



February 23, 2018

Charles E. Land, July 13, 1937 – January 25, 2018 In Memoriam

Charles E. Land died on January 25, 2018 at his home in Lisbon, Portugal. He was a world-renowned statistician who made extraordinary contributions to understanding the health effects of radiation exposures. Born in San Francisco in 1937, he received a BA in psychology from the University of Oregon in 1959 and an MA and a PhD in statistics from the University of Chicago in 1964 and 1968, respectively.



His career started in Hiroshima, Japan at the Atomic Bomb Casualty Commission [now the Radiation Effects Research Foundation (RERF)] where he spent two stints from 1966 to 1975. He remained devoted to studying the Japanese atomic-bomb survivors his entire career and was a visiting scientist in the Division of Epidemiology, RERF, 1990 to 2010. In 1975 he joined the National Cancer Institute (NCI), Division of Cancer Epidemiology and Genetics and with John Boice, current President of NCRP, founded the Radiation Epidemiology Branch which remains one of the leading research programs in the world today. Charles retired in 2009.

Charles Land was elected to the National Council on Radiation Protection and Measurements (NCRP) in 1981 and became a Distinguished Emeritus Member in 2005. He served on many NCRP committees including: Program Area Committee 1 on *Basic Criteria, Epidemiology, Radiobiology, and Risk*; Scientific Committee (SC) 1-2 on *Assessment of Risk for Radiation Protection Purposes*; SC 1-5 on *Uncertainty in Risk Estimates*; SC 1-7 on *Information Needed to Make Radiation Protection Recommendations for Travel Beyond Low-Earth Orbit*. His seminal contributions to NCRP Report No. 66, *Mammography*, included the first pooled analyses of studies of radiation-induced breast cancer. He presented the 2010 L.S. Taylor Lecture: "Radiation Protection and Public Policy in an Uncertain World."

Dr. Land served on the National Academy of Sciences Committee on the Biological Effects of Ionizing Radiation (BEIR III), and the Three Mile Island Follow-up Research Subcommittee of the Committee on Federal Research into the Biological Effects of Ionizing Radiation. He was also a member of Committee 1 of the International Commission on Radiological Protection. In addition, he served on committees for the National Academy of Sciences, the World Health Organization, and the Institute of Medicine. Dr. Land wrote over 180 scientific publications.

Charles received the National Institute of Health (NIH) Director's Award (1986), the Public Health Service (PHS) Outstanding Service Award (1991), PHS Meritorious Service Award (1994), and the Harkin Award (2002). He was a lead investigator to the National Action Plan on Breast Cancer and its Breast Cancer Etiology Working Group (1995 to 2000). He was chairman of NCI's response to the congressional requirement to revise the 1985 report of the NIH ad hoc working group to develop radioepidemiological tables and improved these estimates further with the 2003 NIH Interactive Radioepidemiological Program.

Charles was brilliant and humble, quiet and friendly, a long distance runner, a shakuhachi (Japanese flute) player, delightful to be around and loved his family. He is survived by his wife Vera, sons David and Graham, and grandson Hugo.