

## **Samuel Brody**

Dr. Samuel D. Brody is a Regents Professor and holder of the George P. Mitchell '40 Chair in Sustainable Coasts in the Department of Marine and Coastal Environmental Science at Texas A&M University, Galveston Campus. He is the Director of Center for Texas Beaches and Shores and the newly formed Institute for a Disaster Resilient Texas. Dr. Brody is an adjunct professor in the Department of Civil and Environmental Engineering at Rice University. He was also the Lead Technical Expert for the Governor's Commission to Rebuild Texas in response to Hurricane Harvey. Dr. Brody's research focuses on coastal environmental planning, spatial analysis, flood mitigation, climate change policy, and natural hazards mitigation. He has published numerous scientific articles on flood risk and mitigation, and the book, *Rising Waters: The causes and consequences of flooding in the United States* published by Cambridge University Press. Dr. Brody teaches graduate courses in environmental planning, flood mitigation, and coastal resiliency. He has also worked in both the public and private sectors to help local communities adopt flood mitigation plans.

## **Cherie Coffman**

Ms. Cherie Coffman is a senior administrative coordinator at Texas A&M University at Galveston. Ms. Coffman began her career at A&M Galveston in 1992, as assistant to the VP for Administration, but within a year was transferred to the job of assistant to the head of the Galveston campus. She served in that position for 19 years. In 2011, she transferred to work with Bill Merrell on the Ike Dike project, providing the Galveston's campus's contribution to this important project. She quickly assumed the principal responsibilities for outreach and coordination with Galveston county leaders, national academic partners, Dutch researchers, and the print and television media. Particularly important is her central role in coordinating tours of the Netherlands' coastal protection complex for Texas legislators and decision makers. In addition to Ike Dike work, her duties have expanded into serving the entire Center for Texas Beaches and Shores in their important mission to reduce flood risk in Texas.

## **Bruce Ebersole**

Mr. Ebersole holds a B.S. degree in civil engineering and a M.C.E. degree in civil engineering (with an emphasis in coastal engineering) from the University of Delaware. He worked as a supervisory research engineer with the U.S. Army Engineer Research and Development Center (ERDC) Coastal & Hydraulics Laboratory from 1988 until 2011, first as Chief, Coastal Processes Branch from 1988 to 2004, then as Chief, Flood and Storm Protection Division, leading a division of 110 employees with an annual work program of \$25 million, until his retirement in 2011. He was inducted into ERDC's Waterways Experiment Station (WES) Gallery of Distinguished Civilian Employees in 2019. From 2009-2014 he served as a member of the Advisory Board, Department of Homeland Security, Coastal Hazards Center of Excellence. From 2008-2011, Mr. Ebersole was the U.S. Army Corps of Engineers representative to the White

House Office of Science and Technology Policy, Subcommittee on Disaster Reduction, Coastal Inundation Working Group. He was a contributing author to the book, *Engineering Investigations of Hurricane Damage, Wind Versus Water, Basic Storm Surge, Wave, and Flooding Principles*, American Society of Civil Engineers, 2014. Since 2014, Mr. Ebersole has served as a Senior Research Associate at Jackson State University, where he is working with partners at Texas A&M University-Galveston Campus and TU Delft to evaluate and refine the Ike Dike concept for reducing hurricane flood risk in the Houston-Galveston region.

### **Jens Figlus**

Dr. Jens Figlus is a civil/coastal engineer and Associate Professor in the Department of Ocean Engineering at Texas A&M University. Dr. Figlus heads the Coastal Engineering Laboratory (CEL) on A&M's Galveston Campus and is a faculty fellow with the Center for Texas Beaches and Shores (CTBS) and the Institute for a Disaster Resilient Texas (IDRT). He received his Masters and Ph.D. degrees in civil engineering with an emphasis on coastal engineering from the University of Delaware. Since joining Texas A&M University in 2012, Dr. Figlus has been conducting engineering research and teaching undergraduate and graduate students about coastal engineering and related subjects. He teaches classes related to coastal engineering, fluid dynamics, geotechnical engineering, and ocean measurements and is a faculty mentor for undergraduate research scholars. Dr. Figlus' research focuses on improving our understanding of coastal system processes and engineering approaches to reduce the risk of coastal flooding and erosion. He is an expert in field measurement techniques, laboratory experiments, and numerical model analysis related to storm impacts on barrier islands and dunes, coastal hydrodynamics, sediment transport, and morphodynamics. Together with his team he runs the CEL movable-bed wave flume research facility and deploys field instrumentation to capture wave, current, and sediment processes in nearshore and bay systems.

### **Bas Jonkman**

Dr. Bas Jonkman is Professor of Hydraulic Structures and Flood Risk at TU Delft. Prof. Jonkman holds Msc and PhD degrees in civil engineering from Delft University. In the past he has worked for Rijkswaterstaat, Royal Haskoning and UC Berkeley. He has investigated the levee failures in New Orleans and other countries and has been involved in engineering and flood risk studies in several areas around the world. His research interests include flood risk analysis, and the (probabilistic) design of hydraulic infrastructures, such as flood defences and storm surge barriers. Dr. Jonkman is currently leading a number of national and international research projects focusing on nature-based flood protection, and the forensic investigation of causes and impacts of failures of flood defences. He was also the coordinator of a recently completed European project called BRIGAD (20 partners, 7.8M€), which focused on the development of innovative solutions to reduce the risks of floods, drought and extreme weather. He is currently an advisor for Rijkswaterstaat, a member of the Dutch Expertise

Network on Flood Protection (ENW), the Advisory Committee on Water (AcW) and is the chairman of the hydraulic engineering department of the Dutch association of engineers (KIVI).

### **Baukje Kothuis**

Dr. Kothuis is a research associate in the Faculty of Civil Engineering, Hydraulic Structures and Flood Risk at TU Delft. Her research focuses on multi-functional flood defenses, transdisciplinary knowledge integration, and stakeholder inclusive design of structures and strategies for flood resilience. She manages multidisciplinary research projects on delta design and is coordinator for the Houston Galveston Bay case for TU Delft. She mentors students from TU Delft on long term research projects in Texas. She is editor of the publications 'Delft Delta Design – Houston Galveston Bay Region, Texas, USA'; 'Sustainable and Integrated Design of Multifunctional Flood Defenses'; and 'Delta Interventions'.

### **Yoon Lee**

Dr. Yoonjeong Lee is a research scientist and a lecturer in the Institute for a Disaster Resilient Texas and the Department of Marine and Coastal Environmental Science at Texas A&M University, Galveston Campus. Dr. Lee received her Ph.D. in Urban and Regional Sciences from Texas A&M University. Dr. Lee joined the Ike Dike team in 2013 and have been involved in multiple projects related to flood risk reduction and mitigation. Her research focuses on urban flooding, flood risk communication, community outreach and education. Since 2016, Dr. Lee has been in charge of research and education exchange between TAMUG and TU Delft serving as the Education Program Director of the NSF PIRE Coastal Flood Risk Reduction Program. She teaches graduate courses in sustainable coastal management and resiliency, international flood risk mitigation strategies, and environmental planning.

### **William J. Merrell**

Dr. William J. Merrell holds a B.S. in physics and a M.A. in mathematics from Sam Houston State University and a Ph.D. in oceanography from Texas A&M University. He is the George P. Mitchell chair of marine sciences at Texas A&M University at Galveston, Regents Professor and President Emeritus, TAMUG. He has been chair of the H. John Heinz III Center for Science, Economics and the Environment, vice chancellor for Strategic Programs of The Texas A&M University System, vice president for Research Policy of Texas A&M University, chair of the Ocean Studies Board, served on the Space Studies Board and the Board on Sustainability of the National Research Council and has held presidential appointments with the National Science Foundation. Among his awards are the Distinguished Achievement Medal from the Geosciences and Earth Resources Council and he is the only person to receive the Distinguished Service Award of the National Science Foundation twice. Following the devastation of Hurricane Ike, Dr. Merrell began the Ike Dike project to provide hurricane surge protection for the Upper Texas Coast including all of Houston and Galveston.

## **Tom Richardson**

Mr. Tom Richardson is Executive Director of the Coastal Resilience Center of Excellence. He is an engineering graduate of The Citadel, the University of Miami, and the International Institute for Hydraulic and Environmental Engineering in Delft, The Netherlands. Beginning in 1972 at what is now the Coastal and Hydraulics Laboratory of the Engineer Research and Development Center, his career has focused on developing, performing and managing applied research in coastal and hydraulic engineering. Among other achievements, he designed and built the world's first portable hydraulic land-based system for bypassing sand at coastal inlets. He played a key role in developing the concept of Regional Sediment Management and in transitioning it to practice nationwide. Mr. Richardson served as the Principal Federal Liaison to National Research Council Committees on assessing the return on investment from applied R&D programs and on systems for making measurements in the coastal zone. He was Federal Co-Chair of the Gulf of Mexico Program's Coastal and Shoreline Erosion Committee and a Charter Organizer of the National Beach Preservation Technology Conference. For the past 10 years, he has been a Director of the American Shore and Beach Preservation Association and currently serves as Chair of its Government Affairs Committee. In 2009, Mr. Richardson retired as Director of the Coastal and Hydraulics Laboratory and began work at Jackson State University as Deputy Director of the Coastal Hazards Center of Excellence.

## **Youn-Kyung Song**

Dr. Youn-Kyung Song is a research assistant professor at the Department of Ocean Engineering at Texas A&M University. Since joining the Coastal Engineering Laboratory (CEL) based in TAMU's Galveston campus in 2016, various coastal civil engineering research projects were carried out concerning the surface water impacts from both ocean wave and rainfall events on flooding, erosion and solid transportation across the populated beaches and seafront resident and business areas. The topics investigated include coastal surf and swash processes during the sequence of beach erosion and recovery after storm, rainwater runoff hydrologic impacts on low-lying coastal plains, effects of ship channel dredging, geomodification, and deep-drafted navigation on port, harbor and nearshore processes, and sediment dynamics associated with evolution of a nearshore dredge berm placement. Previously, her academic research studied the nearshore long-wave propagation and wave interaction with natural and built environment under intensified weather conditions. A combination of physical, numerical, and field campaigns are being used to investigate the structural and morphological responses to intense wave flows from both academic and industrial engineering perspectives.

## **Robert W. Whalin**

Dr. Robert W. Whalin is Professor of Civil Engineering in the College of Science, Engineering and Technology at Jackson State University (JSU) and Director Emeritus of Engineer Research and Development Center. He serves as Director for Education, Coastal Resilience Center of Excellence, University of North Carolina sponsored by the U.S. Department of Homeland

Security. A registered professional engineer, Dr. Whalin holds a bachelor's degree in physics from the University of Kentucky, a master's degree in physics from the University of Illinois and a Ph.D. in oceanography from Texas A&M University. He completed 36 years of exemplary civilian service in the Department of Army including 20 years in the Senior Executive Service as Director, Army Research Laboratory (ARL); Director, United States Army Corps of Engineers (USACE) Waterways Experiment Station; and Technical Director, USACE Coastal Engineering Research Center. The ARL program exceeded \$1.1 billion and had a 2,200-person workforce at six primary locations throughout the United States plus small groups in Japan and the United Kingdom. Dr. Whalin was a recipient of the Distinguished Presidential Rank Award, two Meritorious Presidential Rank Awards, Exceptional Civilian Service Award, three Meritorious Civilian Service Awards, two Department of Army Awards for Outstanding Achievement in Equal Employment Opportunity, the Silver Order of the DeFleury Medal and the President's 2015 High Grant Award.