

# John Richard Trabalka, Ph.D., 1942 - 2014



It is with great sadness that we report that our friend and colleague, Dr. John Richard Trabalka, Ph.D., 71, of Oak Ridge, Tennessee, passed away on February 23, 2014, from complications of multiple myeloma.

All who knew John would agree that he was a powerful intellect and a wonderful human being. John had more than 43 years of professional experience investigating the biogeochemistry and effects of environmental pollutants, particularly radionuclides and xenobiotic organic chemicals. He earned a BS in Physics and an MS, MPH, and PhD in Environmental Health Sciences from the University of Michigan. The first 31 years of John's career were spent at Oak Ridge National Laboratory in the Environmental Sciences and Chemical Technology Divisions. In his last year at ORNL, he served as technical assistant to the Associate Laboratory Director for Biological and Environmental Sciences. From 2004 until the time of his death, he joined us at Oak Ridge Center for Risk Analysis, Inc. (formerly *SENES* Oak Ridge, Inc.).

His scientific contributions and interests ranged from protection of human health and the environment at contaminated sites to anthropogenic effects of carbon on global climate. His earliest research was on radiation effects on fish populations. His investigations of the transuranic elements included long-term laboratory, field, and microcosm experiments using Pu-237 as a tracer for environmental plutonium. He received a citation for his service as the editor and a major contributor to the 1985 state-of-the-art report on Atmospheric Carbon Dioxide and the Global Carbon Cycle for the U.S. Department of Energy. In the late 1970s, John discovered evidence for the major 1957 nuclear accident at Kyshtym in the Ural Mountains of the former USSR, a finding that was published in *Science* in 1980, resulting in an interview by Dan Rather for 60 Minutes on CBS.

Dr. Trabalka played a major role in the development and strategic planning for the ORNL remedial action program, a major undertaking designed to address a diverse legacy of contaminated inactive facilities, research areas, and waste disposal sites. He also participated in the development of in situ vitrification technology for remediation of buried solid radioactive and mixed wastes.

He led the ORNL TRU Waste Historical Survey, which was established to assemble historical data on the origins and characteristics of 4000 stored containers of TRU waste to facilitate processing and disposal of this material in the Waste Isolation Pilot Plant in New Mexico.

While working at Oak Ridge Center for Risk Analysis, Inc., John was instrumental in reviewing the historical development of radiation standards and evaluating the significance of inhalation doses to Atomic Veterans from resuspension of nuclear weapons fallout. His most recent significant accomplishment has been a major comprehensive review of radiobiological and radio-epidemiological literature to evaluate the uncertainty in the dose and dose-rate effectiveness factor (DDREF) used in assessing radiogenic cancer risks in humans. This extensive work was near completion at the time of his passing.

John served on the NCRP committee that produced the 1991 report *Effects of Ionizing Radiation on Aquatic Organisms* (Report No. 109), and he was an advisor to the NCRP committee on the Scientific Basis for Evaluating the Risks to Populations from Space Applications of Plutonium. Throughout his career, John authored or co-authored 88 publications and technical papers. He was a member of the Health Physics Society, the American Association for the Advancement of Science, Sigma Xi, American Geophysical Union, and the University of Michigan Alumni Association.

John was an avid long distance runner, finishing several Boston Marathons, an animal lover and an outdoorsman. An extraordinarily positive, optimistic and kind spirit, he made people around him very comfortable and encouraged them daily: each day his parting words from the office were "Hang in there." His optimistic spirit allowed him to "hang in there" much longer than doctors anticipated. He will be greatly missed. To all who have met and known him: "*Hang in there!*"

Prepared by John's friends at

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