

BioPREVAIL Built Environment Design Challenge

Built Environment Advisory Committee (BE-AC)



Dr. Debbie Eagles

Dr. Debbie Eagles is Director of CSIRO's Australian Centre for Disease Preparedness (ACDP). She is a veterinarian with postgraduate qualifications in veterinary public health, is a World Organisation for Animal Health (WOAH) Reference Laboratory Expert on Bluetongue Virus and is enrolled as a WOAH and Australian Qualified Expert on the UN Secretary-General Mechanism's (UNSGM) Roster for investigations of Alleged Use of Chemical, Biological or Toxin Weapons. Debbie has extensive experience in working in the Asia Pacific region, including in laboratory capacity building projects, in field investigations and through the provision of training courses.



Dr. Emmanuel Allegye-Cudjoe

Dr. Emmanuel Allegye-Cudjoe is the Chief Veterinary Officer (CVO) of Ghana, serving under the Ministry of Food and Agriculture. He leads the Veterinary Services Department (VSD), overseeing policies and programmes for animal health, welfare and food safety.

With over 30 years of experience in the veterinary medicine space he has been an advocate for One Health and the forging of collaboration with human health towards strengthening health security, including coordination the utilization veterinary laboratories for the diagnosis of SARS CoV-2 during the early and peak phases of the COVID-19 pandemic.



Geoffrey Jagero

Geoffrey Jagero is a self-motivated, directed, and initiative-oriented Global Health leader, research & development professional, and quality improvement expert. Mr. Jagero has extensive experience in biomedical research and surveillance of infectious diseases & a decade of experience in program management, Laboratory Systems Strengthening, & human capital development. A microbiologist by training, he is also an IFBA-CP in BRM, Biosecurity, and Cyber-biosecurity & an Africa-Regional Subject Matter Expert in BSBS. Geoffrey currently serves as a member of the IFBA Certification Body, President, BMAK and an expert at the Technical Advisory Group on Health-Security Interphase (HSI-TAG) at the WHO.



Dr. Indrawati Sendow

Indrawati Sendow is a veterinarian, senior researcher, Biosafety officer, virologist and her research is in animal diseases and wild animal including zoonotic and emerging diseases. She works in Zoonotic, vector and Emerging, Re-Emerging diseases Section in Research center for Veterinary Science, Research Organization for Health, National Research and Innovation Agency, Indonesia. She established BSL3 in her previous Institute in Ministry of Agriculture. She fosters international relationship and networking both nationally and internationally to increase capacity building, not only in her institution but also in veterinary and health laboratories, and in remote areas especially in low resource facilities across Indonesia through Biorisk training and assessment. She is a member of WOAHA Ad Hoc Biosafety group and member of WHO Technical Advisory Group for Biosafety.



Jane Shallcross

Jane Shallcross started work for Coalition of Epidemic Preparedness Innovations (CEPI) as a Senior Biosecurity Oversight Manager in February 2025, and Jane will lead design and implementation of work to strengthen oversight of biosafety and biosecurity risks associated with CEPI-sponsored research and reduce biosecurity and biosafety risks associated with pathogen sample acquisition, transfer, and storage. Previously Jane worked for UKHSA, Porton for 28 years where she was Head of the Novel and Dangerous Pathogens training team working on developing Training programs and projects for the UK, and international partners in Africa, Southeast Asia and Central Asia. Jane is a member of the Technical Advisory Group-Biosafety for WHO and contributed to the WHO Biosecurity Guidance and WHO Laboratory Biosafety Manual 4 monograph on Outbreak Response and is on The EBSA council and MOH (SL)-UKHSA Ebola Governance Committee.



Dr. Uwe Mueller-Doblies

Veterinarian with 30 years of experience in infectious diseases and over two decades in biological risk management. I have held leadership roles as a biosafety officer and veterinary public health consultant, specializing in the operation and design of biocontainment facilities for diagnostics, research, and vaccine production. His work with international organizations—including WHO, WOAHA, FAO, EU FVO, EUFMD, and IAEA—has taken me to facilities across five continents, where I've assessed laboratories ranging from foundational CL-1 to high-containment CL-4 environments in both human and veterinary contexts. I bring a systems-level perspective to complex infrastructure challenges, with a particular interest in sustainable biocontainment strategies that ensure safety while optimizing laboratory productivity.



Mr. Ken Ugwu

Ken is an expert in Biocontainment Engineering with over 35 years' experience in containment laboratories. He joined the Canada public service in 1992 after working as a Senior Design Engineer with a couple of reputable private Canadian consulting engineering companies. In his previous positions as The Director of Engineering and Science Support with the Public Health agency of Canada and Senior Biocontainment Advisor with Global Affairs Canada he was responsible for the design review, approval, commissioning, and yearly inspection of hundreds of BLS 2-4 laboratories in and outside of Canada. Some of his international project experiences include BSL3 laboratories in Trinidad & Tobago, Jordan, Kenya, Ghana, Mexico, Sierra Leone, Oman, Brazil, South Africa, and Nigeria. He has been providing expert advice to the World Health Organization (WHO) on biocontainment engineering for the past eighteen years. He graduated from the University of Ottawa, Canada in Mechanical Engineering and Engineering Management and a Licensed Professional Engineer in Canada.



Mark Francis Wheatley

Mark Wheatley is a Biocontainment Engineer, Chartered Building Services Engineer, Member of the Chartered Institute of Building Services Engineers and specialist in High Containment Laboratory Design, Construction, Operation and Maintenance (since 1998).

Mark is an independent, international consultant providing services tailored to meeting the highly specialist needs of companies, organizations, institutions, governments and NGOs worldwide. Marks particular specialism is in the investigation, fault-finding and remediation of poorly functioning, failing and/or failed biocontainment facilities. Mark has substantive experience spanning 23+ years of problem solving worldwide, including CBRNE training and preparedness. Mark is also involved in working with low- and middle-income countries.

Mark is currently appointed to MORU (the Mahidol Oxford Tropical Medicine Research Unit in Bangkok) as the Project manager of the DTRA/BTRP (US) funded project to renovate the RRL FMD laboratory for Southeast Asia located at Pak Chong in Thailand; Mark recently completed an appointment to the Dutch NAC (National Authority for Containment) as the biocontainment engineer on the 5 person WHO GAPIII PEF audit team. In the recent past Mark has acted as the Senior Biocontainment Engineer for DEFRA (UK) and was Key Expert 4 on the EU CBRN CoE Project 46 including providing training to Engineers, Architects and Scientists from 8 ASEAN countries on Laboratory Design, Construction, Operation and Management. Mark was also a contributor to the recently released WHO LBM4 monograph (2020) on Laboratory Design & Maintenance and is a volunteer on the Sandia national Laboratories (US) twinning programme. He is also on the writing committee drafting guidance for ISO 35001: Biorisk management for laboratories and other related organisations. Mark is currently engaged on two new projects in Kenya and Saudi Arabia.



Sacha Wallace-Sankarsingh

Sacha is a seasoned public health professional with almost twenty years' experience in strengthening laboratory systems with a focus on Small Island Developing States in the Caribbean. Her practical experience working at various levels including public and private sectors; at inter-governmental levels with CAREC, CARICOM/CARPHA; the PAHO/WHO Office for the Eastern Caribbean Countries and the NGO community gives her an in-depth understanding of the changing needs for laboratories to be sustainable in resource constrained environments. Some of her key appointments include being a previous Chair of the Global Health Security Agenda's Action Package on Biosafety; a past member of the WHO's Technical Advisory Group on Biosafety; and the pioneer of the Caribbean Society for Biosafety and Biosecurity. Sacha's long-term goal is to contribute to the improvement of national health security infrastructure such as laboratories and other health facilities which will assist national communities with the sustainable implementation of medical/health laboratory systems, to positively impact public health and foster greater international health security.



Dr. Samuel L Yingst

Dr. Sam Yingst is a veterinary virologist with over 25 years public health and veterinary diagnostics capacity building experience in Asia, Europe and Africa. Yingst has hands-on experience in infectious disease outbreak response, laboratory testing, laboratory management, research and surveillance across the spectrum from severely resource-limited, outbreak, mobile or deployed laboratories through all levels of laboratory capacity including large, central and multi-tier laboratory systems as well as global reference biosafety level 3 and biosafety level 4 laboratories, on four continents.

Dr. Yingst is a retired US Army officer having served at Walter Reed Army Inst. of Research, the US Army Medical Research Inst. for Infectious Disease, and in overseas assignments in Thailand, Egypt and Afghanistan. Upon retirement from the Army, Dr. Yingst managed the Virology, Serology and Molecular diagnostics sections of the Purdue University Animal Disease Diagnostic Laboratory for 3 years before serving as laboratory advisor for CDC/PEPFAR for 6 years in Zambia. Dr. Yingst now supports efforts to integrate cost-effective pan-pathogen detection and discovery capture-based next generation sequencing methodologies into optimized diagnostic networks for disease X and emerging disease detection in a One Health approach.