

Adopting the International System of Units for Radiation Measurements in the United States: A Workshop

WORKSHOP ORGANIZING COMMITTEE

CHAIR

Steven L. Simon, Ph.D., is a radiation physicist and head of the dosimetry unit of the Radiation Epidemiology Branch of the National Cancer Institute, which provides dose estimation in support of branch epidemiologic studies and develops exposure assessment methods to improve the science of dosimetry. Previously he was on the research faculty at the University of Utah, the academic faculty at the University of North Carolina-Chapel Hill, was a medical physicist for the University of New Mexico at Los Alamos National Laboratory, a senior staff officer at the National Research Council, and director of the Marshall Islands Nationwide Radiological Study. Dr. Simon has worldwide experience in monitoring nuclear test sites for residual radioactivity and assessing historical radiation doses from nuclear weapons fallout. He has provided advice over many years to national and international organizations on issues related to environmental contamination from nuclear testing and related radiation exposures. More recently, he has directed his efforts to estimating historical doses to patients and medical staff from medical diagnostic procedures. He was deployed to the U.S. Embassy in Tokyo during the Fukushima nuclear accident, where he served as a U.S. Department of Health and Human Services (DHHS) technical expert in radiation dose and risk. Dr. Simon is a member of the National Council on Radiation Protection and Measurements (NCRP) and has been an associate editor of *Health Physics* for 23 years. He received a B.S. in physics from the University of Texas, an M.S. in radiological physics from the University of Texas Health Sciences Center in Dallas, and a Ph.D. in radiological health sciences from Colorado State University.

MEMBERS

Daniel J. Blumenthal, Ph.D., manages the consequence management programs in the Office of Emergency Response at the National Nuclear Security Administration (NNSA) within the Department of Energy (DOE). In 2009, he transferred from the Department of Homeland Security's Domestic Nuclear Detection Office where he was the Chief Test Scientist. Prior to joining the Federal government he was a senior scientist at the Department of Energy's Remote Sensing Laboratory from 1996 to 2006 where he managed or provided scientific support to several DOE emergency response teams. Most recently, Dr. Blumenthal led the initial DOE response team to Japan where he spent a total of 7 weeks following the Fukushima Dai-ichi nuclear power plant accident in March 2011. Dr. Blumenthal's background is in nuclear physics and he is also a Certified Health Physicist (CHP).

Nuclear and Radiation Studies Board

E. Vincent Holahan, Jr., Ph.D., is the senior-level technical advisor for health physics within the Office of Nuclear Material Safety and Safeguards at the U.S. Nuclear Regulatory Commission (NRC). Dr. Holahan is responsible for developing the technical basis for issuing federal regulations and guidance to limit occupational and public exposure to ionizing radiation from source and byproduct material. Dr. Holahan began his active military service with assignments to the Armed Forces Radiobiology Research Institute (AFRRI) (1982-1986), the Directorate of Combat Developments/U.S. Army Academy of Health Sciences (1987-90), and the Armed Forces Medical Intelligence Center (AFMIC) (1990-94). As Chief of the AFRRI Cellular Radiobiology Division, Dr. Holahan managed a research program to improve the medical treatment of radiation injuries. At the same time he also served as an adjunct assistant professor at the Uniformed Services University of Health Sciences and the National Navy Medical Center specializing in health effects of ionizing radiation exposure. While assigned to the U.S. Army Academy of Health Sciences, Dr. Holahan was responsible for designing procedures to improve medical treatment and evacuate casualties from areas contaminated with radioactive materials or biological/chemical warfare agents. Before joining the NRC, Dr. Holahan was a senior program officer for the National Research Council/National Academy of Sciences (1995-96). Dr. Holahan is a member of the U.S. delegation to the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), a member of the National Council on Radiation Protection and Measurements (NCRP) Committee 5 (Environmental Radiation and Radioactive Waste Issues), a former U.S. representative to the International Atomic Energy Agency (IAEA) steering group on occupational radiation protection, the former NRC representative to the Nuclear Energy Agency (NEA) Committee on Radiation Protection and Public Health, and a former vice chairperson of the NEA/IAEA Information Systems on Occupational Exposure. Dr. Holahan received a B.A. degree in chemistry and a B.S. degree in biology from Gonzaga University, Spokane, Washington, and was commissioned as a Medical Service Corps officer in the U.S. Army in 1977. Dr. Holahan received his Ph.D. in radiology and radiation biology and an interdisciplinary degree in Cellular and Molecular Biology from Colorado State University, Fort Collins in 1981.

Mark L. Maiello, Ph.D., is radiological projects planning manager in the Office of Emergency Preparedness and Response at the New York City (NYC) Department of Health and Mental Hygiene. He is currently assisting in the design of NYC community reception centers that stand-up in the event of a Radiological Dispersal Device incident. He also co-chairs the interagency NYC Radiological Response and Recovery Committee. In addition, he helped to create the NYC Radiological Advisory Committee of outside experts who can be called upon to assist in the citywide response to a radiological event. Dr. Maiello was a radiation safety officer from 1996 to 2013 with Wyeth Research and later, Pfizer Pharmaceuticals, Inc. in Pearl River, New York, and Groton, Connecticut. Prior to this, he worked at the U.S. Department of Energy Environmental Measurements Lab in NYC before moving on to the private sector in 1990 as a radiological consultant in the fields of environmental surveys and radiological decommissioning. Dr. Maiello received his Ph.D. in environmental health science in 1986 from New York University.

Ruth E. McBurney, CHP, is executive director of the Conference of Radiation Control Program Directors. In that position, she manages and directs the administrative office for the organization. Prior to taking that position in January 2007, she was the manager of the Radiation Safety Licensing Branch at the Texas Department of State Health Services, culminating 25 years of service in the Texas Radiation Control Program, most of which involved licensing and standards development. Ms. McBurney is currently serving as a member of council and the board of directors of the National Council on Radiation Protection and Measurements. She is a past president of the Health Physics Society and has also been a U.S. delegate to the past four International Radiation Protection Association Congresses. Ms.

McBurney holds a B.S. in biology from Henderson State University in Arkansas and an M.S. in radiation sciences in 1973 from the University of Arkansas for Medical Sciences. She is also certified in comprehensive health physics by the American Board of Health Physics.

Jessica S. Wieder is a member of the U.S. Environmental Protection Agency's Center for Radiation Information and Outreach and is the senior public information officer for EPA's Radiological Emergency Response Team. Ms. Wieder was part of the team tasked with communicating about EPA's efforts and radiation levels in the United States during the 2011 Fukushima Daiichi nuclear accident. She has facilitated international panels on public communication about radiation risks after terrorist incidents and was part of the contingency planning team for the 2011 launch of the Curiosity Mars Rover. In 2010, Ms. Wieder was detailed to FEMA's Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Branch, where she helped establish their Improvised Nuclear Device Response and Recovery Program and created the intergovernmental Nuclear/Radiological Communications Working Group. With her guidance, this group developed the nuclear detonation messaging document *Improvised Nuclear Device Response and Recovery: Communicating in the Immediate Aftermath*. She was also the lead author for the communications chapter for the second edition of the White House's *Planning Guidance for Response to a Nuclear Detonation*. Ms. Wieder received a B.A. in public affairs from University of Maryland-College Park in 2004.