

# Biographies

## IHR Emergency Committee for COVID-19

### CHAIR

**Professor Didier HOUSSIN**



President, AP-HP International, the subsidiary of Assistance Publique-Hôpitaux de Paris, Paris, France

Professor Didier Houssin is presently the president of AP-HP International, the subsidiary of Assistance Publique - Hôpitaux de Paris (AP-HP) (Greater Paris University Hospitals). Professor of surgery and liver transplant specialist at Paris-Descartes University since 1988, Didier Houssin served as head of surgery at Cochin hospital in Paris, then as executive director of the French transplant agency and, later, as medical policy director of Assistance Publique - Hôpitaux de Paris and vice-president of Paris-Descartes University.

From 2005 to 2011, he was director general for health at the French Ministry of health and inter-ministerial delegate for pandemic flu preparedness.

President of the French agency for the evaluation of research and higher education (AERES, then HCERES), from 2011 to 2015, and president of the management board of the French agency for food, environmental and occupational health and safety (ANSES) from 2013 to 2016, he served also as an advisor to the World Health Organization since 2011.

At the World Health Organization, he was chair of the Pandemic Influenza Preparedness Framework Agreement Advisory Group and, later, chair of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response.

He is a member of the management board of the European Food Safety Authority (EFSA) and a member of the French National Academy of Medicine.

# MEMBERS

## Professor Stuart D. BLACKSELL\*



Senior Research Scientist, Center for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, United Kingdom of Great Britain and Northern Ireland

Professor Stuart Blacksell is a Senior Research Scientist at the University of Oxford based at the Mahidol-Oxford Tropical Medicine Research Unit (MORU) in Thailand where he has been since 2001. He has been actively involved in studies in Southeast since 1989, where initially worked as a member of the diagnostics team for the CSIRO Australian Animal Health Laboratory (1983-2001) which first brought him to Thailand (1989-1994) and Laos (1996-2001).

In his current post, he is the Health & Safety team leader and Biorisk and Zoonosis group leader. He leads projects on One Health pathogens focussing on biosafety and biosecurity in veterinary and human health laboratories in Thailand, Laos and Cambodia. He is also responsible for rickettsial and tropical disease diagnostics and is the MORU post-graduate student coordinator.

He is a Fellow of the Faculty of Science of the Royal College of Pathologists (Australasia). He is an Associate Professor at the University of Oxford and at the University of Sydney. He is also a Visiting Professor at the Open University, United Kingdom.

He is a member of the WHO biosafety advisory group and WHO Laboratory Biosafety Manual revision editorial team and is included on the WHO International Health Regulations, Roster of Experts, as an expert in Laboratory Issues (Laboratory Biosafety/Biosecurity) for the period from 2018-2022. He is an advisor to FAO One Health/Biosafety programs on matters regarding biosafety throughout Southeast Asia and SAARC countries.

Professor Blacksell has authored or co-authored more than 170 scientific papers in international journals and book chapters.

## **Dr Martin CETRON**



Director, Division of Global Migration and Quarantine, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, United States of America

Dr Cetron holds faculty appointments in the Division of Infectious Disease at the Emory University School of Medicine and the Department of Epidemiology at Rollins School of Public Health. He received his B.A. from Dartmouth College in 1981 and his M.D. from Tufts University in 1985.

He trained in Internal Medicine at the University of Virginia and Infectious Diseases at the University of Washington before joining the CDC's Epidemic Intelligence Service and becoming a Commissioned Officer in the United States Public Health Service (PHS) in 1992.

His primary research interests are global health and migration with a focus on emerging infections, tropical diseases, and vaccine-preventable diseases in mobile populations. Dr Cetron has co-authored more than 100 publications. He has also been a leader in public health emergency preparedness and response activities at CDC and is a graduate of the Harvard School of Public Health & Kennedy School of Government's National Preparedness Leadership Institute. For over 20 years, he has conducted epidemiologic research globally, developed global health policy and led domestic and international outbreak investigations including high profile international emergency responses to emerging infectious disease outbreaks [Anthrax bioterrorism 2001, SARS epidemic 2003, U.S. Monkeypox 2003, Hurricane Katrina/ Rita 2005, H1N1 influenza pandemic 2009, Haiti Earthquake / Cholera Responses 2010-11, Japan Tsunami-Radiation 2011, H7N9 2013, and MERS CoV 2012-3, Coronavirus Response (2013), Unaccompanied Children Central America (2014), Ebola Response (2014) & Zika Virus (2015).

Dr Cetron has been a consultant to several WHO Expert Committees: the United States delegation intergovernmental negotiations of IHR 2005, the Pandemic Influenza and IHR Review Panel 2010, and the IHR emergency committee roster of independent experts. He also was elected in 2016 for a fellowship with IDSA (Infectious Diseases Society of America) & ASTMH (American Society of Tropical Medicine and Hygiene).

Dr Cetron was a member of the 2018 IHR Emergency Committee for Ebola Virus Disease which took place in October 2018.

**Dr Adelle CHANG ON\*\***



County Medical Officer of Health, Ministry of Health, Trinidad and Tobago

Dr Chang On completed her medical degree at the University of the West Indies, Trinidad & Tobago. She is a Fulbright Scholar who completed her Masters in Public Health at Harvard University. U.S.A. Dr. Chang On is presently enrolled in the Public Health and Preventive Medicine Residency Program at McMaster University, Ontario, Canada.

Dr Chang On is employed with the Ministry of Health in Trinidad and Tobago as a County Medical Officer of Health. She has provided technical support for the National Focal Point of the International Health Regulations (2005) for the Republic of Trinidad and Tobago. She has served on the WHO's Scientific and Technical Advisory Group on geographical yellow fever risk mapping (GRYF).

**Dr Supamit CHUNSUTTIWAT**



Advisor, Department of Disease Control, Ministry of Public Health, Bangkok, Thailand

Dr Supamit Chunsuttiwat is Advisor to the Department of Disease Control (DDC), Ministry of Public Health (MOPH) of Thailand. He advises on management of communicable disease control with emphasis on national immunization and emerging infectious diseases programs. He had training in medicine, field epidemiology and public health. Since 1985, has been working in policy and strategy development and the coordination of national immunization program and control programs of several communicable diseases including dengue, diarrheal diseases, zoonotic diseases, influenza and emerging infections. For the national immunization program, he had a leading role in the introduction several new vaccines including hepatitis B, Japanese encephalitis and measles-mumps-rubella, combined DTP-HB, and influenza. He led the coordination of national poliomyelitis eradication campaign for many years before the South East Asia Region was finally certified

poliofree. Currently, he is a member of Thailand's National Vaccine Committee that drives policy for national capacity in vaccine. He has been serving as WHO's South East Asia Regional Certification Commission for Poliomyelitis Eradication since 2012. For emerging infectious disease control, since 1994 he has been involved in the development and coordination of policy and strategies for preparedness and response to emerging infectious diseases. He supervised the development of the current National Strategic Plan on Preparedness and Response to Emerging Infectious Diseases.

**Dr Vladimir M. DUBYANSKIY**



Head of Department of Epizootic Monitoring and Forecasting, Stavropol Plague Control Research Institute and Head of the WHO Collaborating Centre for Reference and Research on Plague, Stavropol, Russian Federation

Dr Vladimir M. Dubyanskiy, B.D., PhD, ScD received his PhD from the Institute of Zoology in Kazakhstan, then Doctor of Science degree in Moscow in the National Research Centre of Epidemiology and Microbiology named after N.F. Gamalea. He has had a long career in science, specializing in epizootology and epidemiology zoonotic diseases as plague, tularemia and arthropod-borne and hemorrhagic fever viruses.

Before 2010 he worked for 25 years as a biologist and epidemiologist in the Central Asia natural plague foci. Now he is working in the Caucasus natural plague foci, CCHF and other viruses foci in Russia and continue to study Central Asia plague.

His main scientific interests are mathematic modelling for forecasting of zoonotic diseases outbreaks and ranking territory by the risk of human infecting with using modern technology like remote sensing and imitation computer modelling. He created the models which have been using for forecasting plague activity in the Republic of Kazakhstan, South Region of Russian Federation and forecasting of CCHF outbreaks in Russian Federation.

He has published numerous scholarly manuscripts and has been a consultant and advisor to various individual countries, scientific groups and commissions.

## **Dr Youngmee JEE**



Advisor, Global Center for Infectious Diseases, Seoul National University College of Medicine, Seoul, Korea

Dr Youngmee Jee (M.D., Ph.D) is an advisor for the Global Center for Infectious Diseases, Seoul National University College of Medicine. Until October 2019, She served as the Acting Director of Korea NIH and the Director of the Center for Infectious Disease Research (CIR) of Korea NIH under the Ministry of Health and Welfare of the Government of the Republic of Korea.

Dr Jee received her M.D. from Seoul National University Medical School, a Diploma in Medical Microbiology from the London School of Hygiene Tropical Medicine, and her Ph.D. in Virology from the University of London in the United Kingdom.

From August 2007 to October 2014, Dr. Jee worked as the regional laboratory coordinator in the Expanded Programme on Immunization of the WHO Western Pacific Region. Dr Jee's work at the WHO involved the coordination of extensive collaborations between public health laboratories and technical assistance to the poliomyelitis, measles/rubella, Japanese encephalitis, rotavirus and invasive bacterial disease network laboratories in the WHO Western Pacific Region with a view to ensuring a high quality laboratory performance

Dr. Jee is the Chairperson of the National Poliomyelitis Certification Committee (NCC), the National Authority for Containment for Polioviruses (NAC) and a member of the Korea Advisory Committee for Immunization in the Republic of Korea. Dr Jee served as a member of the WHO-ROK joint mission on MERS outbreak in Korea in June 2015 and led the WHO International Health Regulation (IHR) Joint External Evaluation (JEE) in 2017 as the head of National JEE Task Force. She also led the Task Force for the Forum on Infectious Disease Research and Development, which is a coalition organization between the government, academic societies, universities and industries in the Republic of Korea during 2015- 2019. Dr Jee also served as the Chairperson of the Korean Society of Infectious Diseases and the Vice-chairperson of the Korean Society for AIDS during 2017-2019.

Dr Jee has been involved in advisory groups and boards of international organizations including WHO. She is a member of the WHO SAGE (Strategic Advisory Group of Experts on Immunization) since April 2017 and SAGE measles and rubella working group since 2018 and serves as a member of the WHO R&D Blueprint Scientific Advisory Group and the Market Information for Access (MI4A) to Vaccines for WHO HQ and a member of hepatitis B expert resource panel in the WHO Western Pacific Region. Dr Jee also served as a member of the Board of Trustees of the International Vaccine Institute and Board of Directors for RIGHT (Research Investment for Global Health Technology) Fund and the Scientific Advisory Committee of the Institut Pasteur Korea (IPK).

**Dr Nyoman KANDUN\*\***



**FETP Indonesia Program Director, Directorate General Disease Control and Environmental Health, Ministry of Health, Indonesia**

Dr Nyoman Kandun graduated from the School of Medicine, University of Gadjah Mada, Yogyakarta, Indonesia. He achieved his Master degree of public health from the Institute of Public Health, University of the Philippines System, Manila. He later graduated from Indonesia's Field Epidemiology Training Program (FETP). Prior to his current duty as Program Director of the Indonesian FETP which he has held since 2008, he served as a civil servant for 33 years. Dr Kandun retired from the Ministry of Health in 2008 with his last position being Director General of Disease Control and Environmental Health.

Alongside his role as FETP Director, Dr Kandun also actively supports a number of public health programmes and activities. He was a member of various organizations, such as the Advisory Board of the National Agency for Disaster Management, the Immunization Technical Advisory Group WHO/SEARO, an Emeritus Member of the Board of Trustee of the International Vaccine Institute (IVI), a member of the Subcommittee of Health Research WHO-SEARO, a member of the Board of Directors of the South Asia Field Epidemiology Training and Technology Network, the Chairman of the National Task Force of Lymphatic Filariasis Elimination, an Expert for the Committee of the National Commission of Zoonotic Diseases Control, a member of the Global Health Security Agenda Expert Committee, and Chair of the Accreditation Commission of Primary Health Care in Indonesia.

He frequently lectures on public health issues at universities and training courses in Indonesia and as a speaker at national and international events.



### **Dr Hiroshi KIDA**



University Professor and Head, Research Center for Zoonosis Control, Hokkaido University, Sapporo, Japan; Head, Collaborating Research Center for the Control and Prevention of Infectious Diseases, Nagasaki University, Nagasaki, Japan; Head, WHO Collaborating Centre for Zoonoses Control; Expert, OIE World Reference Laboratory for Avian Influenza; Member of Japan Academy; and Person of Cultural Merit.

Dr Kida has been devoting himself to the control of zoonoses, especially how to control highly pathogenic avian influenza and how to prepare for human pandemic influenza. His research specialties are Virology, Bacteriology, Immunology and Vaccinology. He has also trained many academic experts who are now working internationally.

### **Professor Marion KOOPMANS**



Chief, Virology Department, Erasmus Medical Center, Rotterdam, Kingdom of the Netherlands

Professor Marion Koopmans, DVM PhD focuses on global population level impact of rapidly spreading zoonotic virus infections, with special emphasis on foodborne transmission. Her research focuses on unravelling the modes of transmission of viruses among animals and between animals and humans, and the use of pathogenic genomic information to unravel these pathways and to signal changes in transmission or disease impact. She is scientific coordinator of COMPARE, a large H2020 funded project (20 MEuro), exploring the potential uses of next generation sequencing techniques for outbreak detection and tracking ([www.compare-europe.eu](http://www.compare-europe.eu)), and co-PI in the FP7 funded PREPARE project ([www.prepare-europe.eu](http://www.prepare-europe.eu)) aimed at building a pan-European operational network for rapid and large-scale European clinical research in response to infectious disease outbreaks with epidemic potential. She is the director of the WHO collaborating centre for emerging infectious diseases at Erasmus, and Scientific Director “Emerging infectious diseases” of the Netherlands Centre for One Health ([www.ncohn.nl](http://www.ncohn.nl)). She has received the Infectious disease award of the Dutch Association for Infectious Diseases and is the recipient of the Stevin Premium 2018. In 2019, she became a member of the KNAW (Royal Dutch Academy of Sciences). She has co-authored >500 papers that have been cited > 20.000 times.



**Professor Rose Gana Fomban LEKE\*\***



Former Head of Immunology and Parasitology, Faculty of Medicine and Biomedical Sciences, University of Yaoundé, Cameroon

Emeritus Professor Rose Gana Fomban Leke is Professor of Immunology and Parasitology, a Fellow of the Cameroon Academy of Sciences CAS, The African Academy of Science AAS, and The World Academy of Science, TWAS. Until March 2013 she was Head of Department at the Faculty of Medicine and Biomedical Sciences, University of Yaounde 1, and Director of the Biotechnology Centre. She serves as Chair of the Board of Directors of the National Medical Research Institute, IMPM, and serves as Vice President of the Scientific Committee of Cameroon First Lady's Research Centre (CIRCB). She was invited as the 2014 Aggrey-Fraser-Guggisberg Memorial Lecturer at the University of Ghana and was awarded the Doctor Honoris Causa (DSc).

In 2011, she was one of six women who received the African Union Kwame Nkrumah Scientific Award for Women and received the 2012 award for Excellence in Science from The Cameroon Professional Society. She was elected International Honorary Fellow of the American Society of Tropical Medicine and Hygiene ASTMH in 2015. She is a member of the Canada Gairdner Foundation Global Health Award Advisory Committee.

She was elected one of nine women as HEROINE OF HEALTH 2018 and was celebrated in Geneva on May 20th, 2018 in the presence of the Director General World Health Organization, the Regional Director WHO/AFRO, and the Cameroon Minister of Health.

On November 23, 2018, she was crowned by the Cameroon Medical Council as QUEEN MOTHER OF THE CAMEROONIAN MEDICAL COMMUNITY

She is Executive Director of the Cameroon Coalition against malaria, and Chair of the Multilateral Initiative in Malaria (MIM) Secretariat.

She was President of the Federation of African Immunological Societies, a Council member of the International Union of Immunological Societies for two terms.

She has served and still serves as a consultant on many committees for the World Health Organization (WHO): the Malaria Policy Advisory Committee (MPAC), The Malaria Elimination Oversight Committee, Chair of the African Regional Commission for the Certification of the Eradication of Poliomyelitis (ARCC), a member of the Global Certification Commission (GCC). She has been a member and Chair of the African Advisory Committee for Health Research (AACHR), a member of the Global ACHR, a Board member of the Global Forum for Health Research, and since 2013 serves on the WHO Emergency Committee for Polio eradication.

She has served as Vice-Chair of the Technical Evaluation Reference group (TERG) of the Global Fund, and in 2009 was awarded a Plaque of Honour in recognition of her “outstanding Services and dedication in leading the TERG...” She was Chair of the Data Management Committee for a trial on Azithromycin-chloroquine, was a member of the Scientific Advisory Group (SAG) for Ebola vaccine trials in Guinea.

Her research interest is in the immunology of parasitic infections, particularly Malaria. She has a keen interest in Global Health issues, is very involved in the Polio Eradication Initiative, in malaria elimination, and is very particular about Health Systems Strengthening. She has been very effective in the training of the next generation of scientists, particularly the empowerment of the young female scientists and women in General. HIGHER WOMEN CAMEROON is one of her initiatives. It is a mentoring program that has made a lot of impact

### **Professor Wannian LIANG**



Professor Wannian Liang, M.D., Professor and Executive Vice President of the Vanke School of Public Health, Tsinghua University.

Professor Liang is Director General of the Department of Healthcare Reform of National Health Commission, Beijing.

He is among the Recipients of special government allowances under the State Council, National-level Young and Middle-aged Expert with Outstanding Contributions. He previously served as Vice President of Capital Medical University, Executive Deputy Director General of Beijing Municipal Health Bureau, Director General of Health Emergency Response Office of Former Ministry of Health, Deputy Director of Healthcare Reform Office of the State Council, Director General of Department of Healthcare Reform of Former National Health and Family Planning Commission.

### **Professor John S. MACKENZIE**



Emeritus Professor John S Mackenzie, Faculty of Health Sciences, Curtin University, Perth, Australia

Professor John Mackenzie is Emeritus Professor at Curtin University in Perth, Western Australia. He is an Honorary Professor in the School of Chemistry and Molecular Biosciences at The University of

Queensland, and Honorary Senior Principal Fellow at the Burnet Institute, Melbourne, He is currently a part-time Senior Research Scientist at PathWest in Perth.

He was Director of the WHO Collaborating Centre for the Collection and Dissemination of Data on Virus Diseases of SE Asia and the Western Pacific from 1984 to 1994. He was a member of the steering committee of the Global Outbreak Alert and Response Network from 2002-2016 (Chair in 2009-10), and the Asia-Pacific Strategy for Emerging Diseases. He chaired the WHO IHR Emergency Committee for Pandemic H1N1 influenza in 2009-10, and is currently a member of the Emergency Committee for Poliovirus. In 2003-04 he worked at WHO to support post-SARS response efforts. He had earlier led a mission into China investigating the origin of SARS in March 2003, and was a member of the WHO Indian Ocean Tsunami response team in Aceh.

He co-founded the One Health Platform, a non-profit Foundation based in Belgium, which is responsible for the International One Health Congresses, of which the 6th will be held in Edinburgh in 2020.

He was elected to Fellow of the American Academy of Microbiology, and as a Fellow of the Australian Academy of Technological Sciences and Engineering. In 2002, he was appointed as Officer in the Order of Australia for services to public health research and to education and is the recipient of various awards including the Akademi Sains Malaysia's Mahathir Science Award for Excellence in Tropical Research.

#### **Dr Brian McCLOSKEY**



Senior Consulting Fellow at the Chatham House Centre on Global Health Security, London, United Kingdom of Great Britain and Northern Ireland

He is an advisor to WHO Health Security Interface Technical Advisory Group (HSI-TAG) and co-chair of the WHO Novel Coronavirus-19 Mass Gatherings Expert Group.

He is also public health advisor to the International Olympic Committee Medical and Scientific Commission.

He has worked in public health at local, regional, national and international level over a period of 25 years, including the UK Health Protection Agency, with a remit for emergency planning and responsibility for cross government aspects of the response to major emergencies. He also had the lead role in planning the public health services for the 2012 London Olympics.

Brian has been working with the WHO's Mass Gatherings Advisory Group since 2008, heading up the UK Collaborating Centre on Mass Gatherings and Global Health Security working with mass gatherings such as the Hajj and the World Cup in South Africa as well as the London Olympics.

Brian acted as the UK National Incident Director for Ebola when it became a national incident in 2014 and was seconded to work with the United Nations Special Envoy on Ebola, based in Geneva.

Brian is also a Senior Consulting Fellow at the Centre for Global Health Security at Chatham House in London and a Professor at London School of Hygiene and Tropical Medicine.

In the January 2013 New Year's Honours List, Brian was awarded a Commander of the British Empire for services to public health.

**Professor Ziad MEMISH**



Senior Infectious Disease Consultant, Director, Research Centre, King Saud Medical City, Ministry of Health, Riyadh, Kingdom of Saudi Arabia

Professor Ziad Memish is currently senior consultant in infectious diseases and Director of research & Innovation Center at King Saud Medical City, Ministry of Health. Professor at the College of Medicine in Alfaisal University, Riyadh, Saudi Arabia; and Adjunct Professor in the Hubert Department of Global Health, Rollins School of Public Health, Emory University, Georgia, United States of America.

Professor Memish obtained his MD from the University of Ottawa, Ottawa, Canada in 1987 and is Board certified by the American Board of Internal Medicine, the American Board of Infectious Diseases as well as a Fellow of the Royal College of Physicians (Canada, Edinburgh and London) and the American College of Physicians. He is widely recognized as a pioneer in Mass Gathering Medicine and Infection Control & established the WHO collaborating center for mass gathering medicine in the Ministry of Health and WHO Collaborating Center for Infection Control in the Saudi Ministry of National Guard (Health Affairs). He was the first Deputy Minister of health for public health, KSA (2009-2014).

He has presented many abstracts and plenary talks internationally and published more than 700 peer reviewed papers and book chapters. He is the editor-in-chief of 2 journals: Journal of Epidemiology & Global Health indexed in PubMed & Dr. Sulaiman Alhabib Medical Journal both published by Atlantis Press. He is a recipient of the King Abdulaziz Medal from the First Degree, the highest National award in Saudi Arabia for achievements in the field of infectious diseases and infection control.

**Professor Babacar NDOYE\*\*\***



Independent Expert-consultant, Infection prevention and control, Antimicrobial resistance, Dakar, Senegal

Professor NDOYE is a physician, associate professor in microbiology from University of Rabat (Morocco). He graduated in microbiology at the Pasteur Institute of Paris, then in army hospitals in France (Marseille and Paris), and Pharo Institute in Marseille. He has then graduated in Epidemiology at the Swiss Tropical Institute in Basel and also completed an Audit Expertise course in Hospital Hygiene at the Pasteur Institute in Lille, France.

For nearly 10 years, he directed Senegal's national program for the control of HAIs (PRONALIN, which was one of the first programs of the day set up in sub-Saharan Africa).

Since his retirement, he has worked as a consultant, mainly at the WHO level (headquarter and AFRO office), for whom he has carried out numerous expert missions, particularly in Africa. He has led the development of national AMR plans in countries like Guinea, Niger and the governance component in Cameroon.

He is currently a member of numerous technical working groups on the fight against AMR and HAIs at international level (WHO Headquarters and Regional Offices, Africa-CDC, WAHO). Professor NDOYE received the distinction of Commander of the Order of the Lion in Senegal.

### **Dr Palliri RAVINDRAN**



Director, Emergency Medical Relief Division, Directorate General of Health Services, Ministry of Health, India

Dr P. Ravindran, a medical graduate of Delhi University, did his MD in Community Health from the National Institute of Health and Family Welfare, New Delhi. He Joined the Directorate General of Health Services, Government of India in 1997 and held various technical positions.

He was inducted into the Emergency response in 2001 and presently heads the Emergency Medical Relief Division of Directorate General of Health Services. During the formative years he had training in Disaster Management in the said division, UN agencies and from Asian Disaster Preparedness Centre (ADPC), Bangkok. In 2000, he was awarded WHO Fellowship on Risk Management. He also completed his intermediate training in Incident Command System from Lal Bahadur Shastri Academy, Mussorie. He graduated in Master of Business Administration (MBA) in Disaster Management from Guru Gobind Singh Indraprastha University and attained his Masters in Public Health (MPH) from Massey University, New Zealand.

At National level, his area of work includes preparedness and response to public health emergencies of national / international concern and managing health consequences of disasters. Apart from being technical focal point for SARS, Avian Influenza, Pandemic Influenza, Ebola Virus Disease, Zika virus disease and Covid-19, He also co-ordinated medical relief activities during major disasters across India that included Bhuj Earthquake, Tsunami etc. He was nominated by DG, WHO as member of the Review Committee (2010-11) for International Health Regulations and Pandemic Influenza. He was

also a recipient of Australian Leadership Award Fellowship on Pandemic Preparedness and Response (2008).

Currently, his area of work also includes setting up Emergency Medical Teams, Public Health Emergency Operation Centres and medical management centres for Chemical, Biological Radiological and Nuclear emergencies, across India.

**Professor Helen REES\*\***



GCOB OBE MB BChir MA(CANTAB) MRCGP DRCOG DCH, Executive Director, Wits Reproductive Health and HIV Institute, University of Witwatersrand, Johannesburg, South Africa

Professor Rees is the Chairperson of the Board of the South African Health Products Regulatory Authority. She has served on and chaired many national and global scientific committees and boards. She was the Chair of the WHO's Strategic Advisory Group of Experts on Immunisation (SAGE) and she now chairs the WHO's African Regional Technical Advisory Group on Immunisation (RITAG).

Since 2014 Professor Rees has been the Chair of the Emergency Committee regarding the international spread of poliovirus. From 2015 to 2016, she was a member of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response tasked with making recommendations to WHO about steps required to improve the global response to public health emergencies and is a member of the IHR Emergency Committee on Yellow Fever. She was the Chair of the WHO SAGE Committee on the Use of Vaccines in Humanitarian Emergencies and is now the Co-Chair of the WHO SAGE Committee on Ebola vaccines as well as chairing the WHO's Maternal Influenza Immunisation Advisory Review Committee.

She is a member of the WHO SAGE Committee evaluating progress towards the Decade of Vaccines, and a member of the WHO SAGE Measles and Rubella Working Group. Professor Rees is a member of the Gavi Board and the Gavi Programme and Policy Committee and chairs the Gates Foundation's Committee on Single Dose HPV vaccines.

Professor Rees has won many international and national awards for her contribution to global health and to science, specifically being made an Officer of the British Empire (OBE) in 2001 by Queen Elizabeth II. In 2016, she was awarded the South African National Order of the Baobab for her contribution to medicine and to medical research.

**Dr Muhammad SALMAN\*\***





Principal Scientific Officer, Public Health Laboratories Division, National Institute of Health, Islamabad

Dr Salman has been working in different capacities in NIH since 1995. He is fellow of College of Physicians and Surgeon Pakistan in the discipline of Pathology with specialization in medical microbiology.

During his experience in the Public Health Laboratories Division, he has participated in the implementation of number of projects related to infectious diseases, laboratory diagnosis and surveillance.

He facilitated the training activities on different aspects of Laboratory medicine including bio-risk management, bio-security, bio-safety, antimicrobial resistance infection control, quality assurance and quality control, surveillance, IHR and AMR etc. He is also among the visiting faculty for lab systems in the Pakistan Field Epidemiology and Laboratory Training Programme (FELTP). In addition, Dr Salman has Bio-risk Management Advanced Trainer certification from the World Health Organization (WHO). He also holds certification on Global Health Challenges, Institute of Health Metrics and Evaluation, University of Washington, USA. Presently he is Head of Microbiology and Virology at the National Institute of Health (NIH) and has been designated as focal person for International Health Regulations and Antimicrobial Resistance by the Ministry of National Health Services Regulations and Coordination, Government of Pakistan.

Dr Salman is a member of the IHR Emergency Committee concerning ongoing events and context involving transmission and international spread of poliovirus.



**Ms Karen TAN**

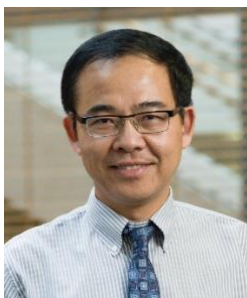


Deputy Chief of Government Communications (Development) and Senior Director (Transformation), Ministry of Communications and Information, Singapore

Ms Karen Tan holds a key role in managing Whole-of-Government's information management and response in crisis situation, and is responsible for the transformation of government communications, including capacity building. Karen joined MCI as Senior Director in August 2011. She headed the Public Communications Division (2011 - 2018) and oversees the planning and execution of Whole-of-Government public communications campaigns, including data driven communications, content production and Singapore national marketing.

Prior to this, she was in Ministry of Health for ten years as Director of Corporate Communications and Press Secretary to the Minister of Health. She has also been previously involved in managing mass communications during the SARS epidemic in 2003 and the influenza A (H1N1) pandemic in 2009.

**Professor Linfa WANG\***



Director, Programme in Emerging Infectious Diseases, Duke-National University of Singapore Medical School, Singapore

Professor Linfa Wang, PhD, is currently the director of the Programme in Emerging Infectious Diseases at Duke-NUS Medical School, Singapore. Having completed his Bachelor's degree in 1982 at the East China Normal University in Shanghai, Wang went on to obtain his PhD at the University of California, Davis. His early research was at the Monash Centre for Molecular Biology and Medicine. In 1990, he joined the Commonwealth Scientific and Industrial Research Organization (CSIRO), Australian Animal Health Laboratory (AAHL), where he started his career on virology and emerging infectious diseases.

Throughout his career, he has worked on all major bat-borne emerging zoonotic virus, from Hendra, Nipah to the Covid-19 outbreaks. He played a leading role in identifying bats as the natural host of the Severe Acute Respiratory Syndrome coronavirus (SARS-CoV). His research then extended from bat-borne viruses to bettering understanding virus-bat interaction, and he led an international team carrying out comparative genomic analysis of two bat species. They discovered an important link between adaptation to flight and bats' ability to counter DNA damage repair as a result of fast metabolism and to co-exist with a large number of viruses without developing clinical diseases.

Wang is active internationally by serving on various editorial boards for publication in the areas of virology, microbiology and infectious diseases. He is currently the editor-in-chief of the Virology Journal. In 2010, Wang was elected as a fellow of Australian Academy of Technological Sciences and Engineering in recognition of his expertise in new and emerging diseases. He is a member of multiple WHO committees and working groups.

### **Dr Denise WERKER\*\***



Clinical Associate Professor, College of Medicine, University of Saskatchewan, Canada

Dr Denise Werker, MD, MHSc, FRCPC, is a public health consultant and clinical associate professor, Department of Community Health and Epidemiology, College of Medicine, University of Saskatchewan.

Her public health practice spans all levels of government in Canada and international governmental organizations. She has practiced as a family doctor in rural and urban communities in British Columbia and served on various committees and boards of professional and non-profit organizations.

As Deputy Chief Medical Health Officer for the Province of Saskatchewan, she had a key role in prevention and control of communicable diseases. In the federal government, Dr Werker held positions in the Public Health Agency of Canada, Department of National Defence and Health Canada. While in the federal government, Dr Werker played a lead role in developing a federal/provincial/territorial public health information sharing agreement, supervising the public health training of health professionals, coordinated many national outbreak investigations, and enabling field epidemiologists to participate in international efforts to eradicate polio and to control outbreaks, including the outbreak of Ebola virus disease in Uganda in 2000/2001.

From 2001 to 2006, Dr. Werker was a Medical Officer in WHO Geneva, where she had an essential role in the design and implementation of global surveillance for the multi-country outbreaks of severe acute respiratory syndrome (SARS) in 2003 and of avian influenza in 2004. In addition, she participated in international responses to outbreaks of international concern, such as the outbreak of Marburg virus disease in Angola in 2005 and provided technical input to the revision of the International Health Regulations (IHR).

Dr Werker was a member of the IHR Emergency Committee on yellow fever in Angola, 2016, and of the Advisory Group to the Director General on Reform of WHO's Work in Outbreaks and Emergencies with Health and Humanitarian Consequences, 2015.

Dr Werker completed her undergraduate degree at the University of Toronto, her medical degree at the University of Ottawa, and her post-graduate degree as well as her Public Health and Preventive Medicine specialty training at the University of British Columbia.

## **ADVISORS**

**Dr Steve AHUKA**



Chief, Department of Virology, National Institute of Biomedical Research, Democratic Republic of the Congo

Dr Steve Ahuka is Chief of the Virology Department at the National Institute for Biomedical Research (INRB), Kinshasa, Democratic Republic of the Congo (DRC); Head of the Medical Biology Department, Kinshasa Teaching School of Medicine, Faculty of Medicine, University of Kinshasa (UNIKIN), Kinshasa; Chief, Chief, Research Clinic Laboratory for Ebola Randomized and Controlled Trials in Nord-Kivu; and Professor and Hospital Practitioner, Kinshasa Teaching School of Medicine, Faculty of Medicine. Dr Ahuka is also the Incident Manager of Covid-19 Outbreak Response in DRC and the General Coordinator of Ebola outbreak Response in the Nord-Kivu, Sud-Kivu and Ituri.

Dr Ahuka trained as a medical doctor at the University of Kinshasa (UNIKIN) and holds a Master in Tropical Medicine from Nagasaki University, Japan. He specialized in Medical Biology at UNIKIN, 2008 and received his PhD in Biomedical Sciences from the University of Montpellier 1, France. His fields of research include HIV genetic diversity and outcomes in the treatment (Resistance to Anti-Retroviral Therapy) and diagnostics, molecular epidemiology of HIV and HTLV, surveillance of emerging viruses at the human-animal interface (Zoonosis) that could originate in severe outbreaks such as Ebola, Yellow Fever, Dengue, HIV-AIDS. He has published numerous articles in peer-reviewed journals.

**Dr Lucía ALONSO\*\*\*\***



Deputy Director of the Epidemiology Division, General Directorate of Health, Ministry of Health, Uruguay

As a former Director of the Epidemiology Division (2018-2020) she has worked on a broad range of subjects, mainly related to Infectious Disease Epidemiology.

Dr Alonso has served as an international expert on a number of World Health Organization expert meetings related to the International Health Regulations, mainly regarding, monitoring and evaluation tools, points of entry and management of public health events on board ships and aircrafts. She has participated of several technical meetings in the Region of the Americas, organized by PAHO on a wide range of topics, mainly related to surveillance and control of infectious diseases.

Dr Alonso obtained her medical degree from the Universidad de la República in Uruguay. She completed her residency in Epidemiology at the same university. She received her training in International Health, obtaining in 2011 the certification of “Leader in International Health” by the Pan-American Health Organization (PAHO), as part of the “Edmundo Granda Ugalde Program”.

She obtained her Professional Diploma in Tropical Medicine and Hygiene (DTMH) from the London School of Hygiene and Tropical Medicine (LSHTM) in the UK. She has also specialized in Travel Medicine and is expected to obtain an MSc in Infectious Diseases (LSHTM).

Dr Alonso holds a teaching position in Epidemiology at the Department of Preventive and Social Medicine (Departamento de Medicina Preventiva y Social), Faculty of Medicine, which is also part of the Universidad de la República, in Uruguay.

### **Dr Etienne BONBON**



Senior Veterinary Advisor, EMC-AH / Animal Health Service, Food and Agriculture Organization of the United Nations, Rome, Italy

Dr Etienne Bonbon is senior veterinary advisor to the FAO, at the Emergency Management Centre for animal health. He received his Veterinary Medicine diploma in 1987 and master's degree in human and animal epidemiology in 1991. Primarily a private practitioner in rural areas, he's been a Veterinary Public Health Inspector in the French Ministry of Agriculture since 1991.

Dr Bonbon began his career as Deputy Director of Veterinary Services in continental France and in Martinica. He then took the Head of the Export Unit at the General Directorate for Food in Paris, before opening the positions of Regional Veterinary Attaché for the Near and Middle East in Beirut and then for Northern Asia in Beijing.

Back from Asia, he was a Seconded Expert to the European Commission in Directorate General for Health and Consumers in Brussels, before joining the World Organisation for Animal Health (OIE) in Paris as Head of the Communication Unit and Advisor to the Director General.

Before arriving at the FAO in 2017, he was Seconded to the European External Action Service at the Delegation of the European Union to the OECD, UNESCO and OIE in Paris.

He has been President of the OIE Terrestrial Animal Health Standards Commission since 2015, after having been Vice-President between 2009 and 2015.

### **Dr Denis COULOMBIER\***



Former Head of Unit, Preparedness and Response Support, European Centre for Disease Prevention and Control, Stockholm, Sweden

Dr Denis Coulombier works as a consultant in various health related international organisations, after retiring from the European Centre for Disease Prevention and Control. From May 2005 to March

2011, Dr Denis Coulombier was the Head of Unit for Preparedness and Response, and from April 2011 to March 2019, the Head of Unit for Surveillance and Response Support in the European Centre for Disease Prevention and Control, in Stockholm, Sweden. From 2001 to 2004, Dr Coulombier was seconded to the World Health Organisation to lead the team in charge of epidemiology capacity strengthening in the Lyon WHO HQ office. He joined the Epidemic Intelligence Service of the US Centers for Disease Control and Prevention in 1991 and subsequently worked in the Epidemiology Programme Office of the CDC in Atlanta. In 1995 he returned to native France to head the Unit for information systems in the National Institute for Public Health until 2000. Dr Denis Coulombier is a medical doctor and a specialist in tropical diseases and public health with extensive international experience in Africa, the Middle-East and the Pacific region.

**Dr Heike DEGGIM\*\***



Director, Maritime Safety Division, International Maritime Organization, United Kingdom of Great Britain and Northern Ireland

Heike Deggim is the Director of the Maritime Safety Division (MSD) of the International Maritime Organization (IMO), the UN specialized agency responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. In this function she is also acting as the Secretary of the Maritime Safety Committee, IMO's senior technical body for ship safety and security related matters. The Maritime Safety Division deals with operational ship safety and the human element; marine technology and cargoes; and maritime security and facilitation of maritime traffic.

Since joining IMO in 1993, Heike was in charge of IMO's Sub-Committees on Flag State Implementation and on Ship Design and Equipment, before being appointed as Head of Marine Technology, with overall responsibility for the technical sub-committees dealing with ship design and equipment; stability, load lines and fishing vessels safety; and fire protection; as well as taking a leading role in the development and implementation of the goal-based ship construction standards for bulk carriers and oil tankers and the associated verification scheme. Before being promoted to the Director position in 2018, she also worked for several years in the position of Senior Deputy Director in IMO's Marine Environment Division, dealing with matters related to MARPOL, air pollution and energy efficiency of ships, reduction of GHG emissions, ballast water management, ship recycling, anti-fouling and biofouling, evaluation of chemicals; as well as being majorly involved with the running of the Marine Environment Protection Committee and the Sub-Committee on Pollution Prevention and Response.

Prior to her career at IMO, Heike worked as R&D engineer in the naval shipbuilding industry, followed by several years as Senior Researcher at the Shipbuilding Faculty of Rostock University,

resulting in a PhD in fishing technology, and later in various positions in the German Maritime Administration dealing among other things with tonnage measurement of ships and issuing of Tonnage Certificates.

Heike graduated in 1983 with a Master's degree in marine engineering from Rostock University. She is a member of the Royal Institution of Naval Architects (RINA).

**Dr Dirk GLAESSER\*\***



Director, Sustainable Development of Tourism, World Tourism Organization (UNWTO, Spain)

Dr Dirk Glaesser is Director of the Sustainable Development of Tourism Department at the United Nations World Tourism Organization (UNWTO). Under his supervision, the programme addresses the challenges and opportunities of sustainable tourism development, including climate change, sustainable consumption and production, health emergencies, biodiversity and travel facilitation. It also promotes safe travel behavior and has closely monitored various health emergencies, from SARS, Pandemic Influenza A (H1N1) 2009 to the most recent COVID-19 outbreak, and their impact on travel and tourism.

He joined the World Tourism Organization in 1997 and has held various positions in UNWTO, among them Chief of the Risk and Crisis Management Department and supervisor of UNWTO's Consulting Unit on Biodiversity and Tourism.

Dr. Glaesser is a banker by profession and Colonel of the Reserve. He obtained his Ph.D. from the University of Lüneburg (Germany) and won the ITB scientific award for his work on Crisis Management. He is the author of a number of publications which have been widely translated.

Dr. Glaesser has been an advisor to the International Health Regulations Emergency Committee on Ebola and to the International Health Regulations Emergency Committee on Zika virus and observed increase in neurological disorders and neonatal malformations.



**Dr Keith HAMILTON**



Head of the Preparedness and Resilience Department, World Organization for Animal Health (OIE), Paris, France

Keith Hamilton is currently Head of the Preparedness and Resilience Department at the World Organisation for Animal Health (OIE). Keith is a veterinarian with a background in international health. During his time at the OIE, which spans 10 years, he has worked on emergency management; improving pandemic preparedness; emerging infectious diseases; building capacity of veterinary services; and on supporting global strategies for biological threat reduction. He has collaborated closely with colleagues at WHO and FAO to better understand and manage risks from emerging infectious diseases at the human animal interface, including zoonotic avian influenza, pandemic H1N1, and MERS CoV.

For two years, from 2015-2017, he was recruited by Kansas State University (USA) College of Veterinary Medicine to establish an international program. During this period, he developed and delivered educational material; established international projects; and initiated a guiding coalition on sustainable crop-livestock systems.

Prior to joining the OIE, he worked for the UK Government (2004-2007) providing veterinary advice to inform policies for exotic animal disease surveillance and control.

Earlier experiences include working for 6 years in mixed animal practice in the UK, Australia, and India, and in field disease surveillance and control programmes.

He was educated in the United Kingdom at Liverpool University Veterinary School and the London School of Hygiene and Tropical Medicine.

**Dr Chikwe Ihekweazu\*\***



Director General, Nigeria Centre for Disease Control, Nigeria

Dr Chikwe Ihekweazu is the Director General of the Nigeria Centre for Disease Control (NCDC) and was until January 2018, the Acting Director of the Regional Centre for Disease Control for West Africa. Dr Ihekweazu trained as an infectious disease epidemiologist and has over 20 years' experience working in senior public health and leadership positions in several National Public Health Institutes, including the South African National Institute for Communicable Diseases (NICD), the UK's Health Protection Agency, and Germany's Robert Koch Institute (RKI). Dr Ihekweazu has led several short-term engagements for WHO, mainly in response to major infectious disease outbreaks around the world.

**Dr Ansa JORDAAN**



Chief, Aviation Medicine Section, International Civil Aviation Organization, Montreal, Canada

Dr Jordaan is also the Manager of the “Collaborative Arrangement for the Prevention and Management of Public Health Events” (CAPSCA) programme in Civil Aviation. CAPSCA is a global multi-partner programme (ICAO, WHO, the United States Centers for Disease Control and Prevention, aviation industry and other partners) providing assistance to international airports and States to help build capacity to manage public health emergencies.

Previously, Dr Jordaan was the Medical Director of Occupational Health at International SOS, where she was responsible for the oversight of Emergency Medical clinics and occupational Health clinics of International SOS corporate clients in remote areas in sub-Saharan African countries. In this position she also facilitated air ambulance transport of patients from remote clinics to specialized medical centres of care.

Prior to International SOS she was employed by the Life Occupational Health Hospital group as the Project Director for Transnet Freight Rail in South Africa, reviewing the client's health

policies based on occupational risk assessments and compliance audits and assuming accountability for quality management of clinic operations.

From 2007 to 2011 she was the Medical Director of South African Airways, responsible for planning and managing all medical related aspects of the company's operations including strategic management, on-board medical care and public health emergencies.

Prior to this she was an Independent Consultant for four years in the aviation industry, consulting to private and corporate clients on various aspects related to aviation medicine.

In 1999 she established the Civil Aviation Medicine department in the South African Civil Aviation Authority, after having worked in the military medical aviation industry for several years. She remained at the Civil Aviation Authority as the Senior Manager of Civil Aviation Medicine until 2003 and was responsible for developing civil aviation medical standards and ensuring industry compliance with national regulations and international standards.

Other current professional activities include memberships in the Aerospace Medical Association, International Academy of Aviation and Space Medicine Faculty, South African Society of Aerospace and Environmental Medicine and the South African Society of Occupational Medicine.

#### **Dr Palitha KARUNAPEMA\*\***



Director, Health Promotion Bureau, Ministry of Health, Sri Lanka

Dr Palitha Karunapema, is a public health specialist from Sri Lanka with over 20 years of experience in the field of Public Health. He was the IHR national focal point from 2015-2019. He was a strong advocate and contributed immensely towards improving health security preparedness in Sri Lanka and he was instrumental in conducting JEE and developing NAPHS for Sri Lanka. His services have been rendered to JEE missions and represented Sri Lanka in many international forums on health security.

Dr Palitha is also a long-standing member of the national advisory committee on communicable diseases and National IHR steering committee in Sri Lanka while holding the posts of National directorate for Quarantine from 2015 to 2019 and currently holding the position of directorate for health communication and publicity at the Health Promotion Bureau that leads the national risk communication focal point for the COVID-19 response.

**Dr Khalil Mohammad KHALIL\*\***



Head of Aviation Medicine, Department Jordan Civil Aviation Regulatory Commission (CARC), Jordan

Dr Khalil is an Aviation Medicine specialist working as a head of Aviation Medicine Department in Jordan Civil Aviation Regulatory Commission. He retired from Royal Jordanian Airforce as the Aviation Medicine (AvMed) Medical Officer. He graduated from King's College London, United Kingdom of Great Britain and Northern Ireland, in Aviation Medicine and certified by the Jordan Medical Council as an AvMed Specialist. He also works with WHO as Points of Entry (Aviation) expert and has conducted many missions, globally and regionally, to implement CAPSCA and IHR requirements in Aviation. More recently, he is part of the study working group for the Public Health Corridor Concept at International Civil Aviation Organization in Montreal, Canada.

**Professor Malik PEIRIS**



Director, School of Public Health and Chair in Virology, Co-Director, WHO H5 Reference Laboratory, The University of Hong Kong, Hong Kong SAR, People's Republic of China

Professor Malik Peiris is professor and chair in virology at the School of Public Health at The University of Hong Kong. He is a clinical and public health virologist with a particular interest in emerging virus disease at the animal-human interface, including influenza, coronaviruses (SARS-CoV, MERS-CoV, SARS-CoV-2) and others. His research encompasses the pathogenesis, innate immune responses, transmission, ecology and epidemiology of human and animal (poultry, swine, wild birds) influenza viruses. His collaborative research has provided understanding on the emergence and pathogenesis of the 2009 pandemic H1N1 virus and on avian influenza viruses H5N1, H9N2 and H7N9. Using a “one health” approach, these studies have provided evidence-based options for the control of these viruses in poultry and in humans. In 2003, he played a key role in the discovery that a novel coronavirus was the cause of SARS, its diagnosis and pathogenesis and contributed to its control. Recently he is researching the recently emerged MERS coronavirus and more recently, the newly emerged SARS-CoV-2.

He co-directs the WHO H5 Reference Laboratory at HKU and the HKU-Pasteur Research Pole, one of the network laboratories of the International Pasteur Network. He was elected a Fellow of the Royal Society of London in 2006, Fellow of the American Academy of Microbiology in 2016 and Foreign Associate of National Academy of Sciences in 2017. He was awarded the Officier de la Légion d'Honneur, France (2017), Mahathir Science Award, Akademi Sains, Malaysia (2007) and Silver Bauhinia Star (S.B.S.), Hong Kong SAR (2008).

**Dr David POWELL**



Chief Medical Officer, International Air Transport Association, Auckland, New Zealand

Dr David Powell is Medical Advisor to IATA (International Air Transport Association). He is a medical graduate from Auckland, New Zealand, specialised in occupational and aviation medicine, and has worked for over 30 years in medical roles across most aspects of aviation (Air Force, airlines, air ambulance, aviation consulting, and university teaching). He has over 20 academic publications and holds commercial helicopter and aeroplane licences. David is a past President of the International Airline Medical Association and a Fellow of the Royal Aeronautical Society.

**Dr Theresa TAM1**



Chief Public Health Officer of Canada, Ottawa, Canada

Dr Theresa Tam was named Canada's Chief Public Health Officer on June 26, 2017. As the federal government's lead public health professional and advisor to the Minister of Health, she is championing the reduction of health inequities impacting all Canadians.

Dr Tam works closely with a variety of partners, within and outside of government, on public health matters. She also provides advice to the President of the Public Health Agency of Canada, and works in collaboration with the President in the leadership and management of the Agency.

Dr Tam is a physician with expertise in immunization, infectious disease, emergency preparedness and global health security. She has played a leadership role in Canada's response to public health emergencies including severe acute respiratory syndrome (SARS), pandemic influenza H1N1 and Ebola.

Dr Tam has served as an international expert on a number of World Health Organization committees and has participated in multiple international missions related to SARS, pandemic influenza and polio eradication.

Dr Tam obtained her medical degree from the University of Nottingham in the U.K. She completed her paediatric residency at the University of Alberta and her fellowship in paediatric infectious diseases at the University of British Columbia. She is a Fellow of the Royal College of Physicians and Surgeons of Canada and has over 55 peer-reviewed journal publications in public health. Dr. Tam is also a graduate of the Canadian Field Epidemiology Program.

**Dr Anders TEGNELL\*\***



Director, Knowledge based policy and guidances, Public Health Agency, Sweden

Dr Tegnell is the state epidemiologist in Sweden and the head of the department of Public Health analysis and reporting at the Public Health Agency of Sweden. The responsibility includes collecting and analysing data from different sources on public health. The department develops yearly report on the status of public health in Sweden and supports epidemiological and statistical analysis for all parts of the agency.

Before the position he was responsible for a department of the National Board of Health and Welfare dealing with knowledge management, developing guidelines and recommendations in all of the Boards areas of responsibility. The National Board of Health and Welfare is a government agency under the Ministry of Health and Social Affairs, with a very wide range of activities and many different duties within the fields of social services, health and medical services, environmental health, communicable disease prevention and epidemiology.

In the past he has been responsible for the development of the Swedish preparedness plan for a flu pandemic, for the Swedish national vaccination programme and the work with AMR and HAI with focus on regulatory issues and supervision.

He has published around 60 articles in scientific journals.

\*On the Committee for the 1<sup>st</sup> and 2<sup>nd</sup> meetings

\*\*On the Committee from the 3<sup>rd</sup> meeting

\*\*\*On the Committee for the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> meetings

\*\*\*\*On the Committee for the 3<sup>rd</sup> and 4<sup>th</sup> meetings