical at the Wellcome Trust Sanger Institute, Prof MacLennan returned to Oxford in 2015 to the Jenner Institute, before moving to the Gates Foundation in 2017. His ongoing work at the Jenner Institute focuses on vaccine development against gonorrhoea. He is a consultant immunologist at Oxford University Hospitals NHS Foundation Trust and Professor of Vaccine Immunology at the University of Birmingham from where he directs the BactiVac Network. He sees bacterial vaccines as having huge potential for global health benefit and is excited about the opportunities that BactiVac has to advance this important area of vaccinology.

Dr Ebrahim Mohamed

AVMI, Secretariat - Technical Workstream Co-Lead | BIOVAC, S&I Group Leader

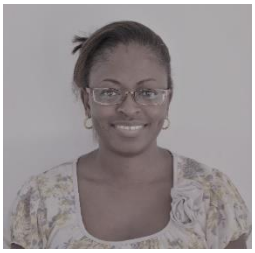
Ebrahim Mohamed is a Synthetic Organic Chemist by training with over 18 years' experience in pharmaceuticals with expertise covering business development, product development, technology transfers, process optimizations and cGMP. After completing his PhD from the University of Cape Town in 2009, he joined the Science and Innovation (S&I) Department at the Biovac Institute (BIOVAC) where he established his expertise in the development of glycoconjugate vaccines. As Group Leader 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 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 also elected as part of the Scientific Working group addressing Technology and IP in the Partnerships for African Vaccine Manufacturing (PAVM) study, as well as being elected to serve on Emerging Biopharmaceuticals Manufacturers Network (EBPMN) scientific committee. Ebrahim has published several publications in reputable peer-reviewed journals.

Dr Arshnee Moodley

Leader of the CGIAR Antimicrobial Hub, International Livestock Research Institute, Kenya

Arshnee is the leader of the CGIAR Antimicrobial Resistance Hub and AMR Team leader at the International Livestock Research Institute in Nairobi, Kenya. She is also jointly appointed as Associate Professor at the Department of Veterinary and Animal Sciences, University of Copenhagen, Denmark. She is a microbiologist working on AMR in animals and the zoonotic aspects for almost 20 years.



Ms Noni Mumba

Head of Engagement, KEMRI-Wellcome Trust Research Programme, Kenya

My background is in Health and Strategic Behaviour Change Communication, Social Marketing and more recently Communication Engagement. My primary role involves developing best practice strategies for the involvement of communities and publics in research work across the different KWTRP sites, through innovative engagement initiatives. I am also responsible for mentoring and building capacity of community liaison and research staff in community and public engagement.

Additionally, I play a role in the monitoring and evaluation of our engagement activities, including sharing lessons learnt across the globe. I provide guidance in the development of public engagement grant proposals and support implementation of funded initiatives.

My involvement in health, science and communities stems from over 10 years of health promotion experience in HIV, Malaria and Child Health across Kenya. I am currently driven by an interest in how to develop meaningful interactions between Researchers and Communities in LMICs: not only ensuring that community views and perspectives influence the conduct of research, but also that communities can be inspired by researchers from the region, and scientists by the lessons of quality communication and engagement.

Dr Ankur Mutreja

Honorary Senior Fellow, Department of Medicine, University of Cambridge, UK
Adjunct Professor, Kasturba Medical College, India
Senior Manager, CEPI, UK
BactiVac Management Oversight Board Member

Dr Ankur Mutreja is an experienced global health scientist, passionate about science and innovation for controlling and eradicating infectious diseases and AMR. Having worked in academia, research, biotech and public health, Dr Mutreja has extensive experience in the identifying and translating science for implementation in clinics and society. Currently leading CEPI's Global South Engagement portfolio as a Senior Manager, Dr Mutreja previously worked as a Group Leader at the Department of Medicine, University of Cambridge; Project Leader at MSD-Wellcome Hilleman Labs and Academia-Industry Bridging Fellow at Novartis Vaccines. Over the last decade he has successfully run several vaccine, diagnostic and WaSH related public health projects across Asia and Africa, funded by DBT, Wellcome, BMGF, MRC, ESRC, NIHR-BRC, Alborada Trust, Hamied Foundation among others.

Dr Mutreja sits on the scientific and management committees of several public health agencies, biotech companies and vaccine networks, including WHO and also holds Adjunct Faculty/Professor positions at many reputed institutions globally, including THSTI, KMC and CMC in India. Dr Mutreja's work is published in top peer reviewed journals, including Nature and Science.

Dr Joseph Mwangangi

KEMRI Deputy Director, CGMR-C, KEMRI Centre for Geographic Medicine Research, Kenya

Joseph is the KEMRI Center (Deputy) Director of the KEMRI Centre for Geographic Medicine Research – Coast. Joseph graduated with a PhD in Medical Entomology his research interests are malaria vector biology and ecology, novel approaches to the control of vector borne diseases and the monitoring of insecticide resistance. Currently he is working on studies different thematic areas in mosquito biology in the area of larval ecology, malaria transmission dynamics, insecticide resistance and vector control strategies. Joseph is keenly interested in understanding drivers of residual/persistent malaria transmission in endemic areas including entomological, socio-economic, human behavioral aspects. Joseph has strong links to National Malaria Control Programs and supporting the malaria control unit in the national entomological surveillance. He is a member and official of the Pan African Mosquito Control Association (PAMCA).

Professor Isabella Oyier

Head of Bioscience, KEMRI-Wellcome Trust Research Programme, Kenya

Following the completion of my PhD at the Liverpool School of Tropical Medicine, I joined the KEMRI-Wellcome Trust Research Programme (KWTRP) in 2006 as a post-doctoral researcher. I was involved in a project studying the natural selection in *Plasmodium falciparum* merozoite antigens at the LSHTM, MRC, The Gambia and KWTRP. I later received a re-entry grant from the Malaria Capacity Development Consortium (MCDC), to work on the temporal genetic variation in merozoite antigens at KWTRP. In addition, I supervised a Wellcome Trust funded MSc fellow in collaboration with Prof Colin Sutherland (LSHTM) to examine the temporal genetic variation in known drug resistance markers. I was appointed Visiting Lecturer to the Centre for Biotechnology and Bioinformatics (CEBIB), University of Nairobi, in 2011. There, I developed a molecular biology lab, taught on the molecular biology and advanced molecular genetics MSc courses and supervised MSc students. I later received a MCDC initiative award to examine the genetic diversity of *P. falciparum* erythrocyte receptors and conducted part of the project at CEBIB. While at CEBIB, using funding from the MCDC, I established a career development group to improve the learning environment through mentoring, postgraduate supervision and personal development planning activities. In 2015, I received funding from the Wellcome Trust, the International Intermediate Fellowship award for the project, A novel strategy for understanding the functional impact of variation in *Plasmodium falciparum* merozoite vaccine candidates, in collaboration with Prof Julian Rayner, Wellcome Trust Sanger Institute. I am currently the Head of the Biosciences Department at KWTRP and a Calestous Juma Fellow, funded by the Bill & Melinda Gates Foundation in 2021, to Integrate malaria molecular epidemiology into routine surveillance in Kenya. A project that partners with the Division of National Malaria Programme to implement malaria molecular surveillance activities. During the COVID-19 pandemic, I lead the COVID-19 testing and co-ordinate the regional genomic surveillance in collaboration with Africa CDC and WHO-Afro.

My research interests are in *Plasmodium falciparum* malaria molecular epidemiology, focusing on the spatial and temporal use of molecular tools to: 1) examine genetic variation in merozoite antigens that are potential candidates for blood stage vaccines and its impact on naturally acquired immunity; 2) define complexity of infection while examining the impact of interventions or changes in malaria epidemiology; 3) distinguish persistent infections and reinfections in both therapeutic efficacy studies and in longitudinal follow up of asymptomatic individuals; and 4) monitor drug resistance molecular markers.

Professor Samir K. Saha

Executive Director, Child Health Research Foundation Dhaka, Bangladesh

Bactivac Network Advisory Board Member

Prof. Samir K. Saha is the Founder and Executive Director of Child Health Research Foundation (CHRF). He is also the Head of the Department of Microbiology at Bangladesh Shishu (Children) Hospital and Institute in Dhaka, Bangladesh.

He is known globally for his research on pediatric infectious diseases with specific focus on pneumonia, meningitis, and enteric fever in Bangladesh. He strives to find the true burden of these diseases, their causative organisms, drug resistance patterns and serotype distribution. His work facilitated the introduction of the Hib and pneumococcal vaccines in Bangladesh. He was the first scientist from a developing country to receive the American Society for Microbiology (ASM) award in 2017, for his outstanding research in Clinical Microbiology. Which was followed by fellowship in the American Academy of Microbiology. On the same year he was awarded the Carlos J. Finlay UNESCO Prize for Microbiology. In the Fall of 2019 Prof. Saha and his team's publication in The Lancet received The Charles C. Shepard Science Award in the assessment category for their outstanding contribution in public health. In November 2019, Prof. Saha received membership (FRCPath) from the Royal college of Pathologist, United Kingdom. On 20th February in 2020, Prof. Saha and his daughter (Dr. Senjuti Saha) have been recognized as Bill Gates's Hero for their work to reduce child mortality in Bangladesh and bring global health equity. On the same year (12th May) under the supervision of Prof. Saha and the direction of Dr. Senjuti, the first SARS-CoV-2 genome was sequenced in Bangladesh. For his lifelong commitment and devotion to the field of science & public health in 2021, Prof. Saha received the prestigious Ekushey Padak (second highest civilian award in Bangladesh) from the honorable Prime Minister of People's Republic of Bangladesh.

Prof. Saha is currently a member of the National Immunization Technical Advisory Group (NiTAG) of the Government of Bangladesh. He is also the member of WHO's Technical Advisory Group (TAG) for (i) invasive bacterial vaccine preventable diseases and (ii) Respiratory Syncytial Virus. He has published more than 200 papers in peer-reviewed journals, mostly relating to childhood typhoid, pneumonia and meningitis. Prof. Saha is conducting several multi-site and multi-country research projects supported by different international funding organizations.

Dr Elise Schieck

Scientist, International Livestock Research Institute, ILRI, Nairobi, Kenya

Elise Schieck is a scientist in the Animal and Human Health program at the International Livestock Research Institute (ILRI, Kenya), where she leads the research on vaccine improvements for contagious bovine pleuropneumonia (CBPP) and contagious caprine pleuropneumonia (CCPP). She has been involved in using synthetic genomic tools to delineate the role of the mycoplasma polysaccharide capsule, a potential vaccine candidate for Mycoplasma mycoides, and is working on challenge models and in vivo vaccine efficacy studies for both CCPP and CBPP. Elise has an MSc in biomedicine from Uppsala University, and a PhD in molecular biology from the University of Heidelberg. Before joining ILRI she studied antigenic variation in malaria.

Dr Tanya Shewchuk

Senior Program Officer for the Immunization Team at the Bill and Melinda Gates Foundation, UK

Tanya Shewchuk is a Senior Program Officer for the Immunization Team at the Bill and Melinda Gates Foundation in support of the Enteric & Diarrheal Diseases Team's goals to end diarrheal disease deaths in children under five years and to eliminate typhoid as a public health problem. The focus of her current work is on the launch and effective deployment of cholera, typhoid and rotavirus vaccines and the health of these vaccine markets. Joining BMGF in 2015, she has also led the HIV testing & linkage portfolio for the organization to accelerate the introduction of HIV self-testing. Tanya holds a joint MSc from the London School of Economics and London School of Hygiene & Tropical Medicine. She has extensive field experience in researching and delivering health programs having worked and consulted including overseeing large country/multi-country programs for organizations such as UNICEF and Médecins Sans Frontières.