Public Notice

Guideline Development Group meeting to update the WHO consolidated guidelines on drug-resistant tuberculosis

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SCHÜNEMANN, Holger Jens

Constituency: GRADE methodologist and Chairman of the Guideline Development Group

Academic degrees: M.D., Ph.D., M.Sc., FRCP(C).

Institutional affiliation: Departments of Health Research Methods, Evidence and Impact and of

Medicine, McGRADE Centre, McMaster University Health Sciences Centre

Current position: Professor and Chair, Department of Health Research Methods, Evidence

and Impact; Professor of Clinical Epidemiology and Medicine and Director,

Cochrane Canada and McMaster GRADE Centre

Primary residence: Hamilton, Canada

Dr Schünemann is Chair of the Department of Health Research Methods, Evidence, and Impact at McMaster University. He began his research career in respiratory and exercise physiology as a medical student in the Department of Physiology at the Medical School of Hannover and with an award from the German government at the University at Buffalo (UB), State of New York. He is trained in internal medicine, epidemiology and preventive medicine. Having contributed to over 500 peer-reviewed publications (across a broad area of health care questions), he has been named by Thomson Reuters as one of the most influential 3,000 scientific minds of current times across scientific disciplines. He is Co-Chair of the GRADE working group, co-director of the World Health Organization (WHO) collaborating centre for evidence informed policy-making, the director of Cochrane Canada, a member of the **Guidelines International Network** Board of Trustees, the Advisory Committee on Health Research (ACHR), the Cochrane Collaboration Steering Group, and several other committees. He led or participated in numerous high-profile guideline panels, including for the WHO, the American College of Physicians, American Thoracic Society, the World Allergy Organization and he was a key contributor to the revised methods for WHO guideline development in 2006. For the past 16 years, he has been advisor to ministries of health, other governmental organizations and professional societies for their guideline programs. His work also focuses on practical application of his work by researchers and clinicians through contributions to the guideline development tool (www.gradepro.org), the guideline checklist (cebgrade.mcmaster.ca/guidecheck.html) and GRADE evidence to decision frameworks (www.decide-collaboration.eu). Maintaining an active clinical practice fulfils his passion for patient care and ensures his research is people-oriented.

LANIADO-LABORÍN, Rafael

Constituency: MDR-TB expert; National TB Programme; Regional Green Light Committee;

and Co-Chair of the Guideline Development Group

Academic degrees: M.D. (Pulmonary Medicine), M.P.H

Institutional affiliation: TB Clinic and Laboratory, Tijuana General Hospital & School of Medicine,

Universidad Autónoma de Baja California, Mexico

Current position: Pulmonologist **Primary residence:** Tijuana, México

Dr Laniado-Laborin is a Professor of Pulmonology in the School of Medicine, *Universidad Autónoma de Baja California*, Tijuana, México. He has been serving as a pulmonologist at the Tijuana General Hospital since 1985. He has over 40 years' experience in the diagnosis and treatment of TB, in particular, treatment of multidrug-resistant TB (MDR-TB). He has served as a member of various Guideline Development Groups convened by the World Health Organization (WHO) to assess evidence on interventions for drug-resistant TB and to help inform the development of treatment & care recommendations. He is currently a member of CONACYT *Sistema Nacional de Investigadores* (2007-current). As well, he has been a member of the WHO Regional Green Light Committee (rGLC) of the Americas for Drug-Resistant Tuberculosis (2013- 2021) and was the as Chair of the rGLC for the period 2016-2018. He has an extensive record of publications tuberculosis and has authored two books on MDR-TB and a list of the peer-reviewed publications on TB in which he has been involved can be accessed at: https://www.ncbi.nlm.nih.gov/pubmed/?term=laniado-laborin+r.

ABDEL-RAHMAN, Susan

Constituency: Pharmacology, Pharmacodynamics, Pharmacokinetics

Academic degrees: PharmD

Institutional affiliation: Children's Mercy

Current position: Director of Innovation in Healthcare Delivery; Section Chief, Therapeutic

Innovation

Primary residence: Kansas, United States of America

Dr Susan Abdel-Rahman is the Director of the Pharmacokinetic and Pharmacodynamic Core Laboratory and the Fungal Genomics Laboratory at the Children's Mercy Hospital (Kansas, United States). Dr Abdel-Rahman also holds an appointment as Professor of Paediatrics and Pharmacy, University of Missouri-Kansas City School of Medicine. She has been involved in basic, applied and clinical research for 20 years, with grants and contracts funded by the National Institutes of Health, U.S. Food and Drug Administration, World Health Organization, Centers for Disease Control, National Endowment for the Arts, Pharmaceutical Industry and private foundations. She directs a laboratory-based research program emphasizing analytical chemistry and molecular genetics and leads a drug discovery program centered around anti-infectives. She has overseen dozens of clinical trials spanning the range from small, single-site pharmacokinetic studies to large population-based epidemiologic investigations. Over 28,000 participants have enrolled in studies for which Dr Rahman has served as the Principal Investigator. Dr Abdel-Rahman is developing medical device software centered around clinician-driven decision support and has developed three physical medical devices. The first medical device was cleared by the FDA in 2015 as a first-in-class device. She is actively engaged in patient care as part of the Clinical Pharmacology consult service and serves as the Principal Investigator and Program Director for an NIH-funded T32 fellowship program in Paediatric Clinical Pharmacology.

BURHAN, Erlina

Constituency: Pulmonologist; MDR-TB expert; end-user

Academic degrees: M.D., M.Sc., Sp.P.

Institutional affiliation: Department of Respiratory and Pulmonology, Persahabatan Hospital

Current position: Pulmonologist at Persahabatan Hospital Jakarta; faculty member of Faculty

Medicine Universitas Indonesia

Primary residence: Jakarta, Indonesia

Dr Erlina Burhan heads the clinical expert team on MDR-TB at the Persahabatan Hospital in East Jakarta since 2016. She is also a faculty member of Universitas Indonesia's Pulmonology and Respiratory Medicine Department. In 2017, she joined a group of stakeholders led by the Sub-Directorate of Tuberculosis, the Directorate of Direct Infectious Disease Control, and the Ministry of Health of the Republic of Indonesia in the establishment of the Coalition of Professional Organizations in TB Control (known by its acronym in Indonesian "KOPI"), which she leads since 2018. She also joined the Board of Directors of the International Union of Tuberculosis and Lung Disease in 2018 where she will serve as a member for a period of three years. From 2013 to 2018, she was a member of the rGLC countries in the South-East Asia Region. In collaboration with the American Thoracic Society (ATS) and the Indonesian Society of Respirology, she has served as the Country Director of the ATS Methods in Epidemiologic, Clinical and Operations Research "MECOR" Indonesia Programme.

CIRILLO, Daniela

Constituency: Laboratory specialist

Academic degrees: M.D., Ph.D.

Institutional affiliation: San Raffaele Scientific Institute

Current position: Head of Emerging Bacterial Pathogens Unit, WHO collaborating Centre and

TB Supranational Reference laboratory, San Raffaele Scientific Institute

Primary residence: Milan, Italy

Daniela Maria Cirillo is a board-certified clinical microbiologist, is the director of the Emerging Bacterial Pathogen research unit, Supranational TB reference laboratory and WHO collaborating Centre for Laboratory Strengthening ITA-98 and Italian reference centre for molecular typing of Mycobacteria at San Raffaele Scientific Institute in Milan. Dr Cirillo's research focuses on mechanisms of detection of drug resistance in multidrug-resistant organisms (MDROs) of nosocomial origin and mycobacteria and application of NGS based technology in clinical microbiology. Areas of expertise include clinical bacteriology and infection control, next generation sequencing based diagnostic tools, diagnostic capacity building in high burden TB countries, research on new diagnostics for active and latent TB Infections, nosocomial infection. She and her collaborators provide technical support to more than 12 Countries in Africa, Asia and Europe. International appointments: Co-Chair of the New Diagnostic Working Group of the Stop TB partnership and a Core Group elected member of the Global Drug Resistance Initiative (GDI) of the Stop TB partnership, and member of the European Laboratory Initiative. Past member of the Scientific and Technical Advisory Board (STAG) 2011-2014 and of the Global Laboratory Initiative Working Group. Member of the Core Group of the ERLN-TB and of Core Group of SRL network. Advisor of European Centre for Disease Prevention and Control. President of European Society of Mycobacteriology since 2016. Awardee of G Middlebrook prize in 2017. She is currently member of the following international Consortia: EU-Seq MyTB, ReSeq TB, Cryptic, E-detect TB. Her scientific production includes more than 190 original papers published in peer-reviewed journals.

List of publications accessible here:

 $\frac{\text{https://www.ncbi.nlm.nih.gov/pubmed/?term=Cirillo%20DM%5BAuthor%5D\&cauthor=true\&cautho}{\text{r_uid=}16368794}$

DALEY, Charles

Constituency: Pulmonologist; MDR-TB expert; end-user

Academic degrees: M.D.

Institutional affiliation: National Jewish Health

Current position: Chief of the Division of Mycobacterial and Respiratory Infections; Director,

NTM Center of Excellence, National Jewish Health

Primary residence: Denver, United States of America

Charles L. Daley, M.D., is a Professor of Medicine at National Jewish Health (NJH), the University of Colorado, and Icahn School of Medicine, Mount Sinai. He is Chief of the Division of Mycobacterial and Respiratory Infections and Director of the Nontuberculous Mycobacteria (NTM) Center of Excellence at NJH. He is immediate past-Chair of the Strategic and Technical Advisory Group (STAG)-TB for WHO. He chaired the Green Light Committee, gGLC and is the immediate past-Chair of the Global Drug-Resistant TB Initiative, a working group of the Stop TB Partnership and advisory body to the WHO Global TB Programme. He has served on expert panels for the WHO, Centers for Disease Control and Prevention and American Thoracic Society. In these roles he has served on guideline development committees for diagnosis, treatment and prevention of TB including as Co-Chair of the WHO 2016 MDR-TB update. He served as the inaugural Chair of the Bronchiectasis Research Registry and currently Chairs the revision of the ATS/IDSA/ERS/ESCMID NTM guidelines committee. Dr Daley has been recognized as one of the "Best Doctors in America" by U.S. News & World Report and Castle Connolly and he received the World Lung Health Award given by the American Thoracic Society. Dr Daley was previously Associate Editor of the American Journal of Respiratory and Critical Care Medicine and currently Associate Editor of The European Respiratory Journal. His academic interests include global health policy and clinical and translational research in tuberculosis and NTM infections with a focus on drug resistance.

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DAVIES, Geraint (Gerry) Rhys

Constituency: Trials expert; Pharmacologist Academic degrees: B.M., Ph.D., FRCP, DTM&H

Institutional affiliation: Institutes of Infection and Global Health and Translational Medicine,

University of Liverpool

Current position: Reader in Infection Pharmacology, Honorary Consultant in Infectious

Diseases

Primary residence: Liverpool, United Kingdom of Great Britain and Northern Ireland

Dr Davies is Reader in Infection Pharmacology and Honorary Consultant in Infectious Diseases at the University of Liverpool. He qualified in Medicine at the University of Southampton Medical School in 1991. He ran the TB programme at Hlabisa hospital, KwaZulu-Natal, South Africa from 1994-1998, later obtaining an MSc in Epidemiology from the London School of Hygiene and a PhD in Pharmacology from the University of Liverpool. From 2007-2009, he was based at the Mahidol-Oxford Research Unit in Bangkok where he worked on clinical PK-PD studies of anti-tuberculosis and influenza therapy and subsequently as theme leader in HIV-TB pharmacology at the Malawi-Liverpool-Wellcome Unit in Blantyre, Malawi (2012-2014). He is an editor for the Cochrane Infectious Diseases Group, specializing in tuberculosis and has extensive experience of Phase II and III clinical trials in tuberculosis in differing roles. He is the academic coordinator of PreDiCT-TB, an Innovative Medicines Initiative supported consortium addressing preclinical development of combination regimens for tuberculosis and since 2012 has participated in the WHO Task Force on the Development Policies for Introduction of new TB drugs or treatment regimens.

DOCKHORN COSTA JOHANSEN, Fernanda

Constituency: National TB Programme; end-user; Clinician

Academic degrees: M.D., Sp. Internal Medicine; M.Sc.

Institutional affiliation: Brazilian National Tuberculosis Programme (NTP) and a clinical doctor in a

HIV and TB Clinic

Current position: Technical advisor **Primary residence:** Brasília, Brazil

Dr Dockhorn Costa Johansen graduated from medical school in 2004 and completed a residency in internal medicine in 2007. She completed his master's degree (MSC) in Tropical Medicine at the Federal University of Brasília in 2015. After two years working in hospital care (from 2005 to 2007) moved to Mozambique from 2007 to 2011, worked with HIV Prevention, Care and Treatment and co-infection TB/HIV with ICAP — Columbia University. Since 2011 has been working with the Brazilian NTP being responsible for TB/HIV collaborative activities and technical support to local programs on susceptible and drug-resistant tuberculosis and elaboration of national protocols. In 2016 she started working as a medical assistant at an HIV Clinic (Day Hospital), a reference unit in tuberculosis resistant, HIV, STIs and viral hepatitis in Brasília. She has been collaborator in several national tuberculosis research projects on drug-resistant/susceptible TB and TB prevention, author and organizer of national treatment protocols on sensitive and resistant TB, TB prevention as well as TB/HIV co-infection. She co-authored recent published articles entitled "Effectiveness and safety of clofazimine in multidrug-resistant tuberculosis: a nationwide report from Brazil" and "Resistance profile of drugs composing the "shorter" regimen for multidrug-resistant tuberculosis in Brazil".

DOOLEY, Kelly E.

Constituency: Clinical pharmacologist; researcher; end-user

Academic degrees: M.D., Ph.D., M.P.H

Institutional affiliation: Johns Hopkins University School of Medicine

Current position: Associate Professor of Medicine (Divisions of Clinical Pharmacology and

Infectious Diseases), Pharmacology & Molecular Sciences, The Johns Hopkins University School of Medicine; medical Staff, The Johns Hopkins

Hospital

Primary residence: Baltimore, United States of America

Dr Kelly E. Dooley is a Clinical Pharmacologist and Infectious Diseases specialist, with a research focus on TB therapeutics and TB-HIV co-treatment. She has led numerous research studies funded by the NIH, CDC, FDA, or Unitaid to evaluate new and existing TB drugs and has a strong track record of securing independent funding for clinical pharmacology and clinical trials work in the TB and TB-HIV therapeutics field. Dr Dooley is the Principal Investigator (PI) of trials of new agents or regimens for drug-sensitive TB (APT, Phase 2 trial of pretomanid for pulmonary TB (R01 FDA)), TB meningitis (Phase 2 paediatric TBM trial (TBM-KIDS, R01 NICHD)) and TB-HIV co-treatment (DOLPHIN, Unitaid). She is also PI / Protocol Chair of four trials for drug-resistant TB (Phase 2 dose fractionation study of meropenem with amoxicillin/clavulanate (R01 FDA)); high-dose isoniazid for drug-resistant TB (AIDS Clinical Trials Group (ACTG) A5312), bedaquiline and delamanid in combination for MDR-TB (ACTG A5343), delamanid-based injectable-sparing MDR-TB treatment for children (International Maternal Paediatric Adolescent AIDS Clinical Trials (IMPAACT) 2005)). She has collaborated on several cohort studies as the lead pharmacology investigator in areas including TB-HIV in pregnant women, TBdiabetes, and MDR-TB. She is a member of the TB scientific leadership committees of the TB Trials Consortium (TBTC), ACTG, and IMPAACT networks, and the Chair of the TB PK/PD Working Group at WHO. Specific areas of expertise include the pharmacology of anti-TB drugs; use of PK/PD analysis to optimize regimens for TB; and exploration of safety and PK to optimize treatment for people living with HIV (PLWHIV), children, and pregnant women so that they can benefit from the best available therapy. In addition, she is Co-Director of Johns Hopkins' T32-supported Clinical Pharmacology Training Program. She is highly devoted to increasing options for adults and children for TB or HIV-TB cotreatment.

FOURIE, P. Bernardus

Constituency: Clinical trials expert

Academic degrees: MS.c., Ph.D.

Institutional affiliation: Department of Medical Microbiology, University of Pretoria

Current position: Extraordinary Professor **Primary residence:** Pretoria, South Africa

Bernard Fourie is Research Professor (Extraordinary) in the Department of Medical Microbiology, University of Pretoria, South Africa. He is also associated with the South African MRC Clinical Research Unit for Tuberculosis Biomarker-Targeted Intervention (UCT), an Associated Scientist of the South African MRC Research Unit for Antimicrobial Resistance (UCT), and International Council Member of the Autophagy, Inflammation and Metabolism Centre (NIH supported Centre of Excellence, University of New Mexico, Albuquerque, USA).

Formerly, Bernard served as the Director of the National TB Research Programme of the MRC (1990-2003). During his tenure with the MRC, he was actively engaged in setting-up clinical trials capacity for TB and led or participated in pivotal studies of Mycobacterium vaccae immunotherapy, rifabutin efficacy, rifapentine EBA, moxifloxacin and gatifloxacin EBA, and bioequivalence assessment and development of quality criteria for anti-TB FDCs. Current research contributions are mainly in rapid molecular diagnosis for TB at the community level, studies of biomarkers for predicting risk of relapse in TB, and in developing inhaled BCG and clofazimine as new dosage forms for application tuberculosis prevention and treatment.

Bernard holds ongoing appointments as Expert Consultant to WHO, Unitaid, UNIDO (Pharmaceutical Division) and GIZ (specialized health intervention project evaluation and policy development assignments in TB and HIV). Recent appointments: WHO Guideline Review Committee for MDR Treatment, WHO Task Force for PK/PD of TB Medicines. Earlier contributions to WHO expert review groups on TB drugs and drug regimens include first guideline developments on bedaquiline and delamanid for the MDR-TB Handbook.

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GEBHARD, Agnes

Constituency: Technical agency; clinician; end-user

Academic degrees: M.D.

Institutional affiliation: KNCV Tuberculosefonds
Current position: Director Technical Division
Primary residence: The Hague, Netherlands

Dr Agnes Gebhard is a Dutch medical doctor and senior consultant with 28 years of experience in Tropical Medicine, Public Health and Infectious Disease Prevention and Control in Africa, Asia and The Netherlands. Having been based in Tanzania, Vietnam, Indonesia and The Netherlands, she has hands on experience in managing the TB elimination effort in countries and provided substantial technical assistance to National TB programs in 14 countries in Africa, Central, Southern and East Asia. She has experience in developing, implementing and evaluating public health policies and disease-specific strategic plans and programs.

Dr Gebhard served on the Green Light Committee as representative of KNCV (2007 till 2011) and was Vice-Chair of the Core Group of the GDI (Global Drug-Resistant TB Initiative) from 2014 till 2018. Over the same period, she served as a member of the regional advisory committee on drug-resistant TB for the WHO South-East Asia Regional Office. Currently, Dr Gebhard serves as the Technical Director of KNCV Tuberculosefonds (KNCV Tuberculosis Foundation), The Hague, Netherlands, focusing on delivery of quality services and technical assistance to countries, projects and partners, generation of (new) knowledge and evidence, and contributing to local and global policy development in support of the global TB elimination effort.

GURBANOVA, Elmira

Constituency: Clinician; ; Regional Green Light Committee; end-user

Academic degrees: M.D., Ph.D.

Institutional affiliation: Lung Clinic, University of Tartu

Current position: Clinician at the University of Tartu Clinic, Tartu, Estonia; Head of World

Health Organization (WHO) Collaborative Centre (CC) on TB control and

prevention in prisons.

Primary residence: Tartu, Estonia

Dr Elmira Gurbanova is the Head of WHO Collaborative Centre on tuberculosis prevention and control in prisons. Since 2010, Dr Gurbanova has gained practical experience of TB/M/XDR-TB clinical and programmatic management in the Azerbaijan TB control in prisons programme, which is internationally accepted Centre of Excellence on PMDT among prisoners. In 2011 Dr Gurbanova joined the project implementation unit of GFATM TB control in prisons grant in the capacity of project coordinator and in 2014 was promoted to the position of director. During her tenure rapid tests were included into TB case finding and diagnostics algorithms in prisons, treatment policies for TB/MDR-TB were revised, etc. From 2011 she is a member of the clinical committee on TB and MDR-TB functioning in penitentiary system of Azerbaijan.

Dr Gurbanova contributed to establishment of the unique WHO Collaborative Centre on tuberculosis control and prevention in prisons, with the main aim to spread an exemplary model for tuberculosis care in prisons and to generate new data for future decisions. Dr Gurbanova also has more than 5 years' international experience in about ten countries as a WHO TB consultant on a series of GLC monitoring missions in the WHO European Region and as an international trainer in related fields.

Dr Gurbanova holds a PhD degree from the University of Tartu, Estonia and she is the main/principal author of >10 publications in the field of TB/MDR-TB. Since 2018 Dr Gurbanova is practicing clinician at the University of Tartu Clinic, Estonia.

KHAN, Muhammad Amir

Constituency: Civil society representative

Academic degrees: MBBS, D.H.A., Ph.D.

Institutional affiliation: Professional Association for Social Development Pakistan

Current position: Chief

Primary residence: Islamabad, Pakistan

For the last more than two decades, Dr Amir Khan has been working with the TB and multiple other Disease Control Programs in Pakistan, as a civil society partner, to supplement the development, research and implementation-scaling of contextualized disease control interventions in Pakistan. Some of the developments which he has contributed towards include: integrated care delivery protocols and products for TB, MDR-TB, TB/HIV, malaria, diabetes-hypertension, chronic lung and tobacco cessation, early child development, and hepatitis care interventions at public and/or private facilities. He has contributed to the work and efforts of multiple national and international committees, for example, the Global Fund to Fight AIDS, Tuberculosis and Malaria Country-Co-ordinating Mechanism as Vice-Chair; the International Union Against Tuberculosis and Lung Disease (vice president/general secretary/board member), as well as being a member of the Research Programme Consortium on Communicable Diseases Health Service Delivery, working with partner non-governmental organizations to improve the quality of prevention and care services for communicable and noncommunicable diseases, as well as making these services easier for people to access, especially in underserved populations. He has also worked as a consultant to government and non-government partners within and outside Pakistan (e.g. Afghanistan, Sudan, Mozambique). He has been awarded with international awards such as the Princess Chichibu Memorial TB Award (individual) and Karel Styblo Prize (organization).

LIU, Yuhong

Constituency: Clinician; end-user

Academic degrees: M.D., M.Sc. Bacteriology and immunology

Institutional affiliation: National Clinical Center on Tuberculosis, China CDC; Beijing Chest Hospital;

WHO Collaborating Center for TB Research and Training

Current position: Director assistant

Primary residence: Beijing, People's Republic of China

Liu Yuhong, Director Assistant of the National Clinical Center on Tuberculosis, China CDC (CCTB). Dr Liu has 28 years working in TB prevention, care and control at national level with experience on laboratory network strengthening, China National TB Programme implementation and Programmatic Management of Drug-Resistant TB. She is currently working in CCTB with focus on development of China TB clinical related guidelines and technical documents, promoting standard care for TB and drug-resistant TB, organizing quality assessment and technical support to TB hospitals in China at all levels, coordinating national and international collaborative project, coordinating and implementing TB related operational and clinical researches. Dr Liu is also participated in various training programmes on the Programmatic Management of Drug-Resistant TB and advance course on TB laboratory management and lab techniques.

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LOVEDAY, Marian Patricia

Constituency: Specialist Scientist in maternal health medicine Academic degrees: MPhil in Maternal and Child Health; Ph.D. Institutional affiliation: South African Medical Research Council

Current position: Scientist

Primary residence: KwaZulu-Natal, South Africa

Dr Marian Patricia Loveday is a scientist in the Health Systems Research Unit of the South African Medical Research Council (SAMRC). She joined the SAMRC after working for 15 years at different levels of the public health system. Most of her research has been in health systems and operational research through the lens of TB, MDR-TB and HIV. Over the last 10 years, she has been involved in several operational research studies, working with national policy makers, clinicians and health care workers to evaluate strategies they have developed, or interventions implemented in the treatment of patients with MDR-TB. For her doctorate, she compared different models of care for patients with MDR-TB showing that management of patients with MDR-TB in a decentralized setting could be as effective as care in a specialized central setting but was dependent on a functional health system. This work contributed to the South African guidelines on decentralized care for MDR-TB patients. She has also been involved in several qualitative studies documenting patient experiences of the health system, the impact of an episode of MDR-TB on the household and the dilemmas and experiences of front-line health care workers. She has participated in several research projects, which have produced over 30 publications, and she has been the first author on 16 of them. She is presently involved in an observational study documenting treatment and infant outcomes in women exposed to MDR-TB treatment during pregnancy. Nested within this study, she and other experts, are conducting a substudy in which they are exploring plasma concentrations of second-line TB drugs in these women and their infants.

NASEHI, Mahshid

Constituency: National TB Programme Manager; end-user

Academic degrees: M.D., M.P.H., Ph.D. Epidemiology

Institutional affiliation: Ministry of Health and Medical Education

Current position: National Director of Tuberculosis and Leprosy Control Department;

Associate Professor, Department of Epidemiology and Biostatistics, School

of Public Health- Iran University of Medical Sciences

Primary residence: Tehran, Islamic Republic of Iran

Mahshid Nasehi is a medical doctor who has been working as National Director of TB and Leprosy Control Department in Iran since 2000 and simultaneously as an academic member and researcher in Department of Epidemiology and Biostatistics, in Iran University of Medical Sciences (since 2005).

She started her work as a GP in a PHC center (Primary Health Care Center). Then, she has been working consecutively as District TB coordinator, TB Provincial TB coordinator, Director of Disease Control Office at Provincial level in Capital City, and finally she joined the national level in 2000. Some of her dominant activities / achievements include the development of the National TB Guidelines in 2003, 2010 and 2018 (first author) and the development of the National Guidelines for the Programmatic Management of Drug-Resistant TB in 2010 and 2019 (contributing author). She also served as a member of the Technical Group leading the development of TB guidelines (4th edition) and has served as a member of the WHO Global TB Programme Strategic and Technical Advisory Group since 2016.

MARAIS, Barend Jacobus (Ben)

Constituency: Paediatrician and paediatric infectious diseases specialist Academic degrees: BMedSc, MBChB, MMed (Paed), MRCP(UK), FRACP, Ph.D.

Institutional affiliation: The University of Sydney

Current position: Professor, The Children's Hospital at Westmead Clinical School; Deputy

Director, Marie Bashir Institute for Infectious Diseases and Biosecurity;

Senior Clinical Academic, The Children's Hospital at Westmead

Primary residence: Sydney, Australia

Professor Ben Marais is a paediatrician and paediatric infectious diseases specialist with an interest in global health. He is internationally renowned for his work on childhood and MDR-TB. He serves on the executive committee of the NHMRC Centre for Research Excellence in Tuberculosis Control (http://tbcre.org.au/) and is a founding member of the Australasian Tuberculosis Forum. He is a strong advocate for Australia to take a leadership role in coordinating enhanced TB and MDR-TB control efforts in the Asia-Pacific Region. More broadly, as Deputy Director of the Marie Bashir Institute (www.sydney.edu.au/mbi) he works towards creating a dynamic multi-disciplinary research community in infection, immunity and biosecurity. Professor Marais trained as a paediatrician in South Africa and worked in the UK, the Netherlands, Canada and USA. He described the natural history of childhood TB from the pre-chemotherapy literature and conducted a large, prospective cohort study to document TB incidence and disease diversity among children in Cape Town. As Acting Director of the Ukwanda centre for Rural Health at Stellenbosch University, South Africa, his interest in the health of underserved populations inspired a comprehensive review of health care delivery in rural and remote areas. Professor Marais was one of three lead authors of the Lancet TB series (2010), which assessed key challenges in global TB control, highlighted the neglected burden of childhood TB and emphasized the need for more holistic and integrated approaches. The final 'Call to Action' manuscript that he led, informed the WHO post 2015 global TB control targets and action plan.

MARIANDYSHEV, Andrei

Constituency: Clinician **Academic degrees:** M.D., Ph.D.

Institutional affiliation: Northern State Medical University

Current position: Head of Phthisiopulmonary Department Northern State Medical University

Primary residence: Arkhangelsk, Russian Federation

Professor Andrei Mariandyshev is the head of the Phthisiopulmonary department of the Northern State Medical University and the main TB specialist of the Ministry of Health of the Arkhangelsk region and Northwest federal district (11 regions) of the Russian Federation. DOTS strategy and MDR-TB program have been implemented in the Arkhangelsk region since 1998 that resulted in decrease of the TB rate and mortality more than three times. He contributed to the training courses for TB experts organized by WHO and chaired the European Green Light Committee 2010-2018. He is a consultant for the TB program financed by non-governmental organization in eleventh regions in Russia and other countries. Dr Mariandyshev combines treatment activities with teaching and research and author of 62 manuscripts and 22 abstracts published in the international scientific journals and book of conferences.

Consultant of the DOTS and MDR TB programs implemented by the International Federation of Red Cross and Red Crescent Societies (IFRCCS) in the eleven regions of the Russian Federation. IFRCCS programs were financed by USAID since 2003 to 2013. Member of the TB working group BARENTS and ARCTIC regions. Member of the TB working group of the Ministry of Health of the Russian Federation. Board member of the Russian Society of Specialists in Phthisiology.

MASTER, Igbal Haroon

Constituency: Clinician; MDR-TB physician; end-user

Academic degrees: MBChB

Institutional affiliation:King DinuZulu HospitalCurrent position:Clinical managerPrimary residence:Durban, South Africa

Dr Iqbal Haroon Master graduated from the School of Medicine, University of KwaZulu-Natal, South Africa in 1986. Currently, he is Clinical Manager at the MDR TB Unit at King Dinuzulu Hospital, Durban. This is the Centre of Excellence for the treatment of drug-resistant TB in the province of KwaZulu-Natal.

He has 25 years of experience in MDR-/XDR-TB. He has been involved in the management and care of XDR patients from the onset of the Tugela Ferry outbreak. He is a member of both the KwaZulu-Natal Provincial and South African National Drug-Resistant TB Advisory Committee. As a public health clinician Dr Master has been involved in multiple studies in drug-resistant TB and both the bedaquiline and delamanid Clinical Access program rolled out by the SA National TB program. He has been a contributor to many research projects and papers written on drug-resistant TB. He continues to provide training and support for the drug-resistant TB program in the province.

MENDOZA-TICONA, Alberto

Constituency: Clinician; end-user

Academic degrees: M.D., Sp. Infectious diseases, M.Sc. **Institutional affiliation:** Hospital de Emergencias Villa El Salvador

Current position: Chief of Infectious Diseases Service and HIV Program

Primary residence: Lima, Perú

Dr Alberto Mendoza received his Medical Degree at the Universidad Nacional de San Agustin in Arequipa, Perú, as a Specialist in Infectious and Tropical Diseases. He also holds a Master's Degree in Clinical Epidemiology at the Universidad Peruana Cayetano Heredia in Lima. He has a long track record in research and healthcare specifically for HIV, drug-resistant tuberculosis and HIV/TB co-infection. He has a background in clinical management, operational and clinical research, programs and implementation science. Previously, he was Head of the National Laboratory of Mycobacteria at the Perú National Institute of Health, leading the implementation and scale-up of Line Probe Assay and MODS assays for the rapid detection of MDR-TB. He worked as a team member at the National TB Control Program leading the development of current Peruvian TB guidelines.

Currently, Dr Mendoza is the chief clinician of Infectious Diseases Service and HIV Program at the Hospital de Emergencias Villa El Salvador of the Ministry of Health in Lima. He is Clinical Investigator at the IMPACTA Clinical Trial Unit to develop TB and HIV protocols funded by ACTG (AIDS Clinical Trial Group) of USA-NIH. He is member of the TB Transformative Science Group at ACTG. He is a Faculty for International Courses of TB and MDR-TB and co-infection TB – HIV at The Union and for the *Universidad Peruana de Ciencias Aplicadas* (UPC). He supports the Ministry of Health as a member of the National Committee of drug-resistant TB. He is temporary TB advisor and, recently, member of the Regional Green Light Committee to the PAHO.

MUTAYOBA, Beatrice Kemilembe

Constituency: Programme Manager; end-user

Academic degrees: M.D., Ph.D., M.Phil International Health

Institutional affiliation: Ministry of Health, Community Development, Gender, Elderly and Children

Current position: Programme Manager; National TB and Leprosy Programme

Primary residence: Dar es Salaam, Tanzania

Dr Beatrice Mutayoba is a public health specialist with degrees in Medicine and Public health where she specialized in the field of Tuberculosis. She has almost fifteen years of both research and health policy experience on TB. She worked for the Tanzania National Institute for Medical Research for ten years with several publications. She is currently working as the Program Manager for the National TB and Leprosy Program at the Ministry of Health in Tanzania. Since 2014 she has contributed as an advisor of Global TB policies being a member of the WHO Strategic and Technical Advisory Group for TB from June 2015, a member of the WHO Task Force on Global TB Research and a member of the WHO Core Group on Public Private Mix (PPM) on TB care and Prevention from 2015 to date. She has also contributed to the formulation and review of TB treatment guidelines as a member of the WHO Guideline Development Group on the interim policy on the use of bedaquiline in the treatment of MDR TB in June 2016, a member of the WHO Guideline Development Group on policy guidance on the use of delamanid in children in June 2016 and a reviewer of the WHO Companion Handbook to the WHO guidelines for the Programmatic Management of Drug-Resistant TB.

NAHID, Payam

Constituency: Clinician; Clinical trials expert

Academic degrees: M.D., M.P.H

Institutional affiliation: School of Medicine, UCSF Center for Tuberculosis, University of California,

San Francisco

Current position: Professor In Residence

Primary residence: San Francisco, United States of America

Prof Nahid trained in internal medicine, pulmonary medicine, critical care and epidemiology. He leads international clinical trials in TB therapeutics. He is protocol co-Chair of an ongoing CDC- and NIH-sponsored Phase 3 clinical trial of rifapentine-based shorter course regimens for active TB. He is co-PI of the CDC TB Trials Consortium site in Hanoi, Viet Nam, in partnership with the Viet Nam National TB Programme (VNTP); the VNTP/UCSF Research Collaboration. He is co-PI of NIH-funded research on discovery and qualification of host and pathogen-specific TB biomarkers of treatment response. Prof. Nahid is co-Chair for the GRADE-based practice guidelines for drug-susceptible and drug-resistant TB, sponsored by the ATS, CDC, IDSA and ERS. He has served as Chair of the WHO Task Force for New TB Drugs and Regimens, served on WHO Guideline Development Groups, expert panels and chaired a technical consultation on advances in clinical trial design for development of new TB regimens. Clinically, Dr. Nahid attends in the Chest and TB Clinics at Zuckerberg San Francisco General Hospital, attends on the inpatient pulmonary service, the medical intensive care unit, and provides TB consultation as part of the CDC-funded Curry International Tuberculosis Center at UCSF (https://tb.ucsf.edu).

PIUBELLO, Alberto

Constituency: Technical agency; MDR-TB physician; end-user

Academic degrees: M.D., M.P.H., M.Sc.

Institutional affiliation: The International Union Against Tuberculosis and Lung Disease

Current position: Coordinator of the MDR-TB Programme

Primary residence: Niamey, Niger

Dr Alberto Piubello has 29 years of experience in Public Health, 24 of which working in low-income countries in Africa. He is a clinician with expertise in Malaria, HIV, TB, in particular, almost 20 years' experience in the management and care of MDR-TB patients. He is the coordinator of the Multi-Drug Resistant TB Programme of the International Union against Tuberculosis and Lung Disease and Focal Point for MDR-TB for Damien Foundation. He provides technical assistance to National Tuberculosis Programs and conducts National and International MDR-TB courses in several countries in Africa, Latin America and Asia. He teaches in the Short Course on Clinical Decision Making for MDR-TB of the Institute of Tropical Medicine in Antwerp, Belgium. He is a member of the Technical Review Panel of the Global Fund to Fight AIDS, Tuberculosis and Malaria.

He is actively involved in providing technical assistance to National Tuberculosis Programmes and contributes to the running of National and International MDR-TB courses.

RODRÍGUEZ-HERNANDEZ-DE-DOMINGUEZ, María

Constituency: Clinician; National TB Programme; end-use

Academic degrees: M.D. (Pulmonary Medicine), Ph.D.

Institutional affiliation: Ministry of Public Heatlh, National TB Programme

Current position: Coordinator of the MDR-TB Programme **Primary residence:** Santo Domingo, Dominican Republic

Dr Rodriguez worked as a pulmonologist at the local hospital Las Caobas and started collaborating for the National TB Programme (NTP) of her country in 1992. From 2004 to 2014 she supported the NTP in the programmatic management of MDR-TB and currently works as the coordinator of the Technical Unit of MDR in Dominican Republic, coordinating the clinical and programmatic management of over 1200 RR-MDR patients in the last 12 years. Dr Rodriguez has also participated as a facilitator in several drug-resistant TB courses implemented by the International Union against TB and Lung Diseases in the Region of the Americas. As an international consultant, she was a member of the regional Green Light Committee (rGLC) of PAHO/WHO for 2 periods (2013-2019) and has taken part in several country missions to review the Programmatic Management of Drug-Resistant TB. During 2015-2016 and 2018 she participated as a member of de Guideline Development Group for WHO Treatment Guidelines for drug-resistant tuberculosis and the Ethics Guidance for the Implementation of the End TB Strategy (2016).

SARIN, Rohit

Constituency: National research agency

Academic degrees: MBBS, D.T.C.D., M.D. (Sp. TB & Respiratory Diseases) **Institutional affiliation:** National Institute of TB & Respiratory Diseases

Current position: Director

Primary residence: New Delhi, India

Dr Rohit Sarin, a postgraduate in TB & Respiratory Diseases having over three decades of experience in the field is presently Director of the National Institute of TB and Respiratory Diseases (NITRD), New Delhi. He was one amongst the 15 Core Group Consultants selected for training by WHO for developing International acumen in MDR TB in the year 2011. He is recognized internationally for his expertise and has been Chair of the rGLC SEAR from 2012-2016 and subsequently a Member of the same committee. He has also assisted the GDI in Global Policy Development and has been a Member of various WHO GDGs for Newer TB drugs, Target Product Profiles, Treatment of drug-susceptible TB and Infection Control guidelines. Under his leadership, the technical capacity of NITRD has been strengthened to become a WHO Collaborative Centre and the TB training hub for National and Provincial Programme Managers from the different countries in the South-East Asia Region.

Dr Sarin was responsible to conceptualize the Revised National Tuberculosis Control Programme in India (1993-96) and also formulated and demonstrated the feasibility of Green Light Committee-approved project for initiation of Programmatic Management of Drug-Resistant TB in India in 2002-2006. As present Chair of the National Technical Expert Group on Treatment of TB India, Dr Sarin continues to support the National efforts towards ending TB. His recent publications on the regimens containing bedaquiline and bedaquiline plus delamanid has been well acknowledged in the country and the Region. In view of his extensive contribution for tuberculosis he has received numerous awards including Karel Styblo Public Health Prize 2017.

SCHOEMAN, Ingrid

Constituency: Civil society representative; MDR-TB survivor

Academic degrees: MSc Dietetics Institutional affiliation: TB Proof

Current position: Operational manager at TB Proof & TB Proof board of directors (Role of

secretary)

Primary residence: Pretoria, South Africa

Miss Ingrid Schoeman is currently working with TB Proof, a non-profit NGO by South African health care workers and students after personal experiences with occupational TB. She is responsible for planning activities with staff members and the board that will result in achieving outcomes outlined in grant agreements. Specific tasks include secretarial role of organizing meetings for TB Proof members; overseeing and supporting staff members' work according to their job descriptions; developing collaborative grant proposals for resource mobilization beyond 2020, maintaining financial accountability; developing advocacy strategies and monitoring and evaluation frameworks; working with community health workers (CHWs) and key stakeholders to establish networks, implementing advocacy training and supporting advocacy efforts of TB champions to advocate for CHW within the TB care cascade. This role includes to build partnerships and establish relationships with key stakeholders; to attend national and international advocacy events and to share TB Proof's key advocacy messages. Within the TB Proof team and among key stakeholders, good communication, adherence to ethical principles, long term planning, and documentation of activities in a systematic way is done. She is also a member of the TB Think Tank (South Africa).

SKRAHINA, Alena

Constituency: National TB Programme; MDR-TB physician; end-user

Academic degrees: M.D., Ph.D., D.M.Sc.

Institutional affiliation: The Republican Scientific and Practical Center for Pulmonology and

Tuberculosis

Current position: Deputy National TB Programme Manager

Primary residence: Minsk, Belarus

Dr Alena Skrahina has graduated from the Minsk Medical University (Belarus) in 1986 with M.D. diploma. Since 1986 she has been working in the field of respiratory medicine and tuberculosis in the Republican Scientific and Practical Centre for Pulmonology and TB (RRPCPTB) combining her clinical practice, research activity and administrative work. She defended PhD dissertation in 1994 and then Doctor of Medical Science dissertation in 2010, both dissertations in the field of TB.

As a Deputy Director of the RRPCPTB and Deputy National TB Program Manager since 2005 Alena Skrahina has been responsible for organizing and conducting clinical management of TB, M/XDR-TB, and HIV/TB patients; chairing the National M/XDR-TB Expert's Board (Consilium); managing the National TB Program, major recent achievements of it are implementation of new and repurposed TB drugs containing regimens, implementation and roll out of new rapid diagnostics and video supported treatment for TB patients.

Dr Skrahina has been actively involved in international efforts on TB control as a Head of Regional Green Light Committee for Europe, a member of MDR-TB ERS/WHO Consilium, Guideline Development Group on WHO Consolidated TB Treatment Guidelines, WHO ELI Core Group, European Technical Advisory Group on Tuberculosis Control (TAG-TB), Strategic and Technical Advisory Group on Tuberculosis (STAG TB), WHO Systematic Screening for Active Tuberculosis Group, WHO Childhood TB Group, WHO Wolfheze Working Group on Social Determinants of Tuberculosis, WHO Wolfheze Working Group on TB/HIV Collaborative Activities and WHO Wolfheze Working Group on new TB Drug Introduction and Anti-TB Drug safety. She is former member of the Global Laboratory Initiative Group, WHO Task Force for New Drug Policy Development.

TUDOR, Carrie

Constituency: Nursing specialist; Technical agency; end-user

Academic degrees: B.S.N., M.P.H., Ph.D.

Institutional affiliation: International Council of Nurses

Current position: TB Project Director **Primary residence:** Durban, South Africa

Dr Carrie Tudor, has worked in global health for over 20 years on various global health projects throughout Asia and Africa. She earned a B.S.N. and Ph.D. from the Johns Hopkins University School of Nursing. Following her PhD, she completed a Fogarty Global Health Post-doctoral research fellowship based in Durban, South Africa at the KwaZulu-Natal Research Institute for TB and HIV (now AHRI). Her research interests focused on the occupational risk factors for TB among healthcare workers and preventing TB in healthcare workers. She has published several articles on infection, prevention and control and occupational TB in healthcare workers.

Dr Carrie Tudor is the TB Project Director for the International Council of Nurses working to build the capacity of nurses related to TB/MDR-TB and patient-centered care in China, the Russian Federation, and seven sub-Saharan African countries. Prior to joining the International Council of Nurses she was a Senior Research Coordinator at the John Hopkins University School of Medicine based in South Africa. Carrie has served as the Programme Secretary and Chair of The Union's Nurses and Allied Professionals sub-section from 2014 – 2017 and she currently serves as the Chair of the Stop TB Partnership's End TB Transmission Initiative working group.

VAMBE, Debrah

Constituency: National TB Programme; end-user

Academic degrees: M.D., M.Phil, M.P.H. Health systems and policy),

Institutional affiliation: National TB Control Programme

Current position: Technical Advisor, Programmatic Management of Drug-Resistant TB

Primary residence: Manzini, Eswatini

Dr Debrah Vambe has been working as a clinician and public health specialist in the past 13 years. Her current area of focus is strategic planning, programmatic management and coordination of drugresistant TB services in the country. This also involves monitoring and evaluation of the diagnostic and treatment cascade, operational research and innovations, advocacy and resource mobilization towards improved treatment outcomes. She has successfully led the implementation of shorter MDR-TB regimen and new drugs in Eswatini, assisted in strengthening health systems for improved and sustained high treatment outcomes for drug-resistant and maintained a well-coordinated drug-resistant TB program. The introduction of new drugs and shorter regimen gave the country an opportunity to strengthen the pharmacovigilance system through active TB Drug Safety Monitoring (aDSM) system. She has been actively involved in the implementation of aDSM through PAVIA project which is running from 2018-2021. She has participated in different research studies including drug resistance survey, TB and lung cancer prevalence survey, shorter MDR-TB regimen, drug-resistant TB preventive therapy and community MDR-TB.

Having recognized that TB/HIV mortality remains high in the country, Dr Vambe has also led the development and implementation of TB mortality tools and standard operating procedures on how to conduct TB/HIV mortality audits in all the TB basic management units in Eswatini. This activity will be trying to identify contributory/risk factors of TB deaths, probable causes of deaths and possibly come up with targeted interventions with the hope of improving TB/HIV management. She also led the Global Fund TB/HIV Grant application for the year 2018-2021. She has participated in the midterm and end term review of strategic plans for TB/HIV/PMTCT/SHRU/Community for Eswatini, Botswana and Malawi. She has also assisted Malawi, Uganda, South Sudan to implement new drugs, shorter regimen, aDSM, developing mortality audit tools, transition plans, develop guidelines, recording and reporting tools to adopt WHO key changes in MDR-TB/HIV treatment regimens. In Eswatini, she coordinated the most recent drug-resistant TB guideline review process and will soon be conducting an operational research on the feasibility of provision of oral shorter MDR-TB regimen in some facilities according to the WHO recommendations.

VERNON, Andrew Anthony

Constituency: Trials expert; technical agency; end-user

Academic degrees: M.D., M.H.S. Epidemiology

Institutional affiliation: Division of TB Elimination, National Center for HIV, Viral Hepatitis, STD and

TB Prevention, Centers for Disease Control & Prevention (CDC)

Current position: Chief, Clinical Research Branch **Primary residence:** Atlanta, United States of America

Dr Vernon first joined the U.S. Centers for Disease Control (CDC) in 1978, serving as an Epidemic Intelligence Service Officer from 1978 to 1980 and as Medical Epidemiologist in 1980-1981. From 1981 to 1987, he completed his medical residency and fellowship, then served as an attending physician at Johns Hopkins Hospital, working on multiple HIV-related projects. In 1990 he returned to Atlanta to serve as Assistant Director for Science and then Director of the Technical Support Division in the International Health Program Office. Between 1993 and 1995, he was Field Epidemiologist with the TB Control Programme in the state of Georgia, and moved to the Division of Tuberculosis Elimination (DTBE), Clinical Research Branch, where he coordinated DTBE's revived engagement in TB Clinical Trials and guided the conduct of U.S. Public Health Service (USPHS) Study 22. From 2002-2004 he served as Associate Director for Science (ADS) in the National Center for HIV, STD, and TB Prevention. Since 2004 he has been Chief of the Clinical Research Branch.

Dr Vernon has served on multiple committees and working groups, including, the Union's Clinical Trials Steering Committee where he served as Chair; and participation as a member of the *WHO Task Force* on the Development Policies for Introduction of new TB drugs or treatment regimens from 2012 to 2018. As well, Dr Venon has served as a member of WHO Guideline Development Groups.

VIET NHUNG, Nguyen

Constituency: National TB Programme; MDR-TB physician; end-user

Academic degrees: M.D., Ph.D.

Institutional affiliation: Vietnam National Tuberculosis Programme

Current position: Director of the National Lung Hospital, Manager of the National TB Control

Programme

Primary residence: Hanoi, Vietnam

Associate professor Nguyen Viet Nhung is currently Director of the National Lung Hospital, Manager of the National Tuberculosis Control Program, President of the Vietnam Association against TB and Lung Diseases and Head of TB and Lung Diseases Faculty of Ha Noi Medical University, Viet Nam. Dr. Nhung is an active member of ATS, ESMO, IASLC and IUATLD. He obtained his medical degree from Hanoi Medical University and did his 3-year residency specialized in tuberculosis and lung diseases at the National Lung Hospital in Hanoi and completed his PhD scholarship in the Charles University in Prague, Czech Republic in 2000 with thesis on "the role of immunohistochemistry in typing and prognosis of lung cancer". He was appointed as associate professor of the Ha Noi Medical University in 2012 and he is also a guest lecturer in Army Medical University, Hanoi School of Public Health. He has been a member of regional Green Light Committee (rGLC) Western Pacific from 2011-2015 and a current member of WHO Task Force on development of policies for the rational introduction of new TB drugs and a member of the WHO STAG TB from 2016. Prof Nhung research interests are primarily in the areas of lung cancer, tuberculosis, asthma and COPD. Since 2010, he is deputy editor in chief of National Journal of Tuberculosis and Lung Diseases. His research interests are primarily in the areas of TB, lung cancer, asthma and COPD and published 137 scientific articles, 45 scientific abstracts and 41 books.