UNIVERSITY OF BIRMINGHAM | BactiVac network

BactiVac Online: Virtual Network Conference 2021

Bacterial vaccines in a time of pandemic

Tuesday 27 April 2021 – Wednesday 28 April 2021

SPEAKER PROFILES

Professor Peter Borriello CB

Chief Executive, Veterinary Medicines Directorate, United Kingdom

Professor Peter Borriello CB was Chief Executive, Veterinary Laboratories Agency from 2008 until April 2011 when it merged with the Animal Health agency. He was appointed Chief Executive Officer, Veterinary Medicines Directorate in September 2011. His previous roles include:

- Director, Health Protection Agency, Centre for Infections
- Director, Public Health Laboratory Service, Central Public Health Laboratory
- Founding Director, Institute of Infections and Immunity, University of Nottingham
- Head, Medical Research Council Hospital Infection Group and Microbial Pathogenicity Research Group

Dr Ed T Buurman PhD

Alliance Director, CARB-X, Boston University, USA

Ed spent more than 20 years in large pharma (Pfizer, AstraZeneca) and biotech (Scriptgen/Anadys Pharmaceuticals), focusing on both therapeutic and preventive approaches to infections caused by viruses, bacteria and fungi. Over the years his responsibilities increased from bench scientist to research project lead and alliance director. He earned his PhD in Microbiology at the University of Amsterdam and continued his postdoctoral training at the University of Chicago and University of Aberdeen, UK.

Professor Adam Cunningham

Co-director of BactiVac, Professor of Functional Immunity University of Birmingham, United Kingdom

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.

Professor Dame Sally Davies

UK Special Envoy on Antimicrobial Resistance, UK Department of Health and Social Care, United Kingdom

Dame Sally Davies was appointed as the UK Government's Special Envoy on AMR in 2019. She is also the 40th Master of Trinity College, Cambridge University. Dame Sally was the Chief Medical Officer for England and Senior Medical Advisor to the UK Government from 2011-2019. She has become a leading figure in global health including serving as a member of the World Health Organisation (WHO) Executive Board 2014-2016 and as co-convener of the United Nations Inter-Agency Co-ordination Group (IACG) on Antimicrobial Resistance (AMR), reporting in 2019. In November 2020, Dame Sally was announced as a member of the new Global Leaders Group on AMR. In the 2020 New Year Honours, Dame Sally became the second woman (and the first outside the Royal family) to be appointed Dame Grand Cross of the Order of the Bath (GCB) for services to public health and research, having received her DBE in 2009.

Dr Arnaud Didierlaurent

Assistant Professor at Center of Vaccinology at the Faculty of Medicine, University of Geneva, Switzerland

Arnaud Didierlaurent was trained as an engineer in Biotechnology in France. After gaining his Master's degree at the University of Washington (Steve Ziegler's lab) in 1999, Arnaud obtained his PhD in cellular immunology from the University of Lausanne in 2003 at ISREC under the supervision of Jean-Pierre Kraehenbuhl and Jean-Claude Sirard. Arnaud continued his work on innate immunity in the lab of Jürg Tschopp before joining the Imperial college, London, where he worked as postdoctoral fellow from 2004 to 2007 on the long-term impact of viral infection on the lungs. In 2006, he was awarded a prize from the Novartis Foundation as a research fellow in Ralph Steinman's lab at the Rockefeller University in New York. Arnaud then joined the R&D department of GlaxoSmithKline in 2008 in Belgium, where he held several leading positions in vaccine research and development. Initially head of a lab investigating the mode of action of adjuvant, Arnaud became in charge of the GSK Adjuvant System portfolio and thus directly involved in the licensure of several adjuvanted vaccines. Arnaud's scientific contributions have consequently been focused on deciphering the interplay between innate immunity and pathogen/vaccine-specific adaptive response. Before joining the University, he was global medical affairs director and responsible for the launch of the GSK Zoster vaccine in Japan and European markets, which further increased his understanding of implementation of vaccine programs. With his experience in both academic and industrial settings, Arnaud has acquired a deep understanding of how vaccines are created, developed and deployed. He joined the Center of vaccinology in March 2020 to continue his work on translational vaccine research as Assistant Professor.

Dr Juanjo Infante

Chief Executive Officer, Vaxdyn, Spain

Juanjo Infante joined the private biotechnology sector in 2007 as Chief Scientific Officer of Spanish biotech ADL Bionatur Solutions, after years as academic researcher culminated as senior scientist in the Department of Biochemistry of the University of Washington. In ADL Bionatur Solutions he led development of several active principles, including vaccines, for the animal health space. In 2013 he joined Vaxdyn as CEO and co-inventor of the patent supporting Vaxdyn's technological platform for development of vaccines against antibiotic-resistant bacterial infections. The lead candidate in development by Vaxdyn, aimed to prevent resistant infections including pneumonia in the population at risk, is one of the preventable vaccines in the portfolio of the global accelerator CARB-X.

Dr Laura Knogler

Head of Training and Knowledge Management Consultant, Scriptoria Ltd, United Kingdom

Laura brings over ten years of experience to her twin roles as both head of Scriptoria's Training team and as a communications and knowledge management consultant. Her work ranges from overseeing the management of Scriptoria's training department and delivering courses to clients worldwide, to developing and implementing communications and knowledge management strategies for clients such as the FCDO and the Bill & Melinda Gates Foundation. Laura holds a PhD in the biological sciences and was a project manager at the renowned Max Planck Institute of Neurobiology in Germany prior to joining Scriptoria. She has written many scientific journal articles for peer-reviewed publications and has won numerous fellowships and grants from national funding agencies in North America and Europe.

Dr Kirsty Le Doare

Professor of Global Health and Honorary Paediatric Infectious Diseases and Immunology Consultant within the Paediatric Infectious Diseases Research Group at St. George's, University of London & MRC/UVRI &LSHTM Uganda Research Unit, Uganda

Dr Le Doare is currently based in Kampala, Uganda working with the MRC/UVRI &LSHTM Uganda Research Unit, as well as with MUJHU, a partnership between Makarere University and Johns Hopkins University. Her research interests are age-related immune responses to infectious diseases, in particular to Group B-streptococcus (GBS). She is interested in improving our knowledge of how maternal antibody in blood and breast milk is passed to babies and how this protects them from colonisation and disease. Her laboratory focus is on harnessing these tools of nature to improve vaccines and prevention strategies. Her interest in GBS extends from basic pathophysiology and innate immunity, through clinical trials, to epidemiology and public health interventions aimed at reducing the morbidity and mortality due to this severe disease. She leads the GBS assay standardisation and serocorrelates of protection initiative and is part of the WHO task-force to defeat meningitis and develop the pathway for licensing the GBS vaccine. She has close collaborations with groups both in the UK and overseas, and although primarily based in Uganda, travels frequently to other African countries, and is currently involved in ongoing studies in various African sites including South Africa and Mozambique. She is chief investigator for the PROGRESS and PREPARE studies which aim to identify serocorrelates of protection and build capacity in Uganda for maternal vaccine studies respectively. She is passionate about training the next generation of female scientists working in Africa to improve maternal and child health. She receives funding from the Thrasher and the Bill and Melinda Gates Foundations, EDCTP and BACTIVAC. The UKRI Future Leaders Fellowship award will be used to develop a platform for maternal vaccination clinical trials in Uganda and investigate ways to improve outcomes from infection in women and their infants during pregnancy and early life.

Professor Calman MacLennan

Director of BactiVac, Senior Program Officer, Bacterial Vaccines, Global Health - Enteric & Diarrheal Diseases, Bill & Melinda Gates Foundation, USA
Senior Clinical Fellow, Jenner Institute, University of Oxford, United Kingdom
Professor of Vaccine Immunology, University of Birmingham, United Kingdom

I am Senior Program Officer for Bacterial Vaccines in the Enteric and Diarrheal Diseases (EDD) team at the Bill and 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. My responsibilities focus on bacterial vaccine product development, specifically against Shigella, Typhoid and other Salmonellae. After qualifying in medicine from Oxford, I studied for a doctorate in neurosciences before developing an interest in infectious disease immunology. During my higher specialist training in clinical immunology, I 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 applicable to vaccine development. From 2010 to 2014, I was Head of the Exploratory Programme at the Novartis Vaccines Institute for Global Health, in Siena, Italy. There my programme developed new candidate vaccines against Salmonella, Shigella and meningococcus, and contributed to the establishment of a new bacterial vesicle vaccine platform. Following a sabbatical at the Wellcome Trust Sanger Institute near Cambridge, I returned to Oxford in 2015 to the Jenner Institute, before moving to the Gates Foundation in 2017. My ongoing work at the Jenner Institute focuses on vaccine development against gonorrhoea. I am an honorary consultant immunologist at Oxford University Hospitals NHS Foundation Trust and Professor of Vaccine Immunology at the University of Birmingham from where I direct the BactiVac network. I see bacterial vaccines as having huge potential for global health benefit and am excited about the opportunities that BactiVac has to advance this important area of vaccinology.

Dr V. Krishna Mohan

Executive Director, Bharat Biotech International, India

Dr Krishna Mohan is designated as the Executive Director, Bharat Biotech International Ltd and working with the Organization for around 15 years. Bharat Biotech is a 20-year old Organization with strong focus on Novel Vaccines and New Biological Entities although some part of the current revenues come from Biogenerics. His previous work experience is at senior Management positions in Pharmaceutical/Specialty Chemicals Companies having started his career as a Research Scientist. Dr Krishna Mohan obtained his Ph.D from Indian Institute of Science in Chemical Physics and subsequently carried out Post-doctoral work in USA, UK and Japan, including at the prestigious Cavendish Laboratory, University of Cambridge. He is a Gold Medalist in the Master's Program at IIT, Kharagpur and a recipient of the Graduate Fellowship Award of Rotary Foundation of Rotary International. He was also invited as a Visiting Scientist at the Indian Institute of Science under the Joint Advanced Technology Program. His primary research areas of work have been in the fields of Specialty Chemicals and Pharmaceuticals. He has supervised 9 Ph. D candidates under the External Ph.D registration program of the Osmania University, Hyderabad and the Indian Institute of Science, Bangalore and published around 125 papers in various refereed international journals and 30 Technical Reports along with 20 patents in the field of Speciality chemicals, Pharmaceuticals, and Vaccines/Biologicals. Dr Krishna Mohan gave scientific lectures at several National Laboratories in India, USA, UK, Sweden and Japan and presented papers at several international conferences in these countries. Dr Mohan has displayed strong leadership skills in the areas of Fundamental Research, Technology Development and Products Commercialization and has a unique combination of Fundamental Research Work leading to Commercial Technology Development. He has demonstrated effective leadership in managing Teams of highly qualified scientists and engineers in different disciplines in bringing new Ideas/Products from the Laboratory to the Market place, thereby, successfully passing the test of innovation. Dr Krishna Mohan's current work involves developing vaccines for various infectious diseases such as Rotavirus, Japanese Encephalitis, Typhoid, Rabies, Polio, H1N1, etc. He is involved as a Team member in major aspects from Product development to GMP manufacture and carrying out Clinical trials for these vaccines, with several Patents and Publications to his credit.

Dr Kathleen M. Neuzil

Director, Center for Vaccine Development and Global Health, University of Maryland School of Medicine, USA

Dr Kathleen Neuzil is the Myron M. Levine Professor in Vaccinology, Professor of Medicine and Pediatrics, and the Director of the Center for Vaccine Development and Global Health at the University of Maryland School of Medicine. She is an internationally recognized research scientist and advocate in the field of vaccinology. Throughout her career, Dr Neuzil has conducted clinical and epidemiologic studies on vaccine-preventable diseases, yielding high-profile publications that inform policy decisions and public health actions. Dr. Neuzil's work has spanned dozens of low-resource countries with multiple vaccines, including influenza, rotavirus, human papillomavirus, Japanese encephalitis, typhoid conjugate vaccines, and most recently, COVID-19 vaccines. Dr Neuzil also directs TyVAC, the Typhoid Vaccine Acceleration Consortium, with the goal to accelerate the introduction of typhoid conjugate vaccines into low-resource countries. She has more than 230 scientific publications on vaccines and infectious diseases. Dr Neuzil's research capabilities are complimented by 20 years of involvement in domestic and international policy, including past membership on the US Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices. She is currently the only US member of the World Health Organization Strategic Advisory Group of Experts on Immunization.

Prof Iruka N Okeke

Professor, University of Ibadan, Nigeria

Iruka N Okeke is a Professor of Pharmaceutical Microbiology at the University of Ibadan, Nigeria and a Fellow of the Nigerian and African Academies of Science. Iruka is a molecular bacteriologist focused on diarrhoeal pathogens, bacterial drug resistance, and laboratory practice in Africa. Her laboratory studies the molecular epidemiology, pathogenesis and genomics of enteric bacteria and provides genomic support for public health surveillance of antimicrobial resistance in West Africa. The Okeke lab also engages in collaborative research to develop new therapies against neglected enteric bacteria.

Iruka received B.Pharm., M.Sc. and Ph.D. degrees from Obafemi Awolowo University (formerly University of Ife), Nigeria and post-doctoral training at the University of Maryland, USA and Uppsala Universitet, Sweden. She is author/ co-author of several scientific articles and chapters as well as the books Divining Without Seeds: The case for strengthening laboratory medicine in Africa (Cornell Univ Press) and Genetics: Genes, Genomes and Evolution (Oxford Univ Press). She editor-in-chief of the African Journal of Laboratory Medicine. A teacher scholar, she has mentored over a hundred research students, the majority of whom continue to work in science and health.

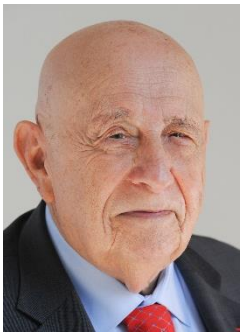
Dr Ole F. Olesen

Executive Director, European Vaccine Initiative, Germany

Dr Ole F. Olesen is Executive Director of the European Vaccine Initiative (EVI). EVI is a non-profit organization that develops new and improved vaccines for neglected and poverty-related diseases through collaboration with an extensive network of academic and industry partners in more than 30 countries across the world. Ole has studied at the universities of Aarhus, Denmark and Cambridge, UK, as well as at Copenhagen Business School, and he holds a PhD degree in Molecular Biology and an HD degree in international economics. Ole has worked for 10 years in the pharmaceutical industry as group leader and later as Global Project Director for pre-clinical and clinical development of vaccines and injectables. He has considerable work experience in conducting and managing large international projects on pharmaceutical product development. Before joining EVI, Ole worked as Director of International Cooperation at the European & Developing Countries Clinical Trials Partnership (EDCTP), and Principal Scientific Officer for Global Health at the European Commission's Directorate-General for Research & Innovation. Ole also holds a position as affiliated professor at Copenhagen University.

Dr Stanley A Plotkin

Emeritus Professor of Pediatrics, University of Pennsylvania, USA



Dr Stanley A. Plotkin is Emeritus Professor of the University of Pennsylvania. Until 1991, he was Professor of Pediatrics and Microbiology at the University of Pennsylvania, Professor of Virology at the Wistar Institute and at the same time, Director of Infectious Diseases and Senior Physician at the Children's Hospital of Philadelphia. For seven years he was Medical and Scientific Director of Sanofi Pasteur, based at Marnes-la-Coquette, outside Paris. He is now consultant to vaccine manufacturers and non-profit research organizations.

He is a member of the Institute of Medicine of the National Academy of Sciences and the French Academy of Medicine. His bibliography includes over 800 articles and he has edited several books including a textbook on vaccines. He developed the rubella vaccine now in standard use throughout the world, is codeveloper of the pentavalent rotavirus vaccine, and has worked extensively on the development and application of other vaccines including anthrax, oral polio, rabies, varicella, and cytomegalovirus.

Dr Jan T Poolman

Head Bacterial Vaccine Research & Development, Janssen Vaccines & Prevention, The Netherlands

- 1969-1975: Masters (bio)chemistry University of Amsterdam
- 1975-1985: Assistant Professor Medical Microbiology, University of Amsterdam, Netherlands Reference laboratory for Bacterial Meningitis, UVA-RIVM
- 1981: Thesis on Serogroup B Meningococcus
- 1982: NIH Post-doctoral Fogarty Fellowship, University of Washington, Seattle , USA
- 1986-1996: Head Vaccine R&D, Netherlands National Public Health Institute and Environmental Protection (RIVM), Bilthoven, The Netherlands
- 1997-2011: Head Bacterial Vaccines, GlaxoSmithKline Biologicals (GSK), Rixensart, Belgium
  - ➢ *InfanrixHexa; Pediarix; Synflorix; Menitorix; Nimenrix; Menhibrix*; *Boostrix; Tritanrix*
  - ➢ DTPaHBIPVHib DTaPHBIPV PCV10 HibMenC ACWY HibMenCY Tdap DTPwHBHib
- 2011- current: Head Bacterial Vaccines – *Escherichia coli*/ExPEC & *S. Aureus*, Janssen Infectious Diseases & Vaccines, Leiden, The Netherlands

Dr Samir K. Saha

Executive Director, Child Health Research Foundation Dhaka, Bangladesh

Dr Saha 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. The same year he received the UNESCO Carlos J. Finlay Prize in Microbiology for his contribution in the field of microbiology and helping the government of Bangladesh to make evidence based decision on introduction of Hib and pneumococcal conjugate vaccine. The November 2017 edition of National Geographic Magazine published "Here's Why Vaccines Are So Crucial", an article revolving around the need and impact of vaccines in society and vividly highlighted the lifelong dedication of Dr Saha's fight to beating pneumonia and other pneumococcal infections in Bangladesh. In the fall of 2019 Dr. 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.

Dr 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 150 papers in peer-reviewed journals, mostly relating to childhood typhoid, pneumonia and meningitis. Dr Saha is conducting several multi-site and multi-country research projects supported by different international funding organizations.

Dr Jeremy Salt

Chief Scientific Officer, GALVmed, United Kingdom

Since 2014 Jeremy Salt has been the Chief Scientific Officer at GALVmed, a not-for-profit company working on veterinary medicine development and commercialisation in Low and Middle Income countries. His role is to develop the organisation's broad scientific strategy in addition to oversight of, and responsibility for, product development. His a qualified veterinary surgeon and has a BSc in Pharmacology, an MSc in Immunology and a PhD in viral immunology. Jeremy worked as a practising vet in various countries; worked at IAH, Pirbright Laboratory for seven years including as the Head of the International FMD Vaccine Bank for the last four; worked on vaccine development for 17 years for Pfizer Animal Health in the UK and then Zoetis in Belgium before joining GALVmed.

Dr Xin Tong

Director of Research Development, Walvax Biotech, China

Xin Tong, Ph.D, currently serves as the Director of R&D in Walvax Biotechnology Co., Ltd. Prior to joining Walvax, he led the development of innovative DNA based vaccines in Simcere Pharma, particularly established the DNA vaccine platform and led a collaborative therapeutic DNA vaccine candidate for Human Papillomavirus which is in phase II trial globally. During the same period, he also served as the chief engineer in Shandong Simcere Biopharma, in charge of process optimization of a commercialized products.

Before joining Simcere, Xin worked for Shanghai Zerun biotech, a member of Walvax group, where he led the development of the innovative recombinant vaccine candidates including a prophylactic 9-valent HPV vaccine candidate which is in preparation of Phase III trial at present, and a prophylactic HFMD vaccine, etc. He received his Ph.D of Biology from the joint program of Rutgers University, the State University of New Jersey and University of Medicine and Dentistry of New Jersey, his master of Biostatistics from Rutgers University, and his master of Microbiology from Wuhan University.

Dr Jim Weale

Co-Director and Principal Consultant, Scriptoria Ltd, United Kingdom

Jim co-founded Scriptoria based on a passion for communications and a commitment to development and the environment worldwide. Since then, he's worked hard to build a company that combines unusually high levels of expertise in development issues with a passion for producing communications that have a definite and sustained impact. He's now recognised as one of the leaders in this field. In his day-to-day work for Scriptoria, Jim has designed communications strategies for multi-million dollar poverty reduction programmes targeting Asia and Africa, trained corporate and government communications teams, and advised the UK government on building the profile of its aid efforts. The writing and communications courses he has designed for Scriptoria have also been very well received around the world. Jim's PhD is in English and Linguistics.