#### INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION of UNESCO INTERNATIONAL TSUNAMI INFORMATION CENTRE U.S. NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

#### Solomon Islands National Tsunami Ready Stakeholder Workshop Heritage Hotel, Honiara, Solomon Islands 30-31 July 2024

### **RESOURCE PERSON BIOGRAPHIES**

### DAVID COETZEE

Retired from the New Zealand National Emergency Management Agency. Past National Controller. Current Alternate National Controller, Member of the Scientific Committee of the UN Ocean Decade IOC Tsunami Program, E-mail: dzcoetzee@gmail.com

David Coetzee retired from the New Zealand National Emergency Management Agency (NEMA) in 2023 after 22 years' service. From 2020 to 2023, he was the Manager, Regional Partnerships, where he was responsible for the NEMA's work with emergency management in the 16 domestic regions and in Pacific Island Countries. From 2008 to 2020, David was the National Operations Manager, responsible for the development of NEMA's response capability, New Zealand's Tsunami Risk Management Programme, and the National Warning System.

David held the position of National Controller for 13 years (2008-2021), making him responsible for leading the national level response to civil defence emergencies in New Zealand. In this capacity he was at the helm for an extended list of emergencies; he singles out the Christchurch earthquake of 2011 that resulted in New Zealand's first ever state of national emergency, the Kaikoura earthquake of 2016, the Whakaari White Island eruption in 2019, and the COVID-19 responses as the most challenging responses in his career. He still serves an alternate national controller.

At the international level David served as a Vice-Chair of the Pacific Tsunami Warning System (PTWS) under the Intergovernmental Oceanographic Commission (IOC) of UNESCO until 2023. He served for more than 10 years as the Chair of the Working Group on Disaster Management and Preparedness of the PTWS and was called upon to assist with tsunami capability building in several regions. On behalf of the IOC, he also chaired a worldwide Task Team on Disaster Management and Preparedness from 2018 to 2022. In 2022 he was appointed by the Chair of the of the IOC as a member of the Scientific Committee for the UN Ocean Decade Tsunami Programme; this appointment was later extended until 2025. He is also a past member of the United Nations Disaster Assessment and Coordination (UNDAC) team.

# MARIE C. EBLÉ

Tsunami Ready Project Manager UNESCO-IOC / NOAA International Tsunami Information Centre(ITIC) Deputy Director (retired), NOAA National Center for Tsunami Research, Pacific Environmental Laboratory, Seattle, WA, USA, E-mail: marie.c.eble@noaa.gov

Marie Eblé earned a Master of Science in Physical Oceanography from Texas A&M University in 1984. After completing her degree, she worked two years with the consulting firm of Northern Technical Services, Inc. where she conducted oceanographic and hydraulic field and numerical modeling studies. She joined the National Oceanic and Atmospheric Administration in 1986 as research oceanographer to develop processing and analysis software for interpretation of bottom pressure recorder and sea level time series data in support of a newly established tsunami research effort. In the mid-1990's, Ms. Eblé engaged with Pacific Marine Environmental Laboratory (PMEL) engineers to develop and test a Deepocean Assessment and Reporting of Tsunami (DART) measurement capability. In 1999, she served as DART Project Manager to ensure that engineering design efforts met research needs, to oversee web display and distribution of bottom pressure data from PMEL servers, and, beginning in 2002, to coordinate transition of DART array operations and maintenance to NOAA's operational National Data Buoy Center. In 2008 until retirement, Ms. Eblé served as Deputy Director of the NOAA Center for Tsunami Research. Her responsibilities included liaison between NOAA Center for Tsunami Research and all partner agencies, representing NOAA on the National Tsunami Hazard Mitigation Program Mapping & Modeling Subcommittee, and engaging in scientific research, presenting scientific findings at national and international scientific venues. Currently, Ms Eblé continues work with a USGS Powell Center sponsored Tsunami Sources project as co-principal investigator and now serves on the NOAA Tsunami Science Technical Advisory Panel.

### DR. LAURA S. L. KONG

Director, UNESCO-IOC / NOAA International Tsunami Information Centre (ITIC) 1845 Wasp Blvd, Bldg. 176, Honolulu, HI, 96818, E-mail: laura.kong@noaa.gov

Dr. Kong has been the Director of the ITIC since 2001. As Director, she oversees a Centre that supports the Intergovernmental Oceanographic Commission in its efforts to deploy tsunami warning and mitigation systems globally, and that works directly with the 46-nation Intergovernmental Co-ordination Group for the Pacific Tsunami Warning and Mitigation System to strengthen national tsunami warnings and preparedness. In this capacity, the ITIC works closely with the USA Pacific and National Tsunami Warning Centers, Japan Meteorological Agency NWPTAC and other Tsunami Service Providers, and national tsunami warnings centres. The ITIC has been primary provider of information and expertise for technology transfer, awareness, training and capacity building in tsunami warning and mitigation for the IOC. Since the 2004 Indian Ocean tsunami, Dr. Kong has been actively involved as part of the IOC's coordination and development of systems in the Indian Ocean. the Caribbean and adjacent regions, and Mediterranean Seas and the north Atlantic Ocean. Within the United Sates, serves as the Hawaii State Tsunami Advisor, and supports the US National Tsunami Hazard Mitigation Program. She is the former Chair of the Hawaii State Earthquake Advisory Committee. Previously, she was with the Pacific Tsunami Warning Center, the University of Hawaii's Hawaii Institute of Geophysics, the U.S. Geological Survey's Hawaiian Volcano Observatory, and the University of Tokyo's Earthquake Research Institute. She is a graduate of Brown University and received PhD from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution in 1990.

## JIUTA KOROVULAVULA

National Professional Officer for Disaster Risk Reduction & Tsunami Warning Tsunami Resilience Section, Intergovernmental Oceanographic Commission of UNESCO, Suva, Fiji, Email: j.korovulavula@unesco.org

Mr. Korovulavula is the National Programme Officer for the IOC Tsunami Resilience Section based in Suva, Fiji since 2018. As NPO, he coordinates efforts of the 46 Member States of the Intergovernmental Co-ordination Group for the Pacific Tsunami Warning and Mitigation System especially the 21 Member States of the Pacific Islands Countries and Territories in the Southwest Pacific. In this capacity, he is the technical secretariat for the ICG/PTWS Pacific Islands Countries and Territories Regional Working Group on Tsunami Warning and Mitigation System. He works closely with PICT National Tsunami Warning Centres and National Disaster Management Office in collaboration with the NOAA International Tsunami Information Centre (ITIC) to strengthen national and regional tsunami warnings systems and preparedness arrangements. He works closely with the Oceania Regional Seismic Network (ORSNET) on the strengthening earthquake and tsunami monitoring and detection through the PTWS WG 2 Task Team Seismic Data Sharing in the Southwest Pacific. He closely collaborates with ITIC on the review and update of National Tsunami Warning SOP and National Tsunami Response Plan. Previously, he worked with National Disaster Management Office and communities among PICTs through Regional and National NGOs to develop community disaster risk management plans and national community-based disaster management frameworks. This includes development of ICT and space-based application to strength disaster resilience of communities. He is a graduate of the University of South Pacific with a Bachelor of Marine Science in 2004.

#### CHRISTA VON HILLEBRANDT-ANDRADE

Deputy Director, UNESCO-IOC / NOAA International Tsunami Information Centre (ITIC) Manager, ITIC Caribbean Office (ITIC-CAR)

Building D, University of Puerto Rico at Mayagüez, USA, E-mail: Christa.vonH@noaa.gov

Christa von Hillebrandt-Andrade is the Deputy Director of the ITIC and Manager its Caribbean Office in Mayagüez, Puerto Rico. Before joining the National Weather Service (NWS), she served as the Director of the Puerto Rico Seismic Network from 1994-2010. Her research and operational experience spans from the detection and analysis of earthquakes and tsunamis, risk assessment, warning, and awareness and preparedness with a focus on the Caribbean and Latin America. She has served as an instructor and trainer for tsunami. seismic and sea level training courses and a NWS media contact point for tsunamis. She began the implementation of the US TsunamiReady® program in Puerto Rico in 2006 and since 2011 promoted and supported efforts towards the establishment of the UNESCO/IOC International Tsunami Ready Recognition Programme. She has actively participated in the TR designation/renewal of 49 communities in Puerto Rico and the US Virgin Islands and 12 other communities in Caribbean and Central America. Through ITIC-CAR she has supported the coordination of the Annual Caribbean wide tsunami exercise, CARIBE WAVE with hundreds of thousands of participants since 2011. von Hillebrandt-Andrade has participated in all seventeen sessions of the UNESCO IOC Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions (CARIBE EWS) since it was established in 2006 and served as its Chair (2012-2018). She currently leads its Working Group 3 on Tsunami Warning Dissemination and Communication. She is also a member of the Scientific Committee for the Ocean Decade Tsunami Program and the IOCARIBE Ocean Decade Task Force. She was President of the Seismological Society of America from 2011-2013. Christa von Hillebrandt-Andrade was raised in Puerto Rico, received her BSc from the University of Delaware in 1984 and her Master's Degree from the Escuela Politécnica Nacional (Quito, Ecuador) in 1988 where she went as a Fulbright Scholar.

#### VIRTUAL

#### **CHRISTOPHER MOORE**

Director, NOAA National Center for Tsunami Research (NCTR), Pacific Environmental Laboratory, Seattle, WA, USA, E-mail: christopher.moore@noaa.gov

Christopher Moore is the director of the NOAA Center for Tsunami Research, the tsunami research team of NOAA's Pacific Marine Environmental Laboratory in Seattle, Washington. His undergraduate degree is in Physics from the University of California, Santa Cruz, and he received his Master's in Physical Oceanography in 1996 at the University of Washington. He is the project manager for the NOAA tsunami forecast system and a modeler with a background in computational fluid dynamics and data analysis. As a developer of the SIFT forecast system, he is interested in real-time DART buoy data assimilation. He developed the Community Model Interface for Tsunami (ComMIT), and the Tsunami Coastal Assessment Tool (TsuCAT): tsunami modeling tools that are in use world-wide to create critical evacuation maps and rapid assessments for exercises, and as part of the Tsunami

Ready program, and he sits on several committees including those in the National Tsunami Hazard Mitigation Program, and the IOC Tsunami Programme.

### DR. JOSE C. BORRERO

Coastal Scientist and Engineer Director, ORCAS Consulting Ltd, New Zealand, E-mail: jose@orcas coastal.com Adjunct Assistant Research Professor, Tsunami Research Center University of Southern California, Los Angeles, CA, USA, E-mail: jborrero@usc.edu

I am a coastal engineer and scientist having studied civil, environmental, and coastal engineering at the University of Southern California in Los Angeles. During my years at USC, I took a wide range of high-level course work including units in earth science (active tectonics, sedimentology, marine geology and engineering geology), aerospace engineering (computational fluid dynamics) and civil engineering (earthquake engineering, structures (wood, steel, concrete), water and wastewater engineering, environmental chemistry and microbiology).

This broad base of study was ideal for my highly interdisciplinary PhD thesis work which focussed on the analysis of tsunami hazards including field studies, post-event damage assessments, numerical modelling, and community consultation for the production of tsunami inundation and evacuation maps. Since completing my PhD, I have continued to work in the area of tsunami hazard analysis staying at the forefront of this discipline and developing new tools and techniques for mitigating tsunami hazards with a particular focus on ports and maritime assets.

In addition to tsunami, I also have extensive experience assessing and mitigating other coastal hazards such as erosion, wave effects and overtopping and adaptation to climate change and sea level rise, particularly in tropical small island developing states (SIDS). I have led projects that combine field data collection, wave, hydrodynamic and sediment transport modelling, and engineering design to arrive at effective and workable solutions for dealing with coastal problems.

I have a keen interest in the design of nature-based solutions including submerged and multipurpose reefs for coastal protection and amenity enhancement, coastal plantings, dune management, beach rehabilitation, sea grass restoration and living shorelines. In the area of submerged reefs, I have worked on designs aimed at enhancing recreational amenities such as snorkelling or diving trails as well as for the creation of surf breaks. I have extensive experience in the area of surf break science including the characterisation and preservation of natural surf breaks characterisation and when possible, enhancement of surfing resources.