

## List and Biography of Proposed Guideline Development Group Members

<b>Ambrose Agweyu</b>	
<b>Institutional Affiliation</b>	KEMRI-Wellcome Trust Research Programme, Kenya London School of Hygiene and Tropical Medicine, UK
<b>Academic Degrees</b>	(1) MBChB, (2) MSc (Epidemiology), (3) MMed (Paediatrics and Child Health), (4) PhD (Epidemiology)
<b>City and country of primary residence</b>	Nairobi, Kenya
<b>Biography:</b> Dr Ambrose Agweyu is a paediatrician and epidemiologist based in Nairobi and Kilifi at the KEMRI-Wellcome trust Research Programme in Kenya. He is also Professor of Infectious Disease Epidemiology at the London School of Hygiene and Tropical Medicine. Dr Agweyu has broad interests in pragmatic trials, childhood respiratory illnesses, clinical guideline implementation, and the integration of routine data to support surveillance. He is currently Principal Investigator on a large multi-site clinical trial comparing alternative treatments for severe pneumonia in children. He also co-leads the Clinical Information Network - a cross-disciplinary collaboration of researchers, policy makers and practicing health professionals partnering towards the generation and use of routine data to improve care, understand patient outcomes, and to evaluate interventions in 25 hospitals in Kenya. He recently spearheaded the adaptation of this platform to support national sentinel syndromic surveillance for severe COVID-19 in Kenya. Dr Agweyu serves on various Ministry of Health technical panels in Kenya where he has contributed to the development of national policy and strategy documents for newborn, child and adolescent health. He is also the immediate former co-chair of the WHO/UNICEF Child Health Accountability Tracking (CHAT) Technical Advisory Group and a member of the WHO Life Course Quality Metrics Working Group.	
<b>Tahmeed Ahmed</b>	
<b>Institutional Affiliation</b>	Executive Director icddr,b and Professor of Public Health, James P. Grant School of Public Health, BRAC University, Dhaka
<b>Academic Degrees</b>	MBBS, PhD
<b>City and country of primary residence</b>	Dhaka, Bangladesh
<b>Biography:</b> Dr Tahmeed Ahmed is a clinician and has been working for the last three decades in simplifying the treatment of maternal and childhood malnutrition, pneumonia, and diarrheal diseases. Together with Dr Jeffrey Gordon of Washington University in St. Louis he discovered microbiota directed complementary food (MDCF) - a novel intervention for childhood malnutrition. This discovery was highlighted by the prestigious journal Science as one of the scientific breakthroughs of 2019. He is continuing the research on MDCF in other countries in South Asia and Africa. He led the BEED (Bangladesh Environmental Enteric Dysfunction) study that validated non-invasive biomarkers of environmental enteric dysfunction, an important cause of stunting in children.  Dr Ahmed obtained his medical degree from Mymensingh Medical College and subsequently studied at the University of Tsukuba in Japan for his PhD. As a member of the Nutrition Guidance Expert Advisory Group of the WHO, Dr Ahmed revised the global guidelines for the management of childhood acute malnutrition. Dr Ahmed was awarded the Bangladesh Academy of Science Gold Medal for outstanding achievement in Medical Science in 2003. He has more than 400 articles published in international journals and books. He is also Professor of Public Health Nutrition of James P. Grant School of Public Health, BRAC University, Dhaka as well as Affiliated Professor of School of Global Health, University of Washington, Seattle.	

<b>Narendra Kumar Arora</b>	
<b>Institutional Affiliation</b>	Executive Director - The INCLEN Trust International, Delhi
<b>Academic Degrees</b>	MD, FAMS, FIAP, FIPHA
<b>City and country of primary residence</b>	New Delhi, India
<b>Biography:</b> <p>Professor (Dr) Narendra Kumar Arora (MD –Paediatrics, MMSc – Clinical Epidemiology), from India is the current Executive Director of The INCLEN Trust International since 2005. Prof Arora was a faculty member (Paediatric Gastroenterology, Hepatology, &amp; Nutrition) of AIIMS between 1983 and 2007. Prof Arora has been involved in numerous national scientific, research, and academic committees constituted under the MoHFW, DBT, BIRAC, DST, ICMR, and UGC for Maternal and Child Health in India. He is currently serving as a Chair – Covid-19 Working Group of National Technical Advisory Group on Immunization (NTAGI- India) and Chair on various COVID-19 vaccine, drugs and diagnostic activities in India. He was the lead author for determining the Indian research priorities for MNCAH&amp;N; these are adopted by ICMR for its investment agenda.</p> <p>Prof Arora served as a Vice-Chair/Member of the WHO- Strategic Advisory Group of Experts on Immunization (SAGE) from 2010 to 2016 and the South-East Asia Regional Immunization Technical Advisory Group (SEAR-ITAG). He served on three SAGE working groups that undertook GDG work. Currently, Prof Arora serves as a member of the WHO's Global Advisory Committee on Vaccine Safety (GACVS); and WHO's Scientific and Technical Advisory Group for Maternal, New-born, Child and Adolescent health and Nutrition (STAGE). He has also participated in GDG groups for GACVS for management of TTS post-COVID-19 vaccination.</p>	
<b>Lulu Bravo</b>	
<b>Institutional Affiliation</b>	University of the Philippines Manila
<b>Academic Degrees</b>	MD . Professor Emeritus
<b>City and country of primary residence</b>	Manila, Philippines
<b>Biography:</b> <p>Lulu Bravo is a Professor Emeritus at the College of Medicine, University of the Philippines Manila. She is the former Vice Chancellor for Research and Executive Director of the National Institutes of Health, University of the Philippines Manila (2005 – 2011) and current head of the Vaccine Study Group of the NIH – UPM.</p> <p>She is a member of the Rota Council, Pneumococcal Awareness Council of Experts (PACE) and member of the Dengue Vaccine Initiative (DVI). Her work has earned for her various national and international honors and awards in the professional, academic and research fields, including the Outstanding Physician (2009) and the prestigious Dr. Jose P. Rizal Memorial Award for Academe (2011) given by Philippine Medical Association, the 2012 Asian Outstanding Pediatrician Award given by the Asia Pacific Pediatric Association and 2018 Outstanding Professional in Medicine given by the Professional Regulation Commission of the Philippines. In 2008, she presented both written and oral evidence to the UK's House of Commons to justify the \$ 2.5 Billion vaccination advance market commitment to provide needed vaccines for the developing world. She was named Pneumonia Fighter in 2018 by the JustActions Organization, a US-based advocacy movement and corporation associated with People Empowerment.</p> <p>Dr. Lulu Bravo completed her MD, pediatric residency and subspecialty training in infectious disease at Philippine General Hospital-College of Medicine of the University of the Philippines Manila. She supplemented her fellowship in pediatric infectious disease at the University of Texas Southwestern Health</p>	

Science Center in Dallas, USA in 1986. She has published more than 100 scientific articles, books and book chapters in both local and international circles.	
<b>Suzanne Kamel Farhoud</b>	
<b>Institutional Affiliation</b>	Former Regional Advisor for Child and Adolescent Health. WHO/EMRO (WHO retiree)
<b>Academic Degrees</b>	MB, BCh Faculty of medicine, Alexandria University, Egypt MSc, Paediatrics, Alexandria University, Egypt Diploma in public health and Health in developing countries, Boston University, USA Master degree on Hospital Administration, Sadat Academy, Alexandria, Egypt
<b>City and country of primary residence</b>	Cairo, Egypt
<b>Biography:</b> Suzanne Farhoud is paediatrician by qualification, worked at Alexandria University after graduation, then moved to the ministry of health of Egypt. Since 1990, Suzanne Farhoud served as WHO/EMRO consultant, mainly in the area of guidelines development and capacity building in the context of CDD/ARI programmes. She officially joined WHO/EMRO as a staff in 1996 and worked for programme of child and adolescent health, implementing IMCI strategy- whose main pillars are CDD and ARI-. From 2000 - 2014, she served as regional advisor for child and adolescent health at WHO/EMRO serving 22 countries of the region. Over 18 years- of work with WHO, she assisted countries in policy/strategy development, guidelines development, capacity building, programmes establishment, advocacy and resource mobilization, planning, implementation of interventions and evaluation activities. In addition, in response to countries' needs, she developed initiatives, among others CHPI (Child health policy development initiative), the IMCI pre-service education (introduction of IMCI into teaching curricula). Since 2014, Suzanne Farhoud has served as an international expert in the area of CAH and has undertaken consultancies on, mainly among others – guidelines development e.g. CHWs training guidelines on care for under-fives and mothers in the community, management guidelines for adolescents at PHC. Moreover, updating IMCI guidelines by introducing new components (e.g. chronic malnutrition, development screening, etc).	
<b>Olivier Fontaine</b>	
<b>Institutional Affiliation</b>	Retired from WHO since 2012
<b>Academic Degrees</b>	MD
<b>City and country of primary residence</b>	Divonne-les-Bains (France)
<b>Biography:</b> He obtained his Medical Doctorate in 1976 in Paris. From January 1977 to February 1981 he worked in the Department of Internal Medicine at Yale University, Conn. USA. Then from 1981 to 1987, he worked for the «Office de la Recherche Scientifique et Technique d'Outre Mer» first in Paris (France), then in Dakar (Sénégal). In october 1987, he was hired by the Diarrhoeal Diseases Control Programme of the World Health Organization in Geneva to be Medical Officer in charge of clinical research. I retired from WHO in April 2012.	
<b>Short bibliography:</b> Wolfheim C, <b>Fontaine O</b> , Merson M. Evolution of the World Health Organization's programmatic actions to control diarrhoeal diseases. J Glob Health. 2019 Dec;9(2):020802. doi: 10.7189/jogh.09.020802	

Kosek M, Lanata CF, Black RE, Walker DG, Snyder JD, Salam MA, Mahalanabis D, **Fontaine O**, Bhutta ZA, Bhatnagar S, Rudan I. Directing diarrhoeal disease reserach towards disease-burden reduction.. J Health Popul Nutr. 2009 Jun;27(3):319-31. doi: 10.3329/jhpn.v27i3.3374.

de Benoist B, Darnton-Hill I, Davidsson L, **Fontaine O**, Hotz C. Conclusions of the Joint WHO/UNICEF/IAEA/IZiNCG Interagency Meeting on Zinc Staus Indicators. Food Nutr Bull. 2007 Sep;28(3 Suppl):S480-4. doi: 10.1177/15648265070283S306.

Keusch GT, **Fontaine O**, Bhargava A, Boschi-Pinto C, Bhutta ZA, Gotuzzo E, Rivera J, Chow J, Shahid-Salles S, Laxminarayan R. In: Jamison DT, Breman JG, Measham AR, Alleyne G, Claeson M, Evans DB, Jha P, Mills A, Musgrove P, editors. Disease Control Priorities in Developing Countries. 2nd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2006. Chapter 19.

**Fontaine O**, Gore SM, Pierce NF. Rice-based orazl rehydration solution for treating diarrhoea. Cochrane Database Syst Rev. 2000;(2):CD001264. doi: 10.1002/14651858.CD001264.

Clinical trials of improved oral rehydration salt formulations: a review. Bhan MK, Mahalanabis D, **Fontaine O**, Pierce NF. Bull World Health Organ. 1994;72(6):945-55.

## Stephen Howie

<b>Institutional Affiliation</b>	University of Auckland, Auckland, New Zealand
<b>Academic Degrees</b>	Bachelor of Human Biology (BHB), Bachelor of Medicine Bachelor of Surgery ( <b>MBChB</b> ), Diploma of Obstetrics ( <b>DipObs</b> ), Diploma of Paediatrics ( <b>DipPaed</b> ), Fellowship of The Royal Australasian College of Physicians ( <b>FRACP</b> ) in Paediatrics, Fellowship of The Royal College of Physicians of London ( <b>FRCP</b> ), PhD (Epidemiology, LSHTM), Postgraduate Diploma of the London School of Hygiene & Tropical Medicine (Epidemiology & Population Health) ( <b>DLSHTM</b> )
<b>City and country of primary residence</b>	Auckland, New Zealand

## Biography:

Stephen Howie is a graduate of the University of Auckland School of Medicine and completed specialist paediatric training in New Zealand, becoming a Fellow of the Royal Australasian College of Physicians. He worked for over a decade at the UK Medical Research Council's unit in The Gambia, West Africa, latterly as its Theme Leader for Child Survival. He holds a PhD in clinical epidemiology from the London School of Hygiene and Tropical Medicine. His research, teaching, clinical practice and leadership focus is on the prevention and treatment of high-morbidity, high-mortality, child health conditions, including pneumonia, diarrhoea, vaccine-preventable and other infections, nutritional problems and maternal & newborn illness. His emphasis is on furthering effective partnerships to positively impact child health. He serves on a number of international child health-related groups. He is currently Associate Professor of Paediatrics at the University of Auckland in Auckland, New Zealand.

## Fyezah Jehan

<b>Institutional Affiliation</b>	The Ruby and Karim Bahudar Ali Jessani Endowed Chair Chair, Department of Pediatrics and Child Health Associate Professor & Consultant Paediatrics Infectious Diseases The Aga Khan University, Karachi, Pakistan
<b>Academic Degrees</b>	MBBS, FCPS, MSc
<b>City and country of primary residence</b>	Karachi, Sindh, Pakistan

**Biography:**

Dr. Jehan is an Associate Professor and the Ruby and Karim Bahadur Ali Jessani Endowed Chair in the Department of Pediatrics and Child Health at The Aga Khan University. As a clinician, researcher, and educator, Dr. Jehan has a diverse international research portfolio in Global Maternal, Newborn, and Child Health, with over 90 publications in high-impact journals.

One of Dr. Jehan's key areas of focus has been evaluating the safety of withholding antibiotics in low-income and middle-income countries (LMICs) for mild pneumonia, as the lead of the Randomized Non-inferiority Trial of Amoxicillin versus Placebo (RETAPP) study. This study enrolled the largest cohort of children with mild (presumed viral) pneumonia in community settings. This work has also led to further research on pneumonia diagnostics and research priority setting. Another line of her work is exploring the multifactorial cause of adverse birth outcomes, including prematurity, which remains a significant public health issue, particularly in LMICs. Dr. Jehan continues to lead the delivery of free services, including the management of common childhood illnesses, such as pneumonia and diarrhea, at the Karachi Community field sites.

Ultimately, Dr. Jehan's goal is to combine her experiences as a pediatrician, infectious disease specialist, epidemiologist, and patient representative to better understand the challenges faced by healthcare providers, and communities, and apply evidence-based medicine to address these challenges.

**Kristina Keitel****Institutional Affiliation**

University Hospital of Bern, Switzerland  
Swiss Tropical and Public Health Institute, Switzerland  
Boston Children's Hospital, USA

**Academic Degrees**

MD MPH PhD

**City and country of primary residence**

Bern, Switzerland

**Biography:**

Dr. Kristina Keitel is Head of the Pediatric Emergency Medicine at the University Hospital of Bern, Switzerland, and Honorary Lecturer at the Swiss Tropical and Public Health Institute. Dr. Keitel graduated with a MD from the Charité Medical Faculty in Berlin, Germany. She completed her clinical training in Pediatrics, Pediatric Infectious Diseases, and Pediatric Emergency Medicine at the University Hospital in Geneva, Switzerland, and Boston Children's Hospital/ Harvard Medical School, USA. Dr. Keitel received training in Public Health (MPH) at Columbia University, New York, USA, followed by a PhD in Epidemiology at the Swiss Tropical and Public Health Institute in Basel, Switzerland. During her PhD she was based in Tanzania. Dr. Keitel's primary research interest lies in the outcome-based evaluation of diagnostic and treatment strategies for common pediatric infections. This includes the development and validation of electronic decision algorithms (e.g. ePOCT, an IMCI-based tool now undergoing implementation research in several countries), and pragmatic clinical trials (focus on management strategies for respiratory infections).

**Claudio F Lanata****Institutional Affiliation**

2022 – to date: Director General, Nutrition Research Institute  
1983 – to date: Senior Researcher, Nutrition Research Institute

**Academic Degrees**

April 1977: M.D. Peruvian University Cayetano Heredia - Lima, Peru.  
Honors: Number 9 out of 61 classmates.  
May 1983: M.P.H. The Johns Hopkins University -School of Hygiene & Public Health  
- Baltimore, Maryland, USA. - Emphasis: Epidemiology

	June 2019 (ongoing): PHD Program –Peruvian University Cayetano, Heredia, Lima, Peru
<b>City and country of primary residence</b>	Lima, Peru
<b>Biography:</b> Senior Researcher at the Nutritional Research Institute in Lima, Peru, which he joined in 1983, after returning from his post-graduate training in the USA and since October 2022, appointed Director General. He has led in Peru extensive research in child health and nutrition areas, mainly on diarrheal and respiratory diseases, micronutrients and vaccines development that has resulted in two books, 27 chapters, and more than 180 publications mainly in major international journals. Active collaborator with WHO and PAHO, and member of several expert committees on diarrheal diseases and vaccine development; he has served as a Trustee of the International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), and founder of the Child Health and Nutrition Research Initiative (CHNRI) in Switzerland. Currently Adjunct Professor, Department of Pediatrics at Vanderbilt University and Honorary Professor at the London School of Hygiene and Tropical Medicine. As a recognition of his research career, in 2020 received the Slim Health Award from Carlos Slim Foundation, Mexico. Recently appointed as Honorary Researcher at the Alexander von Humboldt Tropical Medicine Institute of the Peruvian University Cayetano Heredia, Lima, Peru and member of the International Society of Global Health, UK.	
<b>You Li</b>	
<b>Institutional Affiliation</b>	Nanjing Medical University; University of Edinburgh
<b>Academic Degrees</b>	PhD, Master of Science, Bachelor of Medicine
<b>City and country of primary residence</b>	Nanjing, China
<b>Biography:</b> Dr. You Li is professor of epidemiology at Nanjing Medical University, China, and honorary fellow at University of Edinburgh, UK. He received Bachelor of Medicine and Master of Science (in epidemiology and health statistics) degrees in Peking University, China and PhD degree at University of Edinburgh. Dr. Li has substantial track records on epidemiology of respiratory infectious diseases. He has extensive experience in working with international organizations including WHO and the Gates Foundation, and in international collaboration in large consortiums including RSV GEN, RESCEU, and PROMISE. As the lead author, Dr. Li has published several influential works on global, regional, and national disease burden estimation of RSV in young children (Li et al. Lancet 2022; Li et al. Lancet Respiratory Medicine 2022); seasonality of respiratory viruses and implications for immunization strategy (Li et al. Lancet Global Health 2019; Li et al. Lancet Infectious Diseases 2021a); and assessment of public health measures in controlling the spread of SARS-CoV-2 (Li et al. Lancet Infectious Diseases 2021b). He is a section lead author of the value profile for RSV vaccines and monoclonal antibodies initiated by WHO. He also co-authored a WHO manual on estimating communicable disease burden in displaced population.	
<b>Rakesh Lodha</b>	
<b>Institutional Affiliation</b>	Professor, Department of Pediatrics, All India Institute of Medical Sciences, New Delhi, INDIA
<b>Academic Degrees</b>	MBBS, MD (Pediatrics)
<b>City and country of primary residence</b>	New Delhi, INDIA
<b>Biography:</b> Dr Lodha has trained in Pediatrics at the All India Institute of Medical Sciences, New Delhi, INDIA and is a Faculty since the year 2000. His main areas of work are pediatric intensive care and infectious diseases. He	

has worked in the areas of sepsis, severe sepsis, healthcare associated infections, severe infections and pneumonia in children. His group has conducted multiple studies in children with pneumonia. He has also conducted systematic reviews to assess optimal fluid therapy in severe sepsis/ septic shock; determine signs of sepsis; oral vs parenteral antibiotics for pneumonia. Dr Lodha is a member of “Pediatric Sepsis Definitions Taskforce” of the Society of Critical Care Medicine. He is also a member of the Global Burden of Diseases group. Dr Lodha has also been a member of the WHO GDGs on Fluid guidelines and clinical management of COVID-19.


**Eric D. McCollum**

<b>Institutional Affiliation</b>	Johns Hopkins University School of Medicine, Johns Hopkins Bloomberg School of Public Health
<b>Academic Degrees</b>	MD, MPH
<b>City and country of primary residence</b>	Cape Town, South Africa

**Biography:**  
Dr. Eric D. McCollum, MD, MPH is based in South Africa as the director of the Johns Hopkins Global Program in Pediatric Respiratory Sciences, an Associate Professor of Pediatric Pulmonology in the Eudowood Division of Pediatric Respiratory Sciences at the Johns Hopkins School of Medicine (United States) with a joint appointment at the Johns Hopkins Bloomberg School of Public Health in the Department of International Health, and Associate Professor Extraordinary in Pediatrics and Child Health at Stellenbosch University (South Africa). Dr. McCollum provided technical assistance to the Government of Lesotho during the COVID-19 pandemic response, and led the establishment of the two national COVID-19 treatment centers and non-invasive advanced respiratory care. He has 17 years of clinical and research experience in child respiratory diseases in low-income and middle-income countries in southern Africa and South Asia. He has led the implementation and evaluation of pulse oximeters in multiple studies of children with pneumonia in Malawi and Bangladesh. He has also been the principal investigator of a seminal randomized trial of children with severe pneumonia in Malawi evaluating bubble continuous positive airway pressure, and of ongoing research developing a reflectance mobile phone-based pulse oximeter and hypoxemia surveillance system in South Africa.

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**Harish Nair**

<b>Institutional Affiliation</b>	Professor of Paediatric Infectious Diseases and Global Health, University of Edinburgh (2010-current) Honorary Professor, School of Public Health, University of the Witwatersrand, South Africa (2022- current) Visiting Professor, School of Public Health, Nanjing Medical University, China (2023- current)
<b>Academic Degrees</b>	MBBS, PhD, MSc, DCH, FRCPE, FFPH, FRSE
<b>City and country of primary residence</b>	Edinburgh, United Kingdom

**Biography:**  
Professor Harish Nair is co-Director of Centre for Global Health as well as co-Director of WHO Collaborating Centre for Population Health Research and Training at the University of Edinburgh. He is Chair of Paediatric Infectious Diseases and Global Health at the Edinburgh Medical School and leads the Respiratory Viral Epidemiology Research Group at the University of Edinburgh. He has led several large collaborative

projects on global child health and infectious diseases and has raised over £62 million in research grant income and has published over 200 articles, over 40 of them in high impact factor journals. He currently leads (and is the coordinator of) the REspiratory Syncytial virus Consortium in EUrope (RESCEU) (<http://resc-eu.org/>) and Preparing for RSV Immunization and Surveillance in Europe (PROMISE) (<https://imi-promise.eu/>). He leads the Respiratory Virus Global Epidemiology Network (RSV GEN) which has developed the previous and current paediatric global all-cause and cause-specific viral (RSV, Influenza, human meta-pneumovirus and parainfluenza virus) pneumonia morbidity and mortality estimates. Prof Nair is an adviser to the World Health Organisation and Bill and Melinda Gates Foundation; and currently chairs the WHO TAG for RSV surveillance. He is a Fellow of the Royal Society of Edinburgh, Fellow of the Royal College of Physicians of Edinburgh and Fellow of Faculty of Public Health (UK). He is also the Regional Editor of the Journal of Global Health and member of several international scientific advisory boards for ongoing studies on RSV. In 2019, he was awarded the Principal's Medal for Exceptional Service by the University of Edinburgh and the Hind Rattan (Jewel of India) award for his contribution to global public health in 2020. He is a Highly Cited Researcher (Clarivate 2021) and received the Barney Graham Award for contribution to RSV Research in 2021 and 2022. He has developed WHO Manuals for "Estimating Seasonal Influenza Disease Burden in Populations"; and "Estimating Burden of Acute Communicable Diseases and Syndromes in Settlements of Displaced Populations".

#### **Mark Neuman**

<b>Institutional Affiliation</b>	Boston Children's Hospital, Boston, MA, USA
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<b>Academic Degrees</b>	MD, MPH
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<b>City and country of primary residence</b>	Wayland, MA, USA
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#### **Biography:**

Dr. Neuman is a Pediatric Emergency Medicine physician at Boston Children's Hospital, where he serves as the Research Director for the Emergency Department. He has led multidisciplinary teams, which have included radiologists, infectious disease specialists, intensivists and hospitalists to help characterize the clinical and radiographic characteristics of pneumonia in children. He also led a systematic review published in the JAMA as part of the Rational Clinical Examination series, which serves as the benchmark to guide clinicians in their evaluation of suspected pneumonia in children. His research has identified patients at low risk of radiographic pneumonia, such as children with wheezing, and has identified hypoxia as the single best predictor of pneumonia in children. Many of his studies are referenced in the Pediatric Infectious Diseases Society/Infectious Diseases Societies of America guidelines in 2011 as evidence supporting the selective use of chest radiography in children. He served on the COVID-19 Research Prioritization Group on MNCAH, and co-authored three manuscripts characterizing radiologic pneumonia and mortality related to his involvement in the Pneumonia Research Partnership to Assess WHO Recommendations (PREPARE).

#### **Humphreys Kampila Nsona**

<b>Institutional Affiliation</b>	2003 to date: Programme Manager- Head of IMCI at Community Health Sciences Unit, Malawi - Ministry of Health Headquarters 2000 to 2003: Malaria Control Program Officer at Community Health Sciences Unit, Malawi – MoH HQ 1998 – 2000: Deputy District Health Officer - Balaka District Health Office, Malawi 1996 – 1998: District focal person for IMCI at Machinga District Health Office
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<b>Academic Degrees</b>	Doctorate Degree in Global Health (2021, Atlantic International University)
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	MSc in Community Health and Development (2008, Great Lakes University of Kisumu, Kenya) Higher Diploma in Community Health and Development (2007, Great Lakes University of Kisumu, Kenya) Diploma in Clinical Medicine (1995, College of Health Sciences, Lilongwe, Malawi)
<b>City and country of primary residence</b>	Malawi
<b>Biography:</b> National Coordinator of Child Health Interventions under Integrated Management of Childhood Illnesses in <b>Publications:</b> Malawi; Child Health Case Management lead in the development and review of Essential medicines list and the Malawi standard treatment guidelines for Malawi; Lead in the review and adaptation of case management protocols and guidelines for Integrated Management of Childhood illnesses in Malawi; The principal Investigator for a WHO-sanctioned study on 'increasing pneumonia treatment coverage for children under the age of 5 for up to 80% in Kasungu District Malawi.	
<b>Titles and references of related publications</b> <ol style="list-style-type: none"> <li>1. <a href="#">Feasibility of implementing the World Health Organization case management guideline for possible serious bacterial infection among young infants in Ntcheu district</a>, Malawi; Tanya Guenther, Gladson Mopiwa, <b>Humphreys Nsona</b>, Shamim Qazi Regina Makuluni, Chancy Banda Fundani, Jenda Gomezgani, Leslie Mgalula,, Mike Chisema, Salim Sadruddin: <a href="https://doi.org/10.1371/journal.pone.0229248">https://doi.org/10.1371/journal.pone.0229248</a></li> <li>2. <a href="#">Quality of Case Management for Pneumonia and Diarrhea Among Children Seen at Health Facilities in Southern Malawi.</a> Kobayashi M, Mwandama D, <b>Nsona H</b>, Namuyinga RJ, Shah MP, Bauleni A, Vanden Eng J, Rowe AK, Mathanga DP, Steinhardt LC. Am J Trop Med Hyg. 2017 May;96(5):1107-1116. doi: 10.4269/ajtmh.16-0945.</li> <li>3. <a href="#">Distribution and determinants of pneumonia diagnosis using Integrated Management of Childhood Illness guidelines: a nationally representative study in Malawi</a> Uwemedimo OT, Lewis TP, Essien EA, <b>Nsona H</b>, et al. BMJ Glob Health 2018;3: e000506. doi:10.1136/ bmjgh-2017-000506. <a href="http://gh.bmj.com/">http://gh.bmj.com/</a> on April 9, 2018 - Published by group.bmj.com</li> <li>4. <a href="#">Training And Supervision Did Not Meaningfully Improve Quality Of Care For Pregnant Women Or Sick Children In Sub-Saharan Africa.</a> Leslie HH, Gage A, <b>Nsona H</b>, Hirschhorn LR, Kruk ME. Health Aff (Millwood). 2016 Sep 1;35(9):1716-24. doi: 10.1377/hlthaff.2016.0261.</li> <li>5. <a href="#">An integrated diagnostic device for neonatal sepsis and childhood pneumonia.</a> Shah R, Jenda G, Lweshia V, <b>Nsona H</b>, Dadlani P, Swedberg E.J Public Health Afr. 2018 Jul 6;9(1):780. doi:10.4081/jphia.2018.780. eCollection 2018 May 21.</li> <li>6. <a href="#">Obstetric Facility Quality and Newborn Mortality in Malawi: A Cross-Sectional Study.</a> Leslie HH, Fink G, <b>Nsona H</b>, Kruk ME. PLoS Med. 2016 Oct 18;13(10):e1002151. doi: 10.1371/journal</li> </ol>	
<b>Kerry-Ann F. O'Grady</b>	
<b>Institutional Affiliation</b>	Queensland University of Technology, Australia
<b>Academic Degrees</b>	BNSc GDipPH MAppEpid PhD
<b>City and country of primary residence</b>	Brisbane, Australia
<b>Biography:</b> Associate Professor Kerry-Ann O'Grady is an applied epidemiologist with a public health focus on vaccine-preventable diseases, acute respiratory infections and the pathways to chronic lung disease in children,	

particularly Aboriginal and Torres Strait Islander children in Australia. She is currently the Senior Research Coordinator for a series of community-based studies evaluating COVID-19 vaccines and outcomes in Queensland, Australia and a Chief Investigator on clinical trials evaluating Q-Fever vaccine immunogenicity and safety in adolescents and the effectiveness of a therapeutic exercise program in children with bronchiectasis. She has expertise in multi-centre community-based cohort studies and clinical trials. Her work has informed public health policy and changed clinical practice with respect to the management of cough in children, including recent contribution to the update of clinical guidelines for the management of cough in adults and children in Australia.

#### **Archana B Patel**

<b>Institutional Affiliation</b>	Program Officer and CFO, Lata Medical Research Foundation, Nagpur, India Professor Emeritus, Department of Pediatrics, Indira Gandhi Government Medical College, Nagpur, India Adjunct Research Faculty, Datta Meghe Institute of Medical Sciences, Wardha
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<b>Academic Degrees</b>	MBBS, MD (Pediatrics), Diplomate of National Board (Pediatrics), India; Masters in Clinical Epidemiology, University of Pennsylvania (USA); PhD in Clinical Epidemiology and Community Medicine, University of Newcastle, (Australia).
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<b>City and country of primary residence</b>	Nagpur, India
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#### **Biography:**

Dr Patel is a recognized national expert in research on maternal, neonatal and child health in India with 200 publications. Her research in severe pneumonia in children has helped to frame WHO policy recommendations for the management of severe pneumonia. She has also contributed to pneumonia experts meeting at the Bill and Melinda Gates Foundation, Seattle and as an expert for the WHO Emergency Pediatric Triage and Assessment meeting held in September 2014. Her research to evaluate the role of oral zinc for the management of acute diarrhea in children was funded by Wellcome Trust, UK, and as a result of publications from this study, she was invited to an important international Zinc Think Tank at the Bill and Melinda Gates foundation, Seattle. More recently Dr Patel has led the agenda on Household air pollution in children in India and at the Global Network of the National Institute of Child Health and Human Development. She was also the Indian principal investigator for the largest longitudinal cohort study of Influenza in pregnant women funded by CDC Atlanta – The Pregnancy Related Influenza Multi-site Epidemiology study to determine the risks of preterm birth and birth weight in pregnant women with confirmed influenza.

#### **Shamin A Qazi**

<b>Institutional Affiliation</b>	Retired WHO staff since October 2017
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<b>Academic Degrees</b>	MBBS, DCH, MSc, MD Paediatrics
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<b>City and country of primary residence</b>	Geneva, Switzerland
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#### **Biography:**

Dr Shamim A Qazi is a paediatrician and a researcher with over 40 years of experience. He has programmatic, clinical, training and research experience in the field of communicable and preventable childhood diseases. His focused areas of work are childhood pneumonia and neonatal infections. He works as an independent consultant now. He has authored or co-authored over 200 scientific articles and book chapters and contributed to 40 WHO documents.

He worked as Medical Officer in the Department of Maternal, Newborn, Child and Adolescent Health World Health Organization, Geneva, Switzerland for nearly 20 years. At WHO, he coordinated several large clinical and implementation research studies. He helped develop and update the WHO guidelines on common childhood illnesses including respiratory infections, oxygen therapy and neonatal infections. He provided specific input and technical support on paediatric clinical content and in promotion of WHO guidelines and tools activities in member countries. He co-led the development of the WHO/UNICEF integrated global action plan on the prevention and control of pneumonia and diarrhoea (GAPPD).

Before joining WHO, he worked as a pediatrician and researcher for 20 years at various hospitals in Pakistan. He was a member of the Federal Acute Respiratory Infections (ARI) Cell, National ARI Control Programme, Pakistan from October 1989 to July 1997.

### **Zeba Rasmussen**

<b>Institutional Affiliation</b>	Contractor with Fogarty International Center, US NIH
<b>Academic Degrees</b>	MD MPH
<b>City and country of primary residence</b>	Bethesda Maryland USA (moving to Islamabad, Pakistan later this year but not there fully yet )

#### **Biography:**

After training in medicine (Harvard Medical School), infectious disease (adult/pediatric, Massachusetts General Hospital, Boston) international public health (Johns Hopkins School of Hygiene and Public Health) and epidemiology (Centers for Disease Control), Dr Rasmussen worked with the Aga Khan University for 20 years in Pakistan, including 12 years in remote rural Gilgit-Baltistan, studying clinical assessment and management of diarrhea and pneumonia in children under five years of age. Returning to the US, she joined the Fogarty International Center (US National Institutes of Health), she followed up the previous cohort to determine the effects of childhood diarrhea and pneumonia into adolescence/young adulthood. Follow-up of a new cohort allowed comparisons over 20 years in epidemiology and management of diarrhea and pneumonia. Dr Rasmussen was the Principal Investigator of the first multicenter double-blind RCT on the management of pneumonia in children in Pakistan, which led to multiple similar studies. Dr Rasmussen helped develop a simple management tool for lady health visitors for childhood pneumonia. She participated in the eight LMIC birth cohort study entitled Malnutrition & Enteric Disease Study which focused on diarrhea, pneumonia, and malnutrition. Optimization of management of pneumonia and diarrhea continues to be of great interest to her professionally to achieve sustainable development goals.

### **Salim Sadruddin**

<b>Institutional Affiliation</b>	Public Health Consultant: December 2021-to date Director Child Health, Momentum Country and Global Leadership: Jan 2020 - Nov 2021 Medical Officer, World Health Organization: December 2018 – November 2019
<b>Academic Degrees</b>	<b>Ph.D:</b> Dept. of Health Policy, Management and Evaluation, University of Toronto, 2007. <b>MPH:</b> Harvard School of Public Health, Boston, USA, 1991. <b>MBBS:</b> Dow Medical College, Karachi, Pakistan, 1986.
<b>City and country of primary residence</b>	Toronto, Canada

#### **Biography:**

Dr. Salim Sadruddin is a medical doctor, with an MPH from Harvard School of Public Health and a PhD from University of Toronto. He has more than 30 years of experience in Public Health. His expertise includes

designing and implementing child health programs in public and non-governmental sectors in developing countries and designing and implementing operations research studies, especially on pneumonia case management. Over the last two decades he has focused on programmes and research to increase coverage of diagnostics and treatment for pneumonia, diarrhea and malaria, the three leading causes of death among children under five years of age.

During 2019-2020 he served as Director Child Health for the USAID Project, Momentum Country and Global Leadership. Major work included strengthening integrated community case management of pneumonia, diarrhea and malaria programmes globally and operationalization of IMNCI guidelines. From 2015-2018 he led the WHO's multi-country integrated community case management of malaria, pneumonia and diarrhea program implemented in five sub-Saharan African countries (Nigeria, Malawi, Niger, Mozambique, Democratic Republic of Congo). Before joining WHO he worked at Save the Children US, UNFPA and Aga Khan University, Karachi. He has authored many publications on pneumonia, community case management and newborn health.

#### **Mathuram Santosham**

<b>Institutional Affiliation</b>	Johns Hopkins University – Dept of International Health - Professor
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<b>Academic Degrees</b>	MBBS, MPH
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<b>City and country of primary residence</b>	USA
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#### **Biography:**

Dr. Santosham was the Founder and Director of the Johns Hopkins Center for Indigenous Health (CIH). He is currently the Director Emeritus of CIH. He is also the Senior Advisor for the International Vaccine Access Center (IVAC) at Johns Hopkins Bloomberg School of Public Health. He holds Professorships in the Department of International Health and the Department of Pediatrics at Johns Hopkins University.

Dr. Santosham is internationally known for his work on oral rehydration therapy, childhood vaccines, and the dissemination of pediatric prophylactics to vulnerable populations worldwide. Working in partnership with Native American communities, he conducted landmark vaccine efficacy trials, including the rotavirus vaccine, H. influenzae type b (Hib) conjugate vaccine, and pneumococcal conjugate vaccine. Native American children used to die from these diseases at rates 10 to 50 times the US average. Through his research and advocacy, these vaccines now save three to five million lives a year in the US and across the globe. In addition, Dr. Santosham worked with the White Mountain Apache Tribe to pioneer the use of oral rehydration solution (ORS), now known as "Pedialyte" in the US. Dr. Santosham is a global leader in the national and international dissemination of these public health strategies worldwide.

#### **Anthony J Scott**

<b>Institutional Affiliation</b>	KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya and the London School of Hygiene & Tropical Medicine
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<b>Academic Degrees</b>	BSc, BM BCH, MSc, FRCP, DTM&H
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<b>City and country of primary residence</b>	Kilifi, Kenya
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#### **Biography:**

Dr Scott is a medical epidemiologist with clinical and research interests in pneumonia and pneumococcal disease. He trained in Infectious Diseases in the UK and in Epidemiology at the London School of Hygiene and Tropical Medicine (LSHTM) and he has undertaken clinical and field research at the KEMRI-Wellcome

Trust Research Programme in Kilifi, Kenya, since 1993. He also works as a Professor of Vaccine Epidemiology at LSHTM where he teaches vaccine epidemiology, pneumococcal vaccinology, and infectious disease surveillance. His research has focused on the etiology of pneumonia in adults and children in Kenya, on access to health care, clinical predictors of outcome of pneumonia and prevention of pneumonia through vaccination. He participated in the PERCH study of pneumonia aetiology in children in Africa and South Asia. He also oversees a research programme in Ethiopia on the causes of death in children under five years, part of the CHAMPS ([www.champshealth.org](http://www.champshealth.org)) network. In the past, he has contributed to guideline revision and development at WHO and he has contributed to vaccine policy for both the UK government and the WHO.

#### **Jonathon Simon**

<b>Institutional Affiliation</b>	Independent Health Consultant (current), World Health Organization (2015-2020), Boston University (2001-2015), Harvard Institute for International Development (1986-2000)
<b>Academic Degrees</b>	Doctorate of Science (D.Sc.), Master of Public Health (MPH), Bachelor of Science (B.Sc.)
<b>City and country of primary residence</b>	Condon, Montana, USA

#### **Biography:**

Dr. Jonathon Simon has 35 years of experience as a research scientist and leader in child health and development with a focus on diarrheal disease, acute respiratory infections, and malaria. After receiving his MPH from the University of California, Berkeley in the mid-1980s, he joined the Health Office of the Harvard Institute of International Development (HIID) at Harvard University, Cambridge, USA. Over fifteen years, he rose to become the Director of the Health, Education, and Social Development Division of HIID, completed his doctoral studies at the Harvard School of Public Health, and was promoted to Fellow status (institutional tenure at Harvard University). In 2001, he led 15 colleagues in a relocation to Boston University (BU) to create the Center for Global Health and Development (CGHD), a university-wide research center that engaged nine schools and colleges of BU. After 15 years as the CGHD Director, 13 years as Chair of the Dept. of Global Health, Professor Simon retired in 2015. Shortly thereafter, he was recruited to join the World Health Organization as a Scientist in the Maternal, Neonatal, Child, and Adolescent Health Department where he served for 5 years. He retired from WHO in 2020 and works as an independent consultant.

#### **Daniel Robinson Wammanda**

<b>Institutional Affiliation</b>	Ahmadu Bello University and Ahmadu Bello University Teaching Hospital,
<b>Academic Degrees</b>	MB, BS. FWACP (Paed)
<b>City and country of primary residence</b>	Zaria, Nigeria

#### **Biography:**

Prof. Wammanda had his undergraduate and postgraduate trainings at the Ahmadu Bello University, Zaria. He is a fellow of West African Postgraduate Medical college. Additional training on strengthening the teaching of diarrhoeal disease in medical schools, the integrated management of childhood illnesses

(IMCI), Emergency Triage Assessment & Treatment (ETAT) for sick children and country leadership for Health System Change.

Prof. Wammanda have coordinated several research projects as Principal and Co-Principal Investigator of National and international funded research projects.

Since 1999, he has provided technical lead in review and adaptation of generic IMCI and iCCM materials to country specific context for implementation in Nigeria, regular reviews, and updates of the IMCI training materials and programme monitoring and evaluation. Lead consultant, adaptation of the Global Action Plan on the Prevention and Control of Pneumonia (GAPP) to National document, member, Online Delphi consultation on quality measures and possible indicators: Standard for improving the quality of care for children and young adolescents in health facilities. Lead consultant, incorporation of the PSBI strategy into the essential newborn care course and the IMCI training materials for domestication of the PSBI concept. Currently Chairman, National Child Health Technical Working Group, Federal Ministry of Health Abuja.

#### **Heather J Zar**

<b>Institutional Affiliation</b>	Dept of Paediatrics & Child Health, University of Cape Town, South Africa
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<b>Academic Degrees</b>	MBBCh, FRCP (Edinburgh), FCPaeds, PhD
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<b>City and country of primary residence</b>	Cape Town, South Africa
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#### **Biography:**

Heather Zar is Professor & Chair of the Department of Paediatrics and Child Health, at the University of Cape Town (UCT), South Africa. She is Director of the SA-MRC Unit on Child & Adolescent Health, UCT. After specialising in Paediatrics she did 3 years of sub-specialist training in paediatric pulmonology at Babies Hospital, Columbia Presbyterian Medical Centre, New York, USA. She then returned to South Africa, following an academic career (including a PhD) while working at UCT. Her work, encompassing research, clinical care, education, training, and advocacy, has focused on child lung health.

She's developed a strong clinical translational research program, mentoring many postgraduate students, with more than 600 peer reviewed published papers many in high impact journals. Research has focused on priority areas in child health including pneumonia, TB, HIV-associated disease and asthma. She's contributed to several national and international practice guidelines including leading the South African guidelines on childhood pneumonia, SA bronchiolitis guidelines, SA asthma guidelines, SA guideline for annual influenza vaccine, SA COVID guidelines, adaption of IMCI guidelines for SA; contributing to Global Initiative for Asthma (GINA) guidelines for asthma; contributing to WHO guidelines on paediatric TB, HIV-associated disease, sexually transmitted disease, pneumonia and use of masks in COVID.

#### **Meseret Zelalem**

<b>Institutional Affiliation</b>	Director for Maternal, Child Health and Nutrition, at the Federal Ministry of Health of Ethiopia Secretary for the national food and nutrition coordination body Chair for the national food and nutrition technical Team Engaged in several advisory board members
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<b>Academic Degrees</b>	MD (Medical Doctor), Pediatrician/ Masters of Public Health at the University of Gondar, Ethiopia
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<b>City and country of primary residence</b>	Addis Ababa, Ethiopia
<p><b>Biography:</b></p> <p>Dr Zelalem started her professional career as a lecturer and later was promoted to Assistant Professor of paediatrics and child health at the College of Medicine and Health Sciences, University of Gondar.</p> <p>Dr Zelelem has extensive experience teaching medical students, supervising and mentoring residents and community services. Dr Zelalem is mainly engaged in the school health and community outreach program, which has benefited around 20,000 students and children on the outskirts of Gondar Town. Between 2008 and 2017, Dr Zelalem served as Senior Medical Specialist in paediatrics and child health and was engaged in research, academia, clinical service, community service and leadership position. Dr Zelelem was also a senior clinical coordinator and mentor for PMTCT and paediatrics HIV at UOG and published peer-reviewed articles in reputable journals. Dr Zelalem was appointed as a medical director for the comprehensive specialized Hospital of the University of Gondar for two years and was recognized as the best female Leader in the 2017 annual student graduation ceremony. Dr Zelalem also contributed as a technical member at various forums, including the Federal Ministry of Health (FMoH) and engaged in several volunteer services.</p> <p>Later, Dr Zelelem was posted at the FMoH as Chief of Staff for the Office of the Minister. Currently, she is the Director for RMNCAAYND at the FMoH. She is a member of the African Nutrition Leaders and Ethiopian Nutrition Network.</p>	