

# Commemorating the 75<sup>th</sup> Anniversary of the Atomic Bombings

Studies on Radiation Health Effects at the  
**R**adiation **E**ffects **R**esearch **F**oundation, Japan

GILBERT W. BEEBE WEBINAR SERIES

November 10, 5:30 – 7:30 PM (ET)



**Gilbert W. Beebe**  
**W E B I N A R**

This year marks the 75<sup>th</sup> anniversary of the atomic bombings in Hiroshima and Nagasaki. Thousands of residents in the two cities lost their lives from the explosions or soon after from radiation sickness. With joint Japanese and American support, the Radiation Effects Research Foundation (RERF) and its predecessor have systematically followed the health effects of the survivors, the hibakusha, and their offspring. Studies on the atomic bombing survivors have been the primary basis for estimating the health risks from radiation exposure and setting radiation protection standards worldwide. This webinar, hosted by the [Nuclear and Radiation Studies Board](#) of the National Academies, will feature presentations from RERF Leadership and researchers on the history of the Foundation and its achievements, current research, and future directions. [Click here](#) to register.

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](mailto:okosti@nas.edu).

# AGENDA

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- 5:30 **Welcome and Opening Remarks**  
*Elizabeth Eide, National Academies of Sciences, Engineering, and Medicine*
- 5:33 **Call 3rd Gilbert W. Beebe Webinar to Order**  
*Amy Berrington de González, National Cancer Institute*
- 5:40 **3.1 History of the Radiation Effects Research Foundation and its Predecessor**  
*Robert Ullrich, Vice-Chair and Chief of Research, Radiation Effects Research Foundation (RERF)*
- 6:00 **3.2 Solid Cancer Incidence among the Life Span Study of Atomic Bomb Survivors: 1958–2009**  
*Alina Brenner, Senior Scientist, Epidemiology, RERF*
- 6:20 **Q&A and Discussion**
- 6:30 **3.3 Biorepository of A-bomb Survivors and their Offspring**  
*Osamu Tanabe, Chief Scientist, Director of Biosample Research Center, RERF*
- 6:50 **Q&A and Discussion**
- 7:00 **3.4 Mortality among individuals exposed to atomic bomb radiation in utero; 1950–2012**  
*Hiromi Sugiyama, Senior Scientist, Department of Epidemiology, RERF*
- 7:20 **Q&A and Discussion**
- 7:30 **Adjourn 3rd Webinar**  
*Richard Wakeford, University of Manchester*

# SPEAKER and MODERATOR BIOS

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**Amy Berrington de González**, D.Phil., (moderator) is the Branch Chief of the NCI's Radiation Epidemiology Branch. She is an internationally recognized expert in the potential cancer risks from medical radiation exposures. Dr. Berrington is co-PI of the UK Pediatric CT scans cohort, which was the first epidemiological study to suggest a direct link between CT scans and subsequent cancer risk. She also leads studies on the risk of second cancer after proton therapy and other emerging radiotherapy techniques. Dr. Berrington is currently a member of the NAS Nuclear and Radiation Studies Board and has participated in many national and international radiation committees. She is an elected member of the American Epidemiological Society and served on the editorial board for the American Journal of Epidemiology. Before joining the NCI in 2008 she held faculty positions at Oxford and Johns Hopkins University. She has a DPhil in Cancer Epidemiology from the University of Oxford.

**Alina Brenner** (speaker) is a senior epidemiologist at the Radiation Research Effects Foundation where she studies the long-term health risks following radiation exposure from the atomic bombs. Previously, Alina worked at the National Cancer Institute where her research focused on health consequences of exposure to radioactive iodine from the Chernobyl Nuclear Plant accident. She graduated with honors from the Russian State Medical University with MD, PhD degrees and from George Washington University with an MPH degree.

**Elizabeth A. Eide** is Executive Director for the Division on Earth and Life Studies at the National Academies of Sciences, Engineering, and Medicine (NASEM). She joined the National Academies in 2005 as a senior program officer in the Board on Earth Sciences and Resources (BESR). In this capacity, she directed studies that have had notable impacts on science policy on topics such as critical minerals, induced seismicity, and disaster resilience. She also has served as staff director of the standing Committee on Earth Resources for many years, and more recently as director of the Roundtable on Unconventional Hydrocarbon Development. Dr. Eide was named director of BESR in 2012 and has also directed the Water Science and Technology Board since 2016, rising to the level of senior board director for both boards in 2017.

**Hiromi Sugiyama**, Ph.D., is a senior scientist of the Department of Epidemiology at the Radiation Effects Research Foundation (RERF) in Hiroshima, Japan. She joined RERF in 2004 and has studied radiation risk on mortality and cancer incidence in the large-scale cohort of atomic bomb survivors and mortality in the cohort of individuals exposed in utero. She has also led the population-based cancer registry (PBCR) operation in Hiroshima and contributed to publications using the PBCR data. She graduated from the Graduate School of Osaka University with a Ph.D. degree in Health Science.

**Osamu Tanabe**, M.D., Ph.D., (speaker) joined Radiation Effects Research Foundation (RERF) in 2018 as a director of Biosample Research Center, and has been supervising the processing, storage, and research use of blood and urine samples donated by A-bomb survivors, their children, and spouses. He is also directing the Center's efforts to implement quality assurance and quality control processes for biosamples, and to improve sample processing and storage procedures. Before joining RERF, Dr. Tanabe was a professor of the Department of Integrative Genomics at Tohoku University, Japan, where he was engaged in development and management of large-scale population-based cohort studies of 150,000 participants for genomic, metabolomic, and proteomic studies with blood and urine samples to identify genetic,

behavioral, and environmental risk factors, and biomarkers for multifactorial diseases. He earned M.D. and Ph.D. degrees at Hiroshima University School of Medicine.

**Robert Ullrich** (speaker) is the Chief of Research, Vice Chairman, and Executive Director at the Radiation Effects Research Foundation (RERF) in Hiroshima, Japan. Dr. Ullrich initially joined RERF as its Associate Chief of Research in November 2013. Before joining RERF, Dr. Ullrich was the John Sealy Distinguished Chair in Cancer Biology, Director of the Sealy Center for Cancer Biology, and Interim Director of the Cancer Center at the University of Texas Medical Branch in Galveston, Texas. Prior to that he was the Barbara Cox Anthony Distinguished Chair in Oncology at Colorado State University and Director of the Colorado State component of the University of Colorado Consortium Comprehensive Cancer Center. He is recognized internationally for his research on mechanisms and risks of cancer following exposure to ionizing radiation and for his scientific leadership of laboratory, academic, and medical programs. Dr. Ullrich received the Radiation Research Society's Failla Award in 2012 for outstanding research contributions in radiation science.

**Richard Wakeford** (moderator) is Honorary Professor at the Centre for Occupational and Environmental Health at The University of Manchester, United Kingdom, where he specializes in radiation epidemiology. He graduated with a BSc in Physics, and then received a PhD in High Energy Physics, from the University of Liverpool before joining British Nuclear Fuels Ltd (BNFL) in 1977. He worked for BNFL for nearly 30 y, most of the time advising on the risks to health from exposure to radiation, before taking early retirement in 2006 and joining the academic staff of The University of Manchester. In 1994 he received the Founder's Prize of the U.K. Society for Radiological Protection for "contributions of distinction to radiological protection." Dr. Wakeford has worked on many research projects involving exposure to radiation and has published and lectured extensively in the field of radiation epidemiology and risk assessment. He has been Editor-in-Chief of Journal of Radiological Protection since 1997 and is a member of the Editorial Board of British Journal of Cancer. He has been a member of a number of U.K., European Union, and international expert groups, including Committee 1 of the International Commission on Radiological Protection, the United Nations Scientific Committee on the Effects of Atomic Radiation, and the U.K. Committee on Medical Aspects of Radiation in the Environment. Following the 2011 Fukushima nuclear accident, he was a member of the U.K. Government's Scientific Advice Group for Emergencies and the World Health Organization's Health Risk Assessment Expert Working Group on the Fukushima accident. Dr. Wakeford was a member of the NCRP Scientific Committee that produced NCRP Commentary No. 27 on the LNT model and radiation protection.

# List of Relevant Publications

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- (1) Grant EJ, Brenner A, Sugiyama H, Sakata R, Sadakane A, Utada M et al. Solid Cancer Incidence among the Life Span Study of Atomic Bomb Survivors: 1958-2009. *Radiat Res.* 2017;187(5):513-37.
- (2) Cahoon EK, Preston DL, Pierce DA, Grant E, Brenner AV, Mabuchi K et al. Lung, Laryngeal and Other Respiratory Cancer Incidence among Japanese Atomic Bomb Survivors: An Updated Analysis from 1958 through 2009. *Radiat Res.* 2017;187(5):538-48.
- (3) Brenner AV, Preston DL, Sakata R, Sugiyama H, de Gonzalez AB, French B et al. Incidence of Breast Cancer in the Life Span Study of Atomic Bomb Survivors: 1958-2009. *Radiat Res.* 2018;190(4):433-44.
- (4) Utada M, Brenner AV, Preston DL, Cologne JB, Sakata R, Sugiyama H et al. Radiation Risks of Uterine Cancer in Atomic Bomb Survivors: 1958-2009. *JNCI cancer spectrum.* 2018;2(4):pky081.
- (5) Sadakane A, French B, Brenner AV, Preston DL, Sugiyama H, Grant EJ et al. Radiation and Risk of Liver, Biliary Tract, and Pancreatic Cancers among Atomic Bomb Survivors in Hiroshima and Nagasaki: 1958-2009. *Radiat Res.* 2019;192(3):299-310.
- (6) Sakata R, Preston DL, Brenner AV, Sugiyama H, Grant EJ, Rajaraman P et al. Radiation-Related Risk of Cancers of the Upper Digestive Tract among Japanese Atomic Bomb Survivors. *Radiat Res.* 2019;192(3):331-44.
- (7) Sugiyama H, Misumi M, Brenner A, Grant EJ, Sakata R, Sadakane A et al. Radiation risk of incident colorectal cancer by anatomical site among atomic bomb survivors: 1958-2009. *International journal of cancer.* 2020;146(3):635-45.
- (8) Brenner AV, Sugiyama H, Preston DL, Sakata R, French B, Sadakane A et al. Radiation risk of central nervous system tumors in the Life Span Study of atomic bomb survivors, 1958-2009. *European journal of epidemiology.* 2020.
- (9) Jonathan M Samet, M.D., M.S, Ohtsura Niwa, PhD, At the 75<sup>th</sup> anniversary of the bombings of Hiroshima and Nagasaki, the Radiation Effects Research Foundation continues studies of the atomic bomb survivors and their children, *Carcinogenesis*, , bgaa104, <https://doi.org/10.1093/carcin/bgaa104>