The National Academies of SCIENCES • ENGINEERING • MEDICINE

1. What's New in Low Dose Radiation

Date: July 22, 2020

Time: 10:00am - 12:00pm (EDT)

Registration Link:

https://nasem.zoom.us/meeting/register/tJ0vceuqpjwtHNWXZHZLiuaJro5FPB8UjO2b



Agenda

Moderator: Jim Brink, NRSB Vice-Chair

10:00 am – 10:05 am	Call 1 st Webinar to Order and Welcome Jim Brink, NRSB Vice-Chair and Rania Kosti, NRSB Staff Member
10:05 am – 10:35 am	1.1 The JNCI Monograph on Epidemiological Studies of Low Dose Radiation and Cancer Risk Amy Berrington de González, National Cancer Institute and Mary Schubauer-Berigan, International Agency for Research on Cancer
10:35 am – 10:50 am	Q+A and Discussion
10:50 am – 11:15 am	1.2 The NCRP Report on Approaches for Integrating Radiation Biology and Epidemiology for Enhancing Low Dose Risk Assessment R. Julian Preston, Environmental Protection Agency
11:15 am – 11:30 am	Q+A and Discussion
11:30 am – 11:50 am	1.3 Where is the Radiation Low Dose Program? Perspectives from a Coalition of Organizations Paul T. Dickman, Argonne National Laboratory
11:50 am – 12:00 pm	Q+A and Discussion
12:00 pm	Adjourn 1 st Webinar Save the Date for 2 nd Webinar Jim Brink, NRSB Vice-Chair

Suggested Reading

- 1.1 JNCI, 2020. Epidemiological Studies of Low Dose Radiation and Cancer Risk, Volume 2020, Number 56, *expected release July 13 2020*.
- 1.2 NCRP, 2020. Approaches for Integrating Radiation Biology and Epidemiology for Enhancing Low Dose Risk Assessment, *in press*.
- 1.3 NASEM, 2019, The Future of Low Dose Radiation Research in the United States Proceedings of a Symposium, see: https://www.nap.edu/catalog/25578/the-future-of-lowdose-radiation-research-in-the-united-states

Speaker Bios



Amy Berrington de González, D.Phil., 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 ioining 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.



James A. Brink, MD, is chief of radiology at the Massachusetts General Hospital (MGH) and the Juan M. Taveras Professor of Radiology at the Harvard Medical School. Dr. Brink has expertise and broad experience in medical imaging, including utilization and management of imaging resources and monitoring and control of medical radiation exposure. Before joining MGH, Dr. Brink was an associate professor at the Mallinckrodt Institute of Radiology at Washington University School of Medicine and professor and chair of the Yale Department of Diagnostic Radiology. He is a fellow of the Society for Computed Body Tomography/Magnetic Resonance, past-president of the American Roentgen Ray Society, fellow and chair (effective May 17, 2016) of the Board

of Chancellors of the American College of Radiology, and scientific vice-president and member of the Board of Directors of the National Council for Radiation Protection and Measurements. He earned his M.D. degree at Indiana University and completed his medical residency and fellowship at MGH.



Mr. Paul T. Dickman is a senior policy fellow with Argonne National Laboratory focusing on international nuclear energy, nonproliferation, and national security policy. For more than 30 years, Mr. Dickman has been in the forefront of nuclear energy and national security programs in the United States and internationally. He has held senior leadership positions at the U.S. Nuclear Regulatory Commission, where he served as Chief of Staff to Chairman Dale E. Klein, and at the U.S. Department of Energy's (DOE's) National Nuclear Security Administration, where he served as Deputy Director for the Office of Policy. During his career he has held several managerial and senior staff positions within the DOE and national laboratory system. He also serves

as an adviser to the Japanese government on the decommissioning of the Fukushima accident site. He is serving on the National Academies' Committee on Independent Assessment of Science and Technology for the Department of Energy's Defense Environmental Cleanup Program. Mr. Dickman received a B.A. in history of science from University of Denver and an M.S. in natural sciences in nuclear chemistry and physics from University of Wyoming.



R. Julian Preston is currently a Special Government Employee (Expert) with the Radiation Protection Division of the U.S. Environmental Protection Agency (EPA). He was previously the Associate Director for Health for the National Health and Environmental Effects Research Laboratory of EPA. He also served as Director of the Environmental Carcinogenesis Division at EPA and as senior science adviser at the Chemical Industry Institute of Toxicology. He has been employed at the Biology Division of the Oak Ridge National Laboratory and has served as Associate Director for the Oak Ridge–University of Tennessee Graduate School for Biomedical Sciences. Dr. Preston's research and current activities have focused on the mechanisms of radiation and chemical carcinogenesis and the approaches for incorporating these types of data into cancer risk assessments. Dr. Preston

currently serves on two NCRP committees and is a member of the National Academy of Sciences Nuclear and Radiation Studies Board and a member of an Office of Science and Technology Policy Committee on Low Dose Radiation Research. Dr. Preston was chair of Committee 1 of the International Commission on Radiological Protection (ICRP), a member of the ICRP Main Commission, and the Representative and a member of the U.S. delegation to the United Nations Scientific Committee on the Effects of Atomic Radiation. He served as Chair for the National Research Council's Committee to Assess the Scientific Information for the Radiation Exposure Screening and Education Program and on the Task Group on the Biological Effects of Space Radiation. He is an associate editor of Environmental and Molecular Mutagenesis and Chemico-Biological Interactions. Dr. Preston has had more than 200 peerreviewed papers and chapters published. He received his BA and MA from Peterhouse, Cambridge University, England, in genetics and his PhD from Reading University, England, in radiation genetics.



Mary Schubauer-Berigan currently works as the senior epidemiologist and acting Group Head in the Monographs Programme at the International Agency for Research on Cancer, where she manages work to synthesize evidence on the causes of human cancer. From 1999-2018, she worked at the National Institute for Occupational Safety and Health; Division of Surveillance, Hazard Evaluations, and Field Studies, Centers for Disease Control and Prevention. Mary's area of expertise is in occupational epidemiology. She has conducted extensive epidemiological research on health effects of low-dose ionizing radiation, radon, beryllium, and carbon nanotubes.

For comments and questions about the **Gilbert W. Beebe Webinar Series**, or suggestions for future topics, please contact

Ourania (Rania) Kosti, Ph.D. Senior Program Officer, Nuclear and Radiation Studies Board Principal Investigator, Radiation Effects Research Foundation Program The National Academies of Sciences, Engineering, and Medicine The Keck Center, Washington DC Email: <u>okosti@nas.edu</u> Phone: 202 334 3066