

Chair of NERVTAG

Professor Sir Peter Horby (University of Oxford)

Peter Horby is the MOH Family Foundation Professor of Emerging Infectious Diseases and Global Health and director of the Pandemic Sciences Institute at the University of Oxford. He has more than 20 years of experience in leading clinical and epidemiological research on a range of epidemic and endemic respiratory virus infections, including SARS, avian influenza, seasonal influenza, and COVID-19. He has been an advisor to the World Health Organization (WHO) in various capacities since 2006, including:

- severity assessment for epidemics of influenza
- public health research agenda for influenza
- working group on methodology for prioritising severe emerging diseases for research and development
- working group on the design of therapeutic clinical trials during public health emergencies

NERVTAG members

Dr Cariad Evans (Sheffield Teaching Hospitals NHS Foundation Trust)

Cariad Evans is a clinical virologist (dual accredited in Infectious Diseases and Virology) working at Sheffield Teaching Hospital NHS Foundation Trust, covering the clinical virology service for South Yorkshire and North Derbyshire.

She has a MD from Sheffield University and continues to be active in clinical virology research. Cariad has a specific interest in high consequence infectious disease (HCIDs), including safe systems of working and personal protective equipment using Violet ('Visualising Infection with Optimised Light for Education and Training') a healthcare training mannequin, adapted to show symptoms consistent with a suspected HCID.

She is local HCID Virology Lead and works within the personal protective equipment (PPE) advisory group of the UK HCID Network, alongside the Health and Safety Executive, NHSE and UK Health Security Agency (UKHSA).

Cariad also has extensive experience in establishing patient pathways and regional implementation using rapid point of care (POCT) viral diagnostics, focusing on influenza and SARS-CoV-2.

Cariad has a valuable understanding of the running of a regional NHS virology laboratory service and provides specialist clinical advice on pandemic response. Cariad has also contributed to the Independent High Risk AGP Panel and was a Member of the

Respiratory Evidence Panel, alongside her NERVTAG role since the emergence of the COVID Pandemic.

Outside of work Cariad is Chair of a charity, Sheffield Health Action Resource for Ethiopia (SHARE), which aims to improve the healthcare systems in Tigray northern Ethiopia.

Professor James Rubin (Kings College London)

James is an academic psychologist at King's College London where he is a Professor of Psychology of Emerging Health Risks. His main research interest is in understanding how people perceive health risks and what implications these perceptions have for how people behave and for their physical and mental well-being. He has published over 150 peer-reviewed academic papers on these and related topics.

James's work covers 2 overlapping areas. The first assesses the importance of perceptions relating to suddenly occurring mass exposure to a potentially hazardous substance. Much of this work is conducted under the auspices of the National Institute for Health and Care Research (NIHR) Health Protection Research Unit in Emergency Preparedness and Response, which he is the assistant director for.

The second area involves understanding how psychological and social factors can determine whether or not a person will develop symptoms following exposure to a potentially hazardous substance.

James has previously published papers on why people attribute physical symptoms or seek health care following apparent exposure to mobile phone signals, wifi, police radio systems, common chemicals, wind turbines, swine flu, chemical terrorism and outbreaks of plague, among other things. As a result of his research, he has been invited to work with UK, EU and WHO bodies investigating the potential effects of newly identified health risks and is an honorary non-medical consultant with the Emergency Response Department, UK Health Security Agency (UKHSA).

Professor Julian Hiscox (University of Liverpool)

Julian A. Hiscox is Chair in Infection and Global Health and Deputy Executive Dean in the Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool. He is also an adjunct professor at the Infectious Diseases Horizontal Technology Centre (ID HTC), A*STAR, Singapore. He did a BSc in Genetics at University College London in 1991 and then a PhD on porcine coronavirus replication at the Institute for Animal Health (University of Reading, 1994).

After post-doctoral training in the USA and back in the UK on avian coronaviruses, Julian became a Lecturer/PI at the University of Reading, starting a research group on the avian

coronavirus, infectious bronchitis virus (IBV). At Reading he focused on the cell biology of the virus, the viral nucleoprotein and developing field-based ELISAs.

Julian moved to the University of Leeds in 2002 and carried on with IBV but also included work on severe acute respiratory syndrome coronavirus (SARS-CoV) and human respiratory syncytial virus. In 2012 he moved to the University of Liverpool, where he included Ebola virus in his research portfolio and, in the past 2 years, he and his laboratory have been visiting Saudi Arabia to work with collaborators on Middle East respiratory syndrome coronavirus (MERS-CoV).

Julian currently leads a £4.1 million research program funded by the US FDA on severe coronavirus infections including MERS-CoV and SARS-CoV-2. His research is defined by using high resolution approaches to characterise clinical samples and inform functional analysis.

Professor Susanna Dunachie (University of Oxford)

Susanna Dunachie is an immunologist at Oxford University, where she is Professor of Infectious Diseases and NIHR Global Research Professor. She also works as a Consultant in Infectious Diseases and Microbiology at Oxford University Hospitals NHS Foundation Trust and is Senior Immunologist at the Mahidol-Oxford Tropical Medicine Research Unit (MORU) in Bangkok, Thailand.

Susanna leads immunology lab research to improve therapies and vaccines for emerging pathogens including SARS-CoV-2, *Burkholderia pseudomallei*, and other Gram-negative bacteria with antimicrobial resistance.

She is chief investigator for the world's first clinical trial of a vaccine for melioidosis, leads the national PITCH study of immunity to SARS-CoV-2 in healthcare workers, and leads the T cell work package of SEACOVARIANTs (Southeast Asia initiative to combat SARS-CoV-2 variants).

Since 2021 she has been Scientific Advisor to the Scottish Parliament's COVID-19 Recovery Committee.

Professor Graham Cooke (Imperial College London)

Graham Cooke is Professor of Infectious Diseases and Vice-Dean for Research at Imperial College London. He works as an NHS consultant at Imperial College and Chelsea and Westminster NHS Foundation Trusts, where he leads the Infection and AMR theme of the NIHR Biomedical Research Centre.

He leads a multidisciplinary research team spanning clinical trials, diagnostics, molecular virology, host genetics, health economics and treatment access. During the COVID-19

pandemic he led the development of rapid diagnostics and was a principal investigator on the REACT study. He is currently an investigator on the REMAPCAP flu trial platform.

Graham is a non-executive director and deputy chair of the MHRA and a member of the WHO committee on the selection and use of essential medicines.

Co-opted members

Dr Chloe Sellwood (NHS England)

Chloe Sellwood (BSc (Hons) PhD FRSPH MFPH FISRM) is the Deputy Head of Emergency Preparedness, Resilience and Response (EPRR) For NHS England (London). Alongside this she works nationally on pandemic preparedness for NHS England.

Chloe's experience ranges from local to international levels and encompasses scientific, strategic and operational aspects. She spent over 7 years at the Health Protection Agency, including 3 years as the Senior Scientist and Coordinator of the Pandemic Influenza Office.

In 2008 Chloe joined NHS London as the Pandemic Influenza Resilience Manager. In 2010 she took on responsibility for Health Resilience for the NHS across London for the 2012 Olympic and Paralympic Games, and in autumn 2014 she assumed the strategic leadership for NHS Ebola preparedness in London.

Since February 2017 Chloe has also been Deputy Head of the NHS England (London) EPRR team and has been intrinsically involved in the response to major incidents in London and nationally, including those over summer 2017. She played a pan-London leadership role for the NHS during the COVID-19 pandemic.

Chloe is the co-editor of, and a contributing author to, 2 textbooks on pandemic influenza and one on health EPRR, as well as articles and papers on influenza resilience. She has previously worked with WHO and the European Centre for Disease Prevention and Control (ECDC) on international consultations, as well as on secondment to the DHSC Pandemic Influenza Preparedness Programme.

Professor Ian Brown (Animal and Plant Health Agency)

Professor Ian Brown is Head of Virology at the Animal and Plant Health Agency Weybridge and Director of Office International des Epizooties (OIE)/ Food and Agriculture Organization (FAO) International Reference Laboratories for Avian Influenza, Newcastle Disease and Swine Influenza.

Ian is the UK national expert on avian and swine influenza and a designated OIE expert for the 3 diseases.

Ian is a founder member of the OFFLU open global network on animal influenza and currently chairs the steering committee. He has taken the lead on a number of key international issues related to the work of this group both on the avian and swine subgroups.

Ian provides a broad range of disease consultancy at both international and national level on all the aforementioned diseases, specialising in science evidence and laboratory application as directly relevant to disease control. His specific research interests include the epidemiology, pathogenicity, transmission and infection dynamics in relation to the control of influenza in animal hosts including zoonotic threat.

Ian gained his PhD on 'Epizootiology of influenza in pigs in Great Britain with emphasis on characterisation of viruses isolated since 1986'.

Ian holds a visiting Professorship position in Avian Virology at the University of Nottingham and Honorary Professorship in Pathobiology and Population Sciences with Royal Veterinary College, London. He was awarded an OBE in the 2020 New Year honours list for services to animal health and welfare.

Dr Lisa Ritchie (NHS England and NHS Improvement)

Lisa Ritchie has worked in health protection and infection prevention and control since 1998. From 2009 Lisa worked as a Nurse Consultant in Infection Prevention and Control and was clinical lead for the National Infection Prevention and Control Policy, Guidance and Outbreak Health Protection Programme at Health Protection Scotland.

Lisa has been active in developing infection prevention and control guidelines both nationally and internationally and has been involved with several key initiatives in this area, including the development of a national infection prevention and control manual for Scotland.

Lisa completed a PhD at Glasgow Caledonian University in 2018 looking at the effectiveness of admission risk assessment and pre-emptive patient cohorting in the control of MRSA transmission. In April 2020 she took up post as Head of Infection Prevention and Control at NHS England and NHS Improvement.

Dr Jim McMenamin (Health Protection Scotland)

Jim graduated from Glasgow University in 1987 (MBChB) and trained in General Medicine (MRCP – Glasgow) and Infectious Diseases (DTM&H-London) before moving into research in infection where he developed an interest in the public health aspects of communicable disease (MPH-Glasgow).

Jim worked as a Consultant in Public Health Medicine/Communicable Disease in Greater Glasgow before moving to his current post in Health Protection Scotland. Jim is the strategic lead for the Respiratory Viral team within HPS and is responsible for seasonal and pandemic influenza. He currently co-chairs the Scottish Immunisation Programme Epidemiology and Surveillance group.

Jim is very active in the area of assessment of seasonal influenza vaccine effectiveness through collaboration with EU partners in the IMOVE project. He has a keen interest in data linkage and works with a consortium of Scottish University and NHS Scotland colleagues on assessment of the impact of the seasonal influenza vaccination programme.

Jim acted as an external advisor to the ECDC for the risk assessment of the 2011 to 2012 and 2012 to 2013 influenza seasons. He has secured in excess of £5 million of research and service development monies over the past 7 years. He has over 90 publications across a range of infection topics.

Professor Wendy Barclay (Imperial College London)

Wendy Barclay took the Natural Science tripos at Cambridge, graduating in 1985. For her postgraduate study, Wendy infected human volunteers with rhinoviruses at the Common Cold Unit in Salisbury under the supervision of Dr David Tyrrell FRS, to understand the immune response to rhinovirus infection. In her first postdoctoral appointment Wendy joined Professor Jeff Almond at the University of Reading and learned the molecular virology skills, including the genetic engineering of small RNA viruses, that would form the technological basis of her research career. In 1992 she moved to the Mount Sinai Medical Center in New York and learned from Professor Peter Palese the techniques for recovery of recombinant influenza virus from cloned cDNA.

Wendy returned to the University of Reading in 1995 and worked on influenza viruses there for 12 years. In May 2007 she moved with her group to take up a Chair in Influenza Virology at Imperial College London. She currently heads a team of around 10 scientists funded by the BBSRC, NC3Rs, and the EU. The lab studies many different aspects of the interaction between influenza viruses and their hosts. She is particularly interested in the mechanism by which viruses can cross from animal sources into humans to cause new pandemics.

Wendy is the current Chair of the Virus Division of the Society for General Microbiology. She sits on several advisory boards including that for The Roslin Institute as well as for the Science Media Centre. She has been a frequent contributor in the media on science issues particularly those concerning virus outbreaks.

Professor Andrew Hayward (University College London)

Andrew Hayward (BSc MBBS MSc DTM&H MD) is Professor of Infectious Disease Epidemiology and Director of the UCL Institute of Epidemiology and Health Care.

Andrew has extensive of epidemiological and public health research in infectious diseases with a particular focus on respiratory infections. He has led research that underpins international influenza vaccination strategies for health care workers. He was chief investigator of the MRC/Wellcome Flu Watch studies which described the community epidemiology of seasonal and pandemic influenza.

Andrew is chief investigator of an NIHR pandemic preparedness grant which will monitor serological responses to the next pandemic. As Director of the Institute of Epidemiology and Health Care he leads around 300 population health and health care research scientists.