Speaker Bios

(in meeting session order)

Christian Bréchot, MD, PhD – has served since 2017 as President of the Global Virus Network, which consists of 71 Centers and 9 Affiliates in over 40 countries. Dr. Bréchot is also engaged with USF Health Morsani College of Medicine since 2018 as Senior Associate Dean for Research in Global Affairs, Associate Vice President for International Partnerships and Innovation, and Professor in the Division of Infectious Disease, Department of Internal Medicine.

Prior to joining the GVN, Dr. Bréchot served as president of the Pasteur Institute from 2013 to 2017. He has also served as vice president of medical and scientific affairs at Institut-Merieux, a company that develops new approaches to fight infectious diseases and cancers. From 2002 to 2007, Dr. Bréchot served as the general director of Inserm, the French national agency for biomedical research. As professor of hepatology and cell biology at Necker School of Medicine, Paris Descartes University, Dr. Bréchot led the clinical department of liver diseases at Necker-Enfants Maldes Hospital from 1997 to 2001.

Authoring more than 400 articles in medical and scientific journals, Dr. Bréchot was ranked by the Institute for Scientific Information as the 4th most cited author on the topic of hepatitis C. He has been recognized as an inventor on 18 patents, and helped create three biotechnology companies: Rarecells, ALFACT Innovation, and The Healthy Aging Company.

Dr. Bréchot's research activities have focused on viral hepatitis: hepatitis B (HBV) and C (HCV), particularly with regard to their role in liver cancer (Hepatocellular carcinoma: HCC) and to the molecular mechanisms that drive liver regeneration and cancer (in particular, cell cycle deregulation and the impact of oxidative stress).

Additionally, Dr. Bréchot's research interests include microbiomes, particularly in microbiomes and viral infections. In this respect, he is a co-founder of the Microbiome, Immunology and Infection Control (MIIM) Hub in the USF Pandemic Response Research Network (PRRN). This research hub focuses on enabling and connecting an interdisciplinary network of scientists at USF and globally. The hub's goals are to develop precision therapies and interventions that target the human microbiome to maintain and restore human health against COVID-19 and future such pandemics. Dr. Brechot is also the head of the USF Institute on Microbiomes. He has also been the member of numerous scientific committees and societies and has received prestigious awards.

Mathew L. Evins – has served as Chairman and CEO of Evins, Ltd., a leading branding, marketing, communications and public relations firm since 1987. Mr. Evins previously served as CEO of Pain Therapeutics Corporation, which was engaged in developing innovative methods for the diagnosis, treatment, and abatement of chronic pain, and copublished "The Talisman Report," the world's leading investment advisory newsletter for the three years of its publication. For more than ten years, Mr. Evins served on the staff of Cornell Medical Center, initially as a Surgical Research Associate in the Cardiovascular Research Laboratory and, subsequently, as Associate Director of The Rogosin Organ Retrieval & Preservation Laboratory. Mr. Evins is a member of the Board of Directors of Hommage Inc., as well as a founding member, Treasurer, and member of the Executive Committee of the Board of Directors of the Global Virus Network.

Dr. John Lees – is a research group leader at EMBL-EBI, where he runs the Pathogen Informatics and Modelling Group. He works on bioinformatics and software, statistical genetics, genomic epidemiology, GPU programming, and mathematical modelling – often with emphasis on respiratory bacterial pathogens, but increasingly pathogen agnostic. His group aims to develop innovative, ethical and sharable approaches which help realise the power of sequencing to control pathogen threats, and is interested both in producing methods and in generating biological insights by applying these methods to data from a range of sources. Current main areas of work are genomic

epidemiology, statistical genetics, mathematical models of transmission, within-host diversity, GPU and multicore algorithms, and democratising bioinformatics.

Dr. Marcel Salathé – is a digital epidemiologist bridging health and computer science. He is currently the president of the Swiss National Research Program on COVID-19 and was a member of the Swiss National COVID-19 Science Taskforce, developing the digital contact tracing protocol DP3T which served as a basis for the Google & Apple Exposure Notification framework.

Richard H. Scheuermann PhD – is the Scientific Director of the National Library of Medicine at the U.S. National Institutes of Health. He received a B.S. in Life Sciences from the Massachusetts Institute of Technology and a Ph.D. in Molecular Biology from the University of California, Berkeley and has held faculty appointments at the University of Texas Southwestern Medical Center, University of California, San Diego, and J. Craig Venter Institute. Dr. Scheuermann has applied his deep knowledge of molecular immunology and infectious disease to develop novel computational data mining methods and knowledge representation approaches, including the development of biomedical ontologies and novel computational methods for gene expression, protein network, flow cytometry, and comparative genomics data analysis. These informatics tools have been made available through public database and analysis resources, including the Immunology Database and Analysis Portal (ImmPort, https://www.immport.org), Influenza Research Database (IRD; www. fludb.org), Virus Pathogen Resource (ViPR; www.viprbrc.org), and Bacterial and Viral Bioinformatics Resource Center (BV-BRC, www.bv-brc.org). More recently, Dr. Scheuermann has focused on the development of novel artificial intelligence approaches for interpreting single cell genomics data of the human immune and nervous systems.

Patrick Rampal, MD – has been President of the Monaco Scientific Center (CSM) since 2008; the CSM is the Principality's scientific research agency, which brings together three marine, polar and medical biology departments. When he was appointed to the CSM, he was head of the Gastroenterology department at the Princess Grace Hospital in Monaco. Previously, Dr. Rampal was Head of the Department of Gastroenterology at the University Hospital of Nice, President of the French Society of Gastroenterology, Professor of Gastroenterology at the Faculty of Medicine of Nice and Dean of the Faculty of Medicine of Nice from 1994 to 2003.

Dr. Hans Henri P. Kluge – embarked on his role as WHO Regional Director for Europe on 1 February 2020 shortly before COVID-19 was declared a global pandemic. Since then, he and his team have led WHO's response to this health emergency across 53 countries encompassing Europe and Central Asia. Having qualified in medicine, surgery and obstetrics, Dr. Kluge's extensive global experience includes seminal years with Médecins Sans Frontières (MSF) Belgium amid health and humanitarian crises in Liberia and Somalia, as well as serving as the Moscow-based Regional TB Advisor for countries formerly part of the Soviet Union. He joined WHO in 1999, first as TB/HIV Project Manager at WHO Russia, and then at WHO Myanmar as TB Medical Officer, eventually becoming Team Leader for the HIV, TB, and malaria unit. Dr. Kluge moved to the WHO European Regional Office in 2009, and a year later was appointed Director of the Division of Health Systems and Public Health, as well as Special Representative of the Regional Director to Combat Multi/ Extensively Drug-Resistant Tuberculosis. In his current role, Dr. Kluge advocates all the more strongly with governments and funders for health systems strengthening, prioritizing primary health care as a cornerstone of public health.

Dr. Richard Pebody – is a medical epidemiologist. He is currently the Programme Area Manager for Infectious Hazard Management Team, which is part of the WHO Health Emergencies Programme at the World Health Organization Regional Office for Europe in Denmark. He joined WHO in 2019, where he is responsible for leading work on surveillance and response to epidemic and pandemic-prone infections such as influenza, SARS-CoV-2 and now monkeypox. Prior to this role, Dr. Pebody was head of the influenza team at the national surveillance centre in the United Kingdom from 2008–2019. He completed the EPIET field epidemiology training programme in Finland between

1994-96. He previously qualified in clinical medicine at Liverpool University and worked as a clinician in the UK and northern Australia with a focus on infectious diseases.

Dr. Jean-Paul Gonzalez – is a medical professional with a career as a scientist, research director. professor, and author. With over 35 years of experience, he has—and continues to—identify program funding and then manage medical research under contract with several Federal/Civilian and military agencies. Dr. Gonzalez also has extensive international experience, having served and operated throughout Africa, Asia, and South America at various multi-disciplinary levels, where he has successfully led numerous public entity medical research activities. He directed several major projects, people and institutes including research, logistics, purchasing, delivery of equipment to host countries, training and providing for professional integrity, in Africa, Asia, and the Americas. As a professor at the Georgetown University School of Medicine, he directs several required courses within the University's Biomedical Science Policy and Advocacy Program. As a life science researcher, Dr. Gonzalez is considered an international expert in disease detection, response, and preparedness for emerging and high-consequence diseases and pathogens. Dr.Gonzalez also exercised the expertise, leadership, training, and motivation required to carry out successfully research projects in a variety of environments and cultures, including Low- and Medium-Income Countries, building a professional network with local and international institutions. He is focused on a One Health approach for understanding the emergence and spread of diseases to develop the tools to respond and fight against it. His fields encompass eco-epidemiology, biosurveillance, outbreak response, vaccine, and therapy for which he has co-authored 350+ articles in peer reviewed journals.

Dr. Linfa Wang – is a professor of the Programme in Emerging Infectious Diseases at Duke-NUS Medical School, and the inaugural executive director of PREPARE, Ministry of Health, Singapore. He is an international leader in the field of emerging zoonotic viruses and virus-host interaction. In response to the COVID-19 pandemic, he has served and is serving on multiple WHO committees for COVID-19, including the WHO IHR Emergency Committee. Prof. Wang has more than 500 scientific publications. He was the Editor-in-Chief for the Virology Journal from 2112-2022. Prof. Wang was elected to the Australian Academy of Technological Sciences and Engineering in 2010, the American Academy of Microbiology in 2021 and the Australian Academy of Sciences in 2023. He received the Singapore President Science Award in 2021.

Dr. Marion Koopmans – is director of the Department of Viroscience at Erasmus Medical Centre in The Netherlands, the WHO collaborating centre for Emerging Infectious Diseases, scientific director for Emerging Infectious Diseases of the Netherlands Centre for One Health NCOH, and scientific director of the Pandemic and Disaster Preparedness Centre in Rotterdam/Delft The Netherlands. Her research focuses on emerging infections with special emphasis on unravelling pathways of disease emergence and spread at the human animal interface. Creating global networks to fight infectious diseases systematically and on a large scale is a common thread in Prof. Koopmans' work. She also coordinates the EU funded consortium VEO, which develops risk-based innovative early warning surveillance in a One Health context, and she is deputy coordinator of a recently awarded HERA-funded network of centres of excellence for EID research preparedness. In 2021, Prof. Koopmans founded the Pandemic and Disaster Preparedness Centre PDPC, a research centre with a focus on the occurrence and prevention of pandemics and climate-related disasters, combining expertise from technical, bio-medical, environmental and social sciences. During the coronavirus crisis in the Netherlands in 2020, Prof. Koopmans was a member of the Outbreak Management Team that advised the national government on measures to stop the spread of SARS-CoV-2. This role brought her national prominence, making her partly a "beacon of reliability," but she also faced growing distrust from a vocal minority of opponents of the Dutch national government's coronavirus policy. Prof. Koopmans is also a sought-after speaker in the media internationally, with appearances on the Economist's Podcast, Al Jazeera, and BBC. In 2022, her son, Mischa Huijsmans, wrote her biography, "Marion Koopmans, Virologist in a Changing World." Prof. Koopmans has co-authored more than 700 articles that have been cited more than 40.000 times.

Dr. Johan Neyts – is full professor of Virology at the University of Leuven, Belgium, where he teaches at the medical school and the school of dentistry. His lab has a long-standing expertise in the development of antivirals strategies and drugs against emerging and neglected viral infections such as dengue and other flaviviruses, Chikungunya and other alphaviruses, enteroviruses, noroviruses, HEV and rabies, and is intensively involved in the search for antiviral strategies against SARS-CoV-2. An ultrapotent pan-serotype dengue inhibitor developed in his laboratory and at the Centre for Drug Design & Development is currently in clinical development at Janssen Pharmaceuticals. A second focus of his laboratory is the development of the Plasmid Launched Live Attenuated Virus vaccine technology based on the yellow fever virus vaccine as a vector that allows for the rapid engineering of highly thermostable vaccines against multiple viral pathogens. Prof. Neyts is also past-president of the International Society for Antiviral Research. He is the cofounder of KU Leuven spin-offs AstriVax and Okapi Sciences and is responsible for the Belgian VirusBank platform, a €20 million investment of the Belgian Federal Government. He published more than 640 papers in peer reviewed journals and received multiple national and international awards. He has given around 300 invited lectures and hundreds of interviews to the press.

Anders Vahlne, MD, PhD – is the former chair of the Division of Clinical Virology at the Karolinska Institute in Stockholm, Sweden. He was also chief physician of the Clinical Virology Laboratory at the Karolinska Hospital. Dr. Vahlne is a member of the Global Virus Network (GVN) board of directors and its Executive Committee. He serves as the director for the Karolinska center of excellence of the GVN and as a co-chair of the GVN's Taskforce on Long COVID. Dr. Vahlne obtained his MD and license to practice from the Gothenburg University in 1973 and his PhD from the same university in 1978. He is a certified specialist in Clinical Virology since 1978. In 1982-83 he spent a sabbatical in Dr. Michael Oldstone's laboratory at Scripps Clinic and Research Foundation in La Jolla, California, on a Fogarty Fellowship. Dr. Vahlne was on the President's Advisory Board for the Irish National Virus Reference Laboratory at the University College Dublin from 2010 to 2021. From 1972 to 1986, Dr. Vahlne's research focused on the neuro-pathogenesis of herpes simplex virus infections. He thereafter switched to mainly work on human retroviruses, in particular HIV.

Dr. Pascal Barbry - is research director at the French National Center for Scientific Research and holds the chair "AI for computational biology data and bio-inspired AI" at 3IA Côte d'Azur Institute since 2020. Creator and head of the Physiological Genomics group and of the UCA GenomiX platform since 1999, he directed the Institute of Molecular and Cellular Pharmacology from 2004 to 2017 with 20 teams and an annual budget of €25 million. He is also Coordinator of the Academy "complexity" of life" at University Côte d'Azur, Scientific leader of the Equipex+ 4D-OMICS since 2021, founding member and member of the executive board of the National Infrastructure France Genomics, President of the Canceropôle Provence-Alpes-Côte d'Azur since 28 November 2019, Member and then President since 2014 of the scientific council of the association Vaincre la mucoviscidose. Dr. Barbry applies genomics and nucleic acid sequencing in different fields. He builds a precise map of gene expression in the normal and pathological human lung in the context of the international Human Cell Atlas project. In the context of European and national projects, Dr. Barbary is also exploring the potential of DNA as an alternative to store data long term. During the pandemic, Dr. Barbry started a project to perform viral epidemiology using wastewater. Nanopore sequencing was used to characterize the different circulating variants at the scale of a whole metrople. Earlier in his career, Dr. Barbry worked on the molecular and cellular pharmacology of epithelial ion channels, in link with several renal and respiratory pathologies.

Dr. Rubeshan Perumal – is pulmonologist and senior scientist at the Centre for the AIDS Programme of Research in South Africa (CAPRISA) and the University of KwaZulu-Natal, where he leads portfolios in tuberculosis, HIV, and COVID-19 research. He holds degrees in Public Health, Medicine, and Pulmonology, and a PhD focused on the pharmacokinetic-pharmacodynamic optimisation of tuberculosis treatment. He is a past recipient of the Fogarty International Clinical Research Scholarship and was named a Global Young Physician Leader by the InterAcademy Partnership. His post-doctoral training was in the Centre for Lung Infection and Immunity at the University of Cape Town focused on translational TB research, including TB diagnostics, and multi-drug resistant TB clinical trials. Dr. Perumal was a founding consultant of the Post-COVID-19 Lung Disease clinical service and research programme at Groote Schuur Hospital/University of Cape Town, has been a panellist on the WHO Working Group on Care Pathways for Long COVID, member of the South African Ministerial Advisory Committee Working Group on Long COVID, and co-chair of the Global Virus Network Taskforce on Long COVID. Dr. Perumal also serves on the editorial board of the Annals of the American Thoracic Society and is an affiliated faculty member of the Global Health Pulmonary Research Pathway at Columbia University's Division of Pulmonology, Allergy, and Critical Care Medicine.

Dr. Diane Griffin – is University Distinguished Service Professor and former Chair of the W. Harry Feinstone Department of Molecular Microbiology and Immunology at Johns Hopkins Bloomberg School of Public Health. Dr. Griffin is a virologist recognized for her work on the pathogenesis of viralinfections. She is known particularly for her studies on measles and alphavirus encephalomyelitis that have delineated the role of the immune response in virus clearance, vaccine-induced protection from infection, tissue damage and immune suppression. Dr. Griffin graduated from Augustana College, Rock Island, Illinois with a BA in biology and from Stanford University School of Medicine with an MD and PhD in immunology, followed by a residency in internal medicine. She was a postdoctoral fellow in virology and infectious diseases at Johns Hopkins University School of Medicine and joined the faculty in 1974. She has been president of the American Society for Virology and of the American Society for Microbiology and is a member of Global Virus Network, the National Academy of Sciences, and the National Academy of Medicine.

Dr. Susan Weiss - obtained her PhD in Microbiology from Harvard University working on paramyxoviruses and did postdoctoral training in retroviruses at University of California, San Francisco. She came to the University of Pennsylvania as an Assistant Professor in 1980, and is currently Professor and Vice Chair, Department of Microbiology, and Co-director of the Penn Center for Research on Coronaviruses and Other Emerging Pathogens at the Perelman School of Medicine at Penn. She previously served as Associate Dean for Biomedical Postdoc Programs (2010-2019). Dr. Weiss has worked on many aspects of coronavirus replication and pathogenesis over the last forty years, making contributions to understanding the basic biology as well as viral entry, organ tropism and virulence. This work focused for many years on the murine coronavirus (MHV) mouse model of hepatitis. More recently, she has worked on SARS-CoV and MERS-CoV and since 2020 also on SARS-CoV-2 as well as the "common cold" coronaviruses. Her work for the last ten years has focused on coronavirus interaction with the host innate immune response, viral antagonists of double-stranded RNA induced antiviral pathways and interactions with the unfolded protein responses. Most recent work also focusses on coronavirus infection of the nasal epithelium, the earliest site of infection. Her other research interests include activation and antagonism of the double-stranded RNA induced antiviral responses, with a focus on the oligoadenylate-ribonuclease L pathway, flavivirus- primarily Zika-virus-host interactions and pathogenic effects of host endogenous dsRNA.

Dr. Thomas Althaus – is an Infectious Disease and Public Health specialist, with extensive experience in Low- and Middle-Income Countries. He is now the principal investigator of several clinical trials in Monaco, with the objective to evaluate innovative SARS-CoV-2 point-of-care diagnostic tools, as well as vaccine effectiveness. He recently designed and supervised the national serological programme in Monaco, including neutralizing antibody measurement, in order to guide vaccination policy. This national programme includes a research component aiming to inform policy makers about vulnerable groups with sub-optimal immune response.

Dr. Eric Voiglio – is Senior Medical Officer at the Directorate of Health Affairs of the Principality of Monaco, having been appointed in 2017. He served as Consultant Surgeon, Head of the Emergency Surgery Unit at the University Hospitals of Lyon and Senior Lecturer of Anatomy at the University Claude Bernard Lyon 1 until 2017. He was Vice-President of the European Society for Trauma and Emergency Surgery from 2013 to 2018. He served in 2004 in the WHO offices in Geneva as temporary advisor. He was awarded the Knight of the Order of Grimaldi in 2020.

Dr. Christine Carrington – is Professor of Molecular Genetics and Virology, and Head of the Department of Preclinical Sciences of the Faculty of Medical Sciences at The University of the West Indies in Trinidad and Tobago. Her primary interests are pathogen genomics, emerging infections and RNA viruses. Her research focuses on understanding evolutionary and ecological factors involved in the emergence, spread and maintenance of viruses, especially arboviruses, rabies and coronaviruses. She is the Coordinator of the WHO/PAHO reference sequencing laboratory at the UWI and of the Global Virus Network Affiliated Centre of Excellence at the Faculty of Medical Sciences. She also serves on the Board of Governors of the International Centre for Genetic Engineering and Biotechnology, and was a member of the UWI COVID-19 Task Force and the Technical Advisory Group on Immunisation to the Trinidad and Tobago Ministry of Health during the COVID-19 pandemic. Dr. Carrington was the Principal Investigator on the COVID-19 IMPACT project that established local capacity for SARS-CoV-2 whole genome sequencing and carried out SARS-CoV-2 genomic surveillance for 17 Caribbean countries until regional public health bodies implemented in-house capacity a year later. She is the Anthony N. Sabga Awards - Caribbean Excellence, 2022 Laureate in Science & Technology, and recipient of a 2022 National Award (Chaconia Medal Gold) for service and contributions as a virologist. Dr. Carrington is also an Associate Editor of Virus Evolution.

Dr. Robert Garry – is a Professor of Microbiology and Immunology and Associate Dean for Biomedical Sciences at Tulane Medical School in New Orleans. He is also the President of the Viral Hemorrhagic Fever Consortium, Director of the Tulane Center of Excellence under the Global Viral Network, Co-Principal Investigator of the West African Research Network for Infectious Diseases, and Cofounder of Zalgen Labs. Dr. Garry and his team are developing viral countermeasures, including vaccines and immunotherapeutics. They have produced point-of-care and confirmatory diagnostics for Lassa virus and other emerging viruses that are based on recombinant proteins. His work continues with structural and molecular investigations to deepen understanding of pathogenesis of viral hemorrhagic fevers while providing training for West African scientists and further developing research and clinical trial.

Dr. Scott Weaver – is the John Sealy Distinguished Chair in Human Infections and Immunity, Director of the Institute for Human Infections & Immunity (IHII), Scientific Director of the Galveston National Laboratory, and Chair of the Department of Microbiology & Immunology at the University of Texas Medical Branch (UTMB). He leads two major NIH-funded center grants at UTMB: the West African Center for Emerging Infectious Diseases, and the World Reference Center for Emerging Viruses and Arboviruses, and is the Director of the UTMB Center of Excellence of the Global Virus Network. Dr. Weaver is a virologist and mosquito biologist with over 440 peer-reviewed research publications on emerging viruses, mosquito vectors, and vaccine development, as well as many invited presentations at international conferences, and international leadership roles. He has received many awards from national and international scientific societies, including the Walter Reed Medal from the American Society of Tropical medicine and Hygiene for career research contributions, and the Robert Gallo Award for Scientific Excellence from the GVN. Dr. Weaver is also a fellow of the American Academy of Inventors in recognition of his contributions to vaccine development, and a fellow of the American Academy of Microbiology and the American Society of Tropical Medicine and Hygiene. He holds nine patents for vaccine and diagnostics development for viral diseases. Dr. Weaver teaches and mentors young scientists extensively. He was named the Leon Bromberg Professor of Excellence in Teaching and received the Research Mentoring Excellence award at UTMB. He earned his BS degree in biology and music from the College of William and Mary in 1979, his MS degree in entomology from Cornell University in 1982, and his PhD degree in virology from the University of California, San Diego in 1993. Following a postdoctoral fellowship in the Department of Epidemiology and Public Health at Yale University School of Medicine, he joined the UTMB faculty in 1994.

Dr. Amadou A. Sall – is the CEO of Institut Pasteur de Dakar in Senegal and Director of the WHO Collaborating Center for Arboviruses and Viral Hemorrhagic Fever. He has been chairman of the Global Outbreak Alert and Response Network and a member of the Coalition for Epidemic

Preparedness and Innovation Scientific Advisory Board. Dr. Sall is a virologist with a PhD in Public health. He is an expert in epidemics response and control more specifically for arboviruses and viral hemorrhagic fevers and high consequence pathogens. Dr. Sall is a member of several expert committees for the WHO and OIE. Dr. Sall is the co-chair of the COVID-19 laboratory technical working group of Africa Center for Disease Control and member of the Africa Union AFTCOR steering Committee as well as the Senegalese Committee for COVID 19. He is the chairman of the Pasteur Network.

Prof. A.D.M.E. (Ab) Osterhaus – trained as a veterinarian with a PhD in Virology from Utrecht University, was head of the Department of Viroscience at Erasmus MC until 2014, and is currently Scientific Director of the Center of Infection Medicine and Zoonosis Research at the University of Veterinary Medicine Hannover. During almost 40 years as scientific researcher and PI of numerous scientific projects, he lead a multidisciplinary team in which more than 80 human and animal viruses were discovered, their pathogenesis elucidated, and innovative intervention strategies developed. He helped authorities like WHO to combat emerging infections like SARS, MERS, and avian influenza. He mentored more than 85 PhD students, holds several key patents, and is author of more than 1350 scientific papers. Prof. Osterhaus firmly believes that scientists should translate their knowledge for the benefit and protection of society.

Dr. Meghan Vermillion – is a senior scientist at Gilead Sciences in Foster City, California. At Gilead, Dr. Vermillion leads all research efforts related to antiviral drug discovery and development for pandemic and emerging viruses. In this role, she coordinates collaborations with academic, government and industry partners to advance antiviral therapies for neglected viral disease. Dr. Vermillion received her Doctorate of Veterinary Medicine (DVM) from the University of Wisconsin, and then completed her residency and PhD in viral pathogenesis at The Johns Hopkins University. Prior to joining Gilead earlier this year, Dr. Vermillion was at Lovelace Biomedical in Albuquerque, New Mexico, where she led the preclinical model development and pivotal efficacy studies that enabled clinical advancement of several COVID-19 candidate vaccines and therapies.

Dr. Osbourne Quaye – is a Professor of Biochemistry and Virology and the Head of Department of the Department of Biochemistry, Cell and Molecular Biology, University of Ghana. He obtained a BS in Biochemistry and Chemistry as well as a MS in Biochemistry from the University of Ghana. His PhD in Chemistry (Biochemistry option) is from Georgia State University. He has worked at the Noguchi Memorial Institute for Medical Research, University of Ghana, as a Research Associate and at the U.S. Centers for Disease Control and Prevention as a Microbiologist. He is a GVN co-Centre Director at the West African Centre for Cell Biology of Infectious Pathogens, University of Ghana. His research interests are in the areas of molecular virology and virus-causing cancers.

Dr. Sarah Londrigan – is a teaching and research academic in the Department of Microbiology and Immunology at The University of Melbourne in Australia. She is also Co-Lead of the Viral Infectious Diseases Theme at the Doherty Institute in Melbourne. Dr. Londrigan completed her PhD Research at Melbourne University, where she identified novel cell surface receptors for rotavirus entry during infection of host cells. Her postdoctoral research at The Walter and Eliza Hall Institute in involved creating immunomodulatory adenoviruses that Australia generated local immunosuppression during islet transplantation to treat type I diabetes. Dr. Londrigan leads an independent research program examining cellular responses to respiratory virus infection, funded through competitively awarded National Health and Medical Research Council grants and industry partners. Her current research projects specifically involve understanding the entry pathways of respiratory viruses into host cells, and how airway immune cells control virus replication. These studies are focused on (i) identifying cell surface receptors and entry pathways for influenza and other respiratory viruses into airway macrophages, (ii) identifying host factors (including interferon stimulated genes) responsible for controlling respiratory virus replication and (iii) investigating novel antiviral strategies to control virus-induced respiratory disease. She plays an active role in research related activities supporting virology, immunology and promoting women in science.

Dr. Jonathan Ewbank – has been Director of the European Research Infrastructure on Highly Pathogenic Agents since October 2021. He holds a MS in Biochemistry from the University of Oxford, and a PhD in Biophysics from the University of Cambridge. He conducted his graduate research at the MRC LMB in Cambridge and the EMBL, Heidelberg, Germany. Dr. Ewbank carried out postdoctoral research in the Biology Department at McGill University, Montreal, and at the Centre d'Immunologie de Marseille-Luminy, France. For 20 years, until 2021, Dr. Ewbank headed a research group at CIML, France. He has served as director of the Marseille-Nice Genopole and deputy director of the CIML. He is a senior research director (DRE) at the French National Institute of Health and Medical Research (INSERM). As director of ERINHA, Dr. Ewbank also acts as coordinator of the Integrated Services for Infectious Disease Outbreak Research (ISIDORe) project that aims to increase Europe's pandemic preparedness. He is a recipient of the Lucien Tartois prize from the French Medical Research Foundation.

Dr. William (Billy) Hall – a GVN Co-Founder, is the Director of the Centre for Research in Infectious Diseases and Professor in the School of Medicine and Medical Science at University College Dublin. Prof. Hall's research interests are primarily on blood-borne viruses which include the human retroviruses, the human T lymphotropic viruses and human immunodeficiency viruses. He has also recently established high profile collaboration with the National Institute of Hygiene and Epidemiology in Hanoi, Vietnam to carry out epidemiological studies on HIV and Hepatitis Band C virus infections in that country. Prof. Hall is presently Chairman of the Technical Advisory Group of Irish Government Department of Foreign Affairs official aid program, Irish Aid. This group advises Irish Aid on the use of resources to combat HIV/AIDS and other communicable diseases. He has been a Director of the Atlantic Philanthropies since 2008.

Dr. Abelardo Araújo – is Associate Professor of Neurology, The Institute of Neurology, at The Federal University of Rio de Janeiro, Brazil. He is also Senior Researcher, Oswaldo Cruz Foundation, Brazilian Ministry of Health and Head of the Laboratory of Clinical Research in Neuroinfections of the National Institute of Infectious Diseases, Brazilian Ministry of Health. Dr. Araújo has a particular interest in chronic infectious diseases that affects the central nervous system, particularly the consequences of retroviruses on the spinal cord. Since 1989, he has assembled a cohort of more than 1,000 cases of patients with neurological manifestations of HTLV-1/2, having personally examined each one of them. He has published over 200 peer-reviewed papers in the area of infectious diseases of the nervous system.

Masao Matsuoka, MD, PhD - is a physician/scientist and oncologist who received his medical and doctorate degrees from Kumamoto University School of Medicine in Japan. He then completed a postdoctoral fellowship at the University of California, Berkeley, Following his postdoc, Dr. Matsuoka returned to Japan where he became Professor and eventually Director of the Institute for Virus Research at Kyoto University. He currently serves as Professor in the Department of Hematology, Rheumatology and Infectious Diseases at Kumamoto University. Dr. Matsuoka is a leader and innovator in human T-cell leukemia virus type 1 (HTLV-1) research. HTLV-1 was the first identified pathogenic human retrovirus and is the etiologic infectious agent of adult T-cell leukemia (ATL). Dr. Matsuoka's earlier work uncovered both genetic and epigenetic inactivation of the viral Tax oncogene in ATL cells. These results led to our understanding of how HTLV- 1 latency is achieved. He also found that the 3' LTR of the HTLV-1 provirus is remarkably hypomethylated, leading him to the discovery of the anti-sense viral transcript, Hbz. Not only is Hbz expressed in all ATL cells, but Dr. Matsuoka made the pivotal discovery that both the Hbz protein and RNA have proliferative effects in infected T cells. In addition, he found Hbz expressing transgenic mice develop T cell lymphomas - further highlighting the critical role of Hbz along with the transactivator, Tax, in ATL development. Dr. Matsuoka and his research team are currently focused on the molecular pathogenesis of ATL. As a researcher who connects clinical science and retrovirology, his work also involves the establishment of novel therapeutics, such as antivirals and immunotherapy, to ATL and other HTLV-1-associated diseases. Dr. Matsuoka has published over 200 research articles, reviews and book chapters in the field of retrovirology. He is the associate editor of Cancer Science and an editorial board member of Retrovirology, Current Opinion in Virology, and Cancer Research. He was

previously awarded the 2011 Retrovirology Prize, which recognizes the achievements of an outstanding retrovirologist. Dr. Matsuoka was selected by the Center for Retrovirus Research of The Ohio State University to receive the 2019 Distinguished Research Career Award in recognition of his substantial body of work on HTLV-1 molecular pathogenesis and patient therapies.

Dr. Eduardo Gotuzzo – is Emeritus Professor of Medicine, Universidad Peruana Cayetano Heredia, Emeritus Director, "Alexander von Humboldt" Tropical Medicine Institute, Universidad Peruana Cayetano Heredia, Emeritus Director, Gorgas Course, as well as Past President International Society for Infectious Diseases, President International Federation of Tropical Medicine, President of Asociación Panamericana de Infectología (API), Member, Steering Committee of Zoonosis Diseases (WHO), Member, Strategic and Technical Advisory Group on Neglected Diseases (WHO), and Member, Institute of Medicine's Forum on Microbial Threats. Dr. Gotuzzo has authored more than 500 papers in prestigious peer-reviewed medical journals and several chapters in textbooks.

Joakim Dillner, MD, PhD – is Professor of infectious disease epidemiology at the Karolinska Institutet since 2009, Head of the Center for Cervical Cancer Elimination at the Karolinska University Hospital since 2014, and Director of Research & Development at Medical Diagnostics Karolinska, Karolinska University Hospital since 2017. Since 1989, his group has conducted Human Papillomavirus research in the areas of molecular biology, immunology and vaccinology, clinical virology and epidemiology. Major ongoing projects include (i) Swedescreen, the first started randomised trial of HPV-screening (since 1997), (ii) Biobank- and registry-based follow-up studies of HPV vaccination (since 1999), (iii) The International Papillomavirus Reference Center, (iv) The National Quality Registry of Cervical Cancer Prevention and the Nordic Information for Action eScience Center of Excellence, (v) Risk-based Screening for Cervical Cancer.

Prof. Raymond Schinazi, PhD, Hon DSc, FAASLD - is the Frances Winship Walters Professor of Pediatrics and Director of the Center for ViroScience and Cure, and the Laboratory of Biochemical Pharmacology at Emory University. Dr. Schinazi holds a PhD in Chemistry from the University of Bath, England (1976). Dr. Schinazi has authored over 600 peer-reviewed papers and 6 books. He holds over 100 issued US patents, which have resulted in 26 New Drug Applications. Dr. Schinazi is best known for his pioneering work on HIV, HBV and HCV drugs including FTC (emtricitabine), LdT (telbivudine), and sofosbuvir (Sovaldi), as well as the use of the Jak inhibitor baricitinib for COVID-19. More than 94% of HIV-infected individuals in the US on combination therapy take at least one of the drugs he invented. He is also the inventor of the use the JAK 1/2 inhibitor baricitinib for the treatment of COVID-19 patients. He is the founder of several successful companies including Pharmasset Inc, Idenix Inc. and Triangle Pharmaceuticals. He is the recipient of numerous awards, including: 2018 France's highest civilian honor, the Légion D'honneur, for saving millions of lives globally; the AASLD Distinguished Achievement Award, the William S. Middleton Award from the Department of Veterans Affairs, and is a Fellow of the American Association for the Advancement of Science. He has also been awarded three honorary doctoral degrees. Dr. Schinazi is internationally recognized as one of the most influential persons in the life science sector.

Erica Ollmann Saphire, PhD, MBA – is the President, CEO and a Professor at the La Jolla Institute for Immunology. In her executive role, she is leading faculty in collaborative strategy, uncovering sex-based differences in the immune system and innovating vaccines. In her academic lab, Dr. Saphire is a structural biologist, virologist and immunologist. She galvanized and led NIH- and BMGF-funded global consortia uniting 40-60 competing investigators to compare competing antibody therapeutics, and learn which features forecast protection, and mitigate viral escape. Her research has led to the first ever structure of the entire human IgG antibody, the supramolecular complex by which IgG activates the complement cascade for immune protection, pioneering structures of the surface glycoproteins of Lassa, Ebola, Marburg, Rabies and other viruses, and understanding how the viruses mediate entry and how human antibodies may defend against them. Her research has further revealed how viral matrix proteins hijack host lipids to polymerize conformational change and virus assembly and proved that certain viral proteins rearrange into different structures at different times for different functions. Dr. Saphire's work has been recognized at the White House with a PECASE, with young investigator awards from ICAR, ASM, ASBMB, and the MRC Centre for Virus Research. She has been recognized with awards from the Burroughs Wellcome Fund; a Fulbright for research in the United Kingdom, South Africa and Germany; and a Mercator Fellowship from Deutsche Forschungsgemeinschaft. In 2021, she was named Scientist of the Year by the ARCS Foundation San Diego.

Prof. Sharon Lewin - is an infectious diseases physician and basic scientist internationally renowned for her research into all aspects of HIV disease and specifically in strategies to achieve an HIV cure. She received her medical degree and PhD from Monash University, Melbourne, Australia and completed specialist training in infectious diseases in Melbourne and post-doctoral training at Rockefeller University, New York. She is the inaugural Director of the Doherty Institute, a joint venture of the University of Melbourne and Royal Melbourne Hospital and Melbourne Laureate Professor of Medicine and Head, Department of Infectious Diseaeses at the University of Melbourne, Melbourne, Australia. She is the inaugural director of the Cumming Global Centre for Pandemic Therapeutics, a new centre at the Doherty Institute established by a philanthropic gift of \$250 million from Canadian philanthropist Geoff Cumming and \$75 million from the Victorian government. She leads Australia's national research network on pandemic preparedness, called APPRISE, which includes more than 100 investigators. She heads a laboratory of 25 scientists and clinicians working on basic and translational research and early phase clinical trials aimed at finding a cure for HIV and novel therapeutics for SARS-CoV-2. In 2019, she was appointed an Officer of the Order of Australia in recognition of her distinguished service to medical research, and to education and clinical care, in the field of infectious diseases, particularly HIV and AIDS.

Sara Javornik Cregeen, PhD – is an Assistant Professor in the Department of Molecular Virology and Microbiology and Head of Bioinformatic Services in the Alkek Center for Metagenomics and Microbiome Research (CMMR) at Baylor College of Medicine, Houston, Texas. The CMMR has a wide academic collaborator base, offering sequencing and analytical services for researchers focusing on human microbiome and virome research. Her team specializes in providing computational and analytical solutions to big data driven questions in infectious disease and human health. Among other for the U19-funded Texas Medical Center Genomic Center for Infectious Diseases and the NIDDK-funded The Environmental Determinants of Diabetes in the Young Project. Dr. Javornik Cregeen leads the CMMR team in the Texas Epidemic Public Health Institute (TEPHI) that set up the sequencing and analysis pipeline to monitor and characterize the wastewater virome in samples from across Texas. Her team generates weekly and bi-weekly reports and provides interpretation of the sequencing-based datasets generated by TEPHI, thus providing real time-data of the viral landscape of human wastewater across Texas and its potential to improve our understanding of outbreaks, transmission, and its effects on overall population health.

Dr. Al Ozonoff – is Senior Advisor to Dr. Pardis Sabeti and Chief of Staff of the Sabeti Lab, where he provides administrative leadership, senior scientific expertise, and programmatic support as the U.S. Director for Sentinel, an infectious disease surveillance program based in West Africa. Dr. Ozonoff is an Associate Professor of Pediatrics at Harvard Medical School and a faculty scientist within the Department of Pediatrics at Boston Children's Hospital. He applies his training in mathematics, statistics, epidemiology, and data science in pursuit of population-based improvement in the health of children and adults. His research focuses on the development and application of methods for surveillance of health and disease. As a surveillance methodologist, he is most engaged in areas of public health surveillance, infectious disease surveillance, and hospital-based surveillance with an emphasis on patient safety and healthcare quality. As a leading expert during the early phases of the pandemic, he led the Clinical and Data Coordinating Center for IMPACC, a national immunophenotyping study of COVID-19 funded by the National Institute for Allergies and Infectious Disease.

Dr. Brett Giroir – is currently CEO of Altesa BioSciences, a clinical stage biopharmaceutical company developing oral antiviral drugs. Formerly, he served as the 16th Assistant Secretary for Health in the U.S. Department of Health and Human Services, Acting FDA Commissioner, and Admiral in the

U.S. Public Health Service Commissioned Corps. He also served as the U.S. Representative to the Executive Board of the World Health Organization within the Department of State. Notably, Dr. Giroir was on the front lines of the COVID-19 response as a member of the White House Coronavirus Task Force and the national lead for testing and diagnostics ("Testing Czar"). Previously, Dr. Giroir was the first physician to serve as an office director at the Defense Advanced Research Projects Agency. His academic career included service as Professor and Executive Vice President and CEO of the Texas A&M Health Science Center, Vice Chancellor for the Texas A&M University System, and before that, tenured professor and holder of two endowed chairs at UT Southwestern Medical Center and Children's Health in Dallas. Dr. Giroir has received numerous awards including the American Society of Nephrology Presidential Medal, the American Society of Hematology Outstanding Public Service Award, the Society of Critical Care Medicine - Founders' Special Recognition Award, the Executive Office of the President Office of National Drug Control Policy's Director's Distinguished Service Award, and the HHS Assistant Secretary for Preparedness and Response Pinnacle Award. His uniformed service decorations include the US Public Health Service Distinguished Service Medal with Gold Star Attachment, the Meritorious Service Medal, the Surgeon General's Medallion, the Assistant Secretary for Preparedness and Response Pinnacle Medal, the Global Health Campaign Medal, Presidential Unit Citation, and the Secretary of Defense Medal for Outstanding Public Service, among other awards. Dr. Giroir resides in College Station, Texas, with his wife of 36 years, Jill Shorey Giroir, and has two daughters and two granddaughters.

Dr. Sten Vermund – is a pediatrician and infectious disease epidemiologist focused on diseases of low and middle income countries. His work on HIV-HPV interactions among women in Bronx methadone programs motivated a change in the 1993 CDC AIDS case surveillance definition and inspired cervical cancer screening programs launched within HIV/AIDS programs around the world. The thrust of his research has focused on health care access, adolescent sexual and reproductive health and rights, and prevention of HIV transmission among general and key populations, including mother-to-child. Dr. Vermund has become increasingly engaged in health policy, particularly around sustainability of HIV/AIDS programs and their expansion to non-communicable diseases, coronavirus pandemic response and prevention, and public health workforce development. His recent grants include capacity-building for public health in Chad, molecular epidemiology for HIV in Kazakhstan, and COVID-19 vaccine studies in Dominican Republic and Connecticut. He has worked with schools and arts organizations for COVID-19 risk mitigation and institutional safety.