

Biosketch
(September, 2017)

Robert F. Phalen, Ph.D. is a Professor of Medicine in the Center for Occupational and Environmental Health at the University of California, Irvine. He is the founding director, and current co-director of the Air Pollution Health Effects Laboratory. He is a member of the graduate program in Environmental Toxicology, now called Environmental Health Science, and he is on the faculty of the Occupational Medicine Residency Program. His research is in several areas: aerosol science, inhalation toxicology, air pollution health effects, modeling the deposition and clearance of inhaled substances, and radiation biology. At San Diego State University his undergraduate major was physics with a minor in mathematics, and his master's degree was in nuclear physics with an emphasis on inhaled nuclear reactor accident particles. At the University of Rochester (NY) School of Medicine and Dentistry, he obtained a Ph.D. in Radiation Biology and Biophysics, with an emphasis in Toxicology. His thesis was a study of inhaled nanosilver particles. His post-doctoral training was at the Lovelace Inhalation Toxicology Research Institute in Albuquerque, NM. He joined the Aerosol Physics group and worked on an NIEHS computer modeling grant on inhaled particles in four mammalian species, including humans. The University of California, Irvine, recruited Dr. Phalen to direct the Air Pollution Health Effects Laboratory, and to establish a research program. The research focused on the effects of air pollution mixtures on lung defenses. He has published over 250 journal papers, chapters, and proceedings papers on his research. Another research interest is in the ethics of laboratory, animal, and human research. He chaired the U.C. Irvine Institutional Review Board (IRB) for seven years, and was a member of the Institutional Animal Care and Use Committee for seven years. His ethics textbook, "Core Ethics for Health Professionals" (Springer International Publisher) was published in August 2017. His current research funding is from an endowment (the Stocking Family Trust). He is an elected fellow of three organizations: the Academy of Toxicological Sciences; the Southern California Academy of Sciences; and the American Association for the Advancement of Science. He is a full member of eight scientific societies, and is the chair of the Board of Directors of the California Society for Biomedical Research (CSBR). He has served on review and advisory committees for EPA, NIEHS, CDC/NIOSH, and the National Academy of Sciences (NAS), including the NAS Committee on Controlled Human Inhalation – Exposure Studies at EPA, and on EPA's Clean Air Scientific Advisory Committee – Particulate Material Subcommittee. He has authored and co-authored sixteen books and reports including "Methods in Inhalation Toxicology" (1997); "Introduction to Air Pollution Science" (2011); and "Core Ethics for Health Professionals" (2017). His recent awards include "Career Achievement" (Society of Toxicology – Inhalation Section); and "Public Education" (CSBR). He has chaired and co-chaired several international conferences on human effects of air pollutants; and on modeling inhaled aerosols.