Societal Resilience to Earthquakes and Tsunamis

Date and Time: 9:00 - 11:00, Friday, October 1, 2021 (Day 4)

The devastating effects of past earthquakes, tsunamis and other disrupting events offer important lessons for the seismic risk and steps that can be taken to minimize the threat through land use and urban planning, seismic design and retrofit of buildings and infrastructure, and preparations for response and recovery. This session will examine lessons from recent disruptions and emerging issues in Japan, New Zealand and the United States, including challenges in research and implementation of innovative ways to improve community resilience. The session will feature three panelists and a moderator who will each make several short presentations, followed by an interactive (on-line) discussion and question/answer session with the audience.

Moderator:
Gregory Deierlein (https://profiles.stanford.edu/gregory-deierlein)
Professor and Director of the John A. Blume Earthquake Engineering Center at Stanford University, and Co-Director of the NHERI Computational Modeling and Simulation Center (SimCenter).

Panelists:
Haruo Hayashi (http://www.bosai.go.jp/e/about/greeting.html)
Professor Emeritus of Kyoto University; President of NIED (National Institute for Earthquake Prediction and Disaster Resilience)

Laurie Johnson (https://www.lauriejohnsonconsulting.com/)
Consultant/Research and Chief Catastrophe Response and Resiliency Office for the California Earthquake Authority and Wildfire Fund; current Past-President of EERI; 30 years of experience in urban planning and disaster recovery planning, management and research.

David Johnston (https://www.massey.ac.nz/massey/expertise/profile.cfm?stref=428930)
Professor of Disaster Management and Director of the Joint Centre for Disaster Research. Formerly a Principal Scientist at GNS Science, currently Deputy Director of the multi-institutional QuakeCoRE research program in New Zealand.

Dr. **HARUO HAYASHI** is currently President of the National Research Institute for Earth Science and Disaster Resilience since 2015. He is also Professor Emeritus from Disaster Prevention Research Institute, Kyoto University where he has taught between 1994 and 2015. He received both his Bachelors and Master's degrees from Waseda University, and Ph.D. from the University of California at Los Angeles in the field of social psychology in 1983. He was appointed as an Assistant Professor from Hirosaki University in 1983 where he started his career as a disaster research when he studied responses of disaster victims toward the 1983 Nihonkai-chubu Earthquake and Tsunami. He moves to Hiiroshima University in 1988 as an Associate Professor where he studied societal reactions to an urban Typoon diaster in 1991.In nine months after moving to Kyoto University, he went through the 1995 Kobe earthquake in which he performed the scientific description and theorizing of the entire recovery processes. The general focus of Dr. Hayashi's work is on Societal and Human Reactions to Disasters, Risk Communication and Education, Information System for Disaster Management, Standardization of Emergency Operations, and Multi-hazard Risk Assessment.

Dr. **LAURIE JOHNSON** is a research consultant and the Chief Catastrophe Response and Resiliency Office for the California Earthquake Authority and Wildfire Fund. She is the immediate past president of the Earthquake Engineering Research Institute (EERI), and affiliated faculty with New York University's Global Institute for Public Health Program on Population Impact, Recovery and Resilience, and past chair of the US federal advisory committee for the National Earthquake Hazards Reduction Program. She is an internationally recognized urban planner specializing in disaster recovery and catastrophe risk management. For over 30 years, she has combined her unique blend of professional practice and research to help communities address the complex urban challenges posed by natural hazards and disasters. Much of her post-disaster recovery efforts are captured in her recent book, *After Great Disasters: An In-Depth Analysis of How Six Countries Managed Community Recovery* (2017). She is also the coauthor of *Clear as Mud: Planning for the Rebuilding of New Orleans* (2010) which examines the post-disaster recovery policies, plans and planning processes in the City of New Orleans in the first three years following Hurricane Katrina.

Dr. **DAVID JOHNSTON** is the Professor of Disaster Management and Director of the Joint Centre for Disaster Research, in the School of Psychology at Massey University, Wellington, New Zealand. Formerly a Principal Scientist at GNS Science (New Zealand's Geological Survey), where he worked for 25 years (1993-2018). Currently he is the Deputy Director of the multi-institutional QuakeCoRE research programme in New Zealand. His research has developed as part of multi-disciplinary theoretical and applied research programme, involving the collaboration of physical and social scientists from several organisations and countries. His research focuses on human responses to earthquake, tsunami, and weather warnings, crisis decision-making and the role of public education and participation in building community resilience and recovery. In 2016 he became Co-chair of World Meteorological Organisation's (WMO) High Impact Weather Project (HIWeather) Steering Group. This follows his role as the Chair of the Integrated Research on Disaster Risk Scientific Committee (IRDR) (2013-2015), a program co-sponsored by the International Council for Science (ICSU), the International Social Science Council (ISCC), and the United Nations International Strategy for Disaster reduction (UNISDR). He is the Editor of The Australasian Journal of Disaster and Trauma Studies; and was the founding Editor of the Journal of Applied Volcanology.