Melvin W. First, ScD, MS, BS  
(1914 – 2011)

For 55 years, Dr. Melvin W. First was a dedicated, daily presence at the Harvard School of Public Health (HSPH). A ground-breaking and uncompromising researcher, teacher, mentor and colleague, he came to HSPH in 1947. He was appointed as Professor of Environmental Health Engineering in 1971 and Professor Emeritus in 1985. While ‘officially’ retired at age 70, Dr. First continued to be a prolific researcher, public health advocate and committed teacher until just days prior to his passing on June 13, 2011 at the age of 96.

Dr. First led the HSPH program in air cleaning and ventilation for nearly four decades. His former students have become leaders in academia, government and industry. Internationally recognized for his research and field applications of filter theory, the operation and maintenance of nuclear air cleaning systems, and as a steadfast protector of public health, Dr. First chaired the biennial Department of Energy/Nuclear Regulatory Commission Air Cleaning Conferences for three decades. Since the 1980s, his research focused on air disinfection and the control of pathogens such as drug resistant tuberculosis and influenza. He also co-founded a unique continuing education summer course at HSPH that trains engineers and architects from around the world in these methods.

Dr. First was the recipient of many awards and honors, including the Lyman A. Rippeton Award from the Air Pollution Control Association, the Cummings Memorial Award from the American Industrial Hygiene Association and the 1998 HSPH Faculty Emeritus Award. He served on numerous influential professional advisory boards and committees for agencies such as the U.S. Army Command, the National Academy of Sciences and the U.S. Nuclear Regulatory Commission.

In 1998, the Melvin W. First Fellowship was established in his honor to continue to support future generations of researchers, faculty and industry leaders. Today’s symposium, Engineering Solutions to Critical Public Health Issues: The Legacy of Professor Melvin W. First is sponsored by the Department of Environmental Health at the Harvard School of Public Health as a tribute to his lasting contributions.
PROGRAM

1:00 pm  Welcome and Opening Remarks
Julio Frenk, MD, PhD, MPH, MA Dean of the Faculty, Harvard School of Public Health and T & G Angelopoulos Professor of Public Health and International Development, Harvard School of Public Health and Harvard Kennedy School

1:20 pm  Engineering and Public Health: The Foundations of the Department of Environmental Health at the Harvard School of Public Health
Joseph D. Brain, ScD, Cecil K. and Philip Drinker Professor of Environmental Physiology, Former Chair, Department of Environmental Health, Harvard School of Public Health

1:50 pm  Keeping Workers and Citizens Protected and Safe: Laboratory Health and Safety
Lou DiBerardinis, MS, Director of the Environment, Health, and Safety Office, Massachusetts Institute of Technology

Nuclear Air and Gas Cleaning
J. Louis Kovach, DChE, President, NUCON International

2:30 pm  Engineering Approaches to Airborne Infection Control
Edward Nardell, MD, Associate Professor in the Departments of Environmental Health and Immunology and Infectious Diseases, Harvard School of Public Health

3:00 pm  Break

3:15 pm  The Legacy Continues – Former Trainees and Collaborators
Moderator: Douglas W. Dockery, ScD, Chair, Department of Environmental Health, Harvard School of Public Health

Upper-Room Ultraviolet Germicidal Irradiation
Stephen Rudnick, ScD, Lecturer on Industrial Hygiene Engineering, Department of Environmental Health, Harvard School of Public Health

Air and Gas Cleaning
David Leith, ScD, Professor and Associate Chair, Department of Environmental Sciences and Engineering, School of Public Health, University of North Carolina, Chapel Hill

California’s Aerosol Transmissible Disease Standard
Janet M. Macher, ScD, MPH, Air Pollution Research Specialist, California Department of Public Health

Returning to First Principles
Jack McCarthy, ScD, CIH, President and Co-founder, Environmental Health and Engineering

4:30 pm  Reception, FXB Atrium