Health Effects from Chernobyl and Fukushima

GILBERT W. BEEBE WEBINAR SERIES

April 7, 2021, 6:00 – 8:00 PM (Eastern Time)/
April 8, 2021, 7:00 – 9:00 AM (Japan)

The year 2021 marks the 35th anniversary of the Chernobyl accident and the 10th anniversary of the Fukushima accident. This webinar, hosted by the Nuclear and Radiation Studies Board of the National Academies, will feature presentations and discussions on radiation and non-radiation induced health effects to populations impacted by the accidents as well as potential transgenerational effects. Click here to register and receive connection information for this event.

For comments and questions about the Gilbert W. Beebe Webinar Series, or suggestions for future topics, please contact Ourania (Rania) Kosti at okosti@nas.edu.

AGENDA

6:00 **Call 4th Gilbert W. Beebe Webinar to Order**
Shaheen Azim Dewji, Texas A&M University

6:05 **4.1 Lack of transgenerational effects of ionizing radiation exposure in cleanup workers and evacuees of the Chernobyl accident**
Stephen Chanock, National Cancer Institute

6:25 **Q&A and Discussion**

6:35 **4.2 Establishing a long term epidemiological study on Fukushima emergency workers**
Toshiteru Okubo, National Institute of Occupational Safety and Health, Japan

6:55 **Q&A and Discussion**

7:05 **4.3 Overview of secondary health issues after the Fukushima incident**
Masaharu Tsubokura, Fukushima Medical University School of Medicine

7:25 **Q&A and Discussion**

7:35 **4.4 Mental health consequences of the Fukushima disaster and care/interventions for affected people**
Masaharu Maeda, Fukushima Medical University

7:55 **Q&A and Discussion**

8:05 **Adjourn 4th Webinar**
Kayo Togawa, International Agency for Research on Cancer

SPEAKER and MODERATOR BIOS

Dr. Stephen Chanock *(presenter)* is the Director of the Division of Cancer Epidemiology and Genetics (DCEG) in the US National Cancer Institute, appointed in 2013. He received his M.D. from Harvard Medical School in 1983 and completed clinical training in pediatrics, pediatric infectious diseases, and pediatric hematology/oncology and research training in molecular genetics at Boston Children's Hospital and the Dana-Farber Cancer Institute, Boston. Previously, he was a tenured investigator in the Genomic Variation Section of the Pediatric Oncology Branch in the NCI Center for Cancer Research. In 2001, he was appointed as Chief of the Cancer Genomics Research Laboratory (formerly Core Genotyping Facility), and in 2007 as Chief of the Laboratory of Translational Genomics, both within the DCEG. Dr. Chanock co-led the Cancer Genetic Markers of Susceptibility project. From 2012 to 2013, he also served as Acting Co-Director of the NCI Center for Cancer Genomics. He is a leading expert in cancer genomics with a focus on the discovery and characterization of cancer susceptibility regions in the human genome. He has led many international consortia that have discovered susceptibility alleles and characterized genetic mosaicism/clonal hematopoiesis. He has led a series studies investigating the integration of somatic and germline genetics into epidemiological studies of radiation exposure and non-smoking lung cancer. He has received numerous awards for his scientific contributions and serves on a number international and national scientific advisory boards.

Shaheen A. Dewji *(moderator)* is an Assistant Professor in the Department of Nuclear Engineering at Texas A&M University and a Faculty Fellow of the Center for Nuclear Security Science and Policy Initiatives (NSSPI). In her prior role at Oak Ridge National Laboratory, Dewji was Radiological Scientist in the Center for Radiation Protection Knowledge, where her recent work has included assessment of patient release criteria for nuclear medicine patients, as well as development of dose coefficients associated with the external exposure and internal uptake of radionuclides due to contaminated environmental media. Prior, Dr. Dewji spent five productive years with the Safeguards and Security Technology Group at ORNL as a Nondestructive Assay Systems Engineer, focusing on nuclear material measurement of uranium enrichment, holdup (MUF), and signature analysis. Dr. Dewji completed her Masters and Ph.D. degrees in Nuclear and Radiological Engineering at the Georgia Institute of Technology in Atlanta, GA, and is an alumni of the Sam Nunn Security Program. As a native of Vancouver, Canada, she received her Bachelor of Science in Physics from the University of British Columbia. Dr. Dewji is a member of ISO/TC 85/SC2 WG 20 and 25 and a member of the National Academies of Science, Engineering, and Medicine – Nuclear and Radiation Studies Board.

Professor **Masaharu Maeda** *(speaker)* is Professor and Chair of the Department of Disaster Psychiatry at the Fukushima Medical University School of Medicine in Fukushima, Japan. Professor Maeda received his medical degree at Kurume University School of Medicine, Fukuoka, Japan, and completed his residency training in psychiatry at Kurume University Hospital. He later returned to his alma mater in 1996 as Associate Professor, before assuming his current roles. Professor Maeda served as President of Japanese Society of Traumatic Stress Studies from 2009 to 2013. He has been actively involved in providing psychiatric examinations and organizing

psychiatric intervention teams for survivors of several major disasters that have occurred in Japan, particularly man-made disasters. Professor Maeda's current clinical and research interests lie in the widespread psychosocial effects resulting from the Fukushima nuclear accident. As Assistant Manager of the Fukushima Center for Disaster Mental Health, he is leading the Mental Health and Life Style Survey to facilitate the adequate care of resident who are at risk of developing mental health problems following the complicated nuclear accident.

Dr. **Toshiteru Okubo** *(speaker)* is currently serving as Chairman of the Research Center for Prevention from Radiation Hazards of Workers, National Institute of Occupational Safety and Health, Japan. His medical education took place at Keio University, where he received his M.D. in 1966 and Ph.D. in 1978. He continued his research on environmental epidemiology at Jichi Medical School (1977-1983) and UCLA (1981). In 1983, Dr. Okubo moved to the University of Occupational and Environmental Health (UOEH) in Kitakyushu, serving as professor of environmental epidemiology at the Institute of Industrial Ecological Sciences. Later he was promoted to Chaiman of the Institute, followed by Chairman of the Occupational Health Training Center, then President of the University in 2003. In 2006, he was assigned to the Chairman of the Radiation Effects Research Foundation in Hiroshima and Nagasaki, Japan and stayed at the position until 2016. He is professor emeritus of UOEH, honorary member of the International Commission of Occupational Health (ICOH) and Honorary Fellow, Faculty of Occupational Medicine, Royal College of Occupational Medicine, London.

Kayo Togawa, PhD, MPH *(moderator)* is an epidemiologist in the Environment and Lifestyle Epidemiology Brach at the International Agency for Research on Cancer (IARC), the World Health Organization's specialized cancer research agency. At IARC, she worked as Scientific Coordinator for the Thyroid Monitoring after Nuclear Accidents (TM-NUC) project which aimed to develop recommendations on thyroid health monitoring after nuclear accidents. Dr. Togawa's current research focuses on environmental and occupational risk factors for cancer. Her research interests also encompass early detection of cancer and overdiagnosis.

Dr. Masaharu Tsubokura *(speaker)* is a Professor at the Department of Radiation Health Management in Fukushima Medical University School of Medicine. After the Fukushima nuclear power plant accident in 2011, he worked with local municipalities in Fukushima, and played an important role in the establishment of the internal radiation exposure screening programs for the local residents. He is also a member of the committee on radiation protection and public health in Minamisoma and Soma Cities, and has actively sought to provide radiation seminars to the public, to respond to public worries about the effects of radiation exposure on health.